

THE USE AND PRESENTATION OF CULTURAL MATERIAL IN A NON-ENCYCLOPAEDIC, GENERAL GREEK LEXICON

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1. INTRODUCTION

The presentation of cultural information is not a task only for the encyclopaedic Greek lexicon. Since word meaning has a cultural as well as a linguistic dimension, every lexicon needs to consider how, and to what extent, it should integrate information about the cultural context of a word with its linguistic properties. The student usually first encounters a particular word or concept in a general lexicon, and commentaries often depend on lexicons like *Liddell-Scott-Jones (LSJ)*, so the influence of the non-encyclopaedic lexicon extends beyond the context of the specific passage being studied.

This paper takes the word *θώραξ* (principally *LSJ* sense I) as a test case, first analysing some of the problems involved in defining it from the literary sources, and then discussing the archaeological evidence. A draft lexicon entry for the word is presented and described,¹ and, finally, the possibilities of supplementing verbal definitions with illustrations are considered and the benefits of multimedia and hypertext technologies are noted.

2. THE LEXICOGRAPHIC BACKGROUND

Although the problems arising from the literary sources mainly involve several passages in Homer which have been discussed at least since the

¹ The entry is a draft article for a Greek-English lexicon currently being written at Cambridge University under the editorship of Dr. Anne Thompson.

Hellenistic period,² much new archaeological evidence has been discovered during the twentieth century, at Pylos and Dendra. This was not available to the editors of *LSJ*, who used much the same structure, and many of the same citations, as had formed the basis of the treatment of the word as far back as the 5th edition of *Liddell and Scott* (1864). Consequently, the article for *θώραξ* remained essentially unaffected by Schliemann's Homeric archaeology in the late nineteenth century, and Evans' excavations at Knossos in 1900. In fact, the influence appears to be more in the opposite direction: the definitions in *LSJ* influenced the understanding of armour in the wider study of the Homeric poems, and their citations have been the focus for subsequent treatments of Homeric body-armour.

The word *θώραξ* will be familiar to students of ancient Greek from Homer, Herodotus, Xenophon and other authors read commonly. Modern dictionaries and translations often have 'breastplate'. Such a translation can be misleading, because it implies metallic plate armour, which covers only the chest. The alternatives given in Liddell's *Intermediate Greek Lexicon*, 'cuirass' and 'corslet', are still used, although they are obscure in modern English. While they are, perhaps, suitably grand and archaic for the *Iliad*, they are certainly inappropriate for descriptions of 5th century hoplite battles – especially since the word 'cuirass' originally denoted an item made of leather (Stubbings 1962, 506-507). 'Body-armour' might be a suitable definition for all the items labelled *θώραξ*, but is far too modern even for hoplites, and so cannot serve as a translation.

The problem is more complex because the word *θώραξ*, has a long history, and denotes several forms of armour intended to protect the upper body. It is attested in Linear B, in the plural, as *to-ra-ke*, in a tablet from Pylos (PY Sh 736)³ and continued to be used into Roman times: it occurs in Plutarch (e.g.

² E.g. the A Scholia on *Iliad* 2.529-530 and 2.830, and the A and T Scholia on *Iliad* 5.99.

³ See further Ventris & Chadwick 1973, 375-380.

Life of Caesar 27) and in the New Testament, where it is also used figuratively (e.g. *Ephesians* 6:14). Yet, although the same word continued to be used in Greek to refer to several types of Greek and Roman armour, it does not follow that any one English word can be used to encapsulate the variety and history of the items referred to by *θώραξ*.

2.1 PROBLEMS IN DEFINING *θώραξ* FROM THE *ILIAD*

The passages from the *Iliad* cited by *LSJ* present a complex situation. Firstly, it is not clear how much of the body was protected. A *θώραξ* or its plates, *γύαλα*, could be worn by Trojans or Achaeans, and, in addition to protecting the chest (*Il.* 11.19), might cover any of the following: the shoulders (*Il.* 5.99, 188-189), the waist (cf. *ζωστήρ* in *Il.* 4.132) and the abdomen (*Il.* 13.506-507). However, Prothoenor is wounded in the shoulder (*Il.* 14.449-452) without any reference to armour.

Specifically, it is not clear whether the back was covered. Some types of armour, such as that worn by Menelaus in *Iliad* 4 and by Polydorus in *Iliad* 20 (passages 1 and 3) seem to have protected the back.

- (1) α[τ↓ δα α|τῶ δψυνηεν |ημι ζπστ°ροω |ξ°εω
 ξρ(σειοι σ(νεξον κα← διπλ)οω ≥ντετο ψΘρηφ.
 /ν δα fπεσε ζπστ°ρι □ρηρ)τι πικρ]ω | (στ)ω:
 δι□ μ'ν □ρ ζπστ°ροω/λ→λατο δαιδαλΥοιο,
 κα← δι□ ψΘρηκω πολυδαιδ□λου ±ρ→ρειστο
 μ↔τρηω ψῶ, θν/φ)ρει fρυμα ξρο]ω ♣ρκωω □κ)ντπν (*Iliad* 4.132-137)

Phyleus in *Iliad* 15 (see passage 4) seems to be wearing another kind of armour, which nevertheless also protected the back.

Although in these passages, the warrior's back is protected, elsewhere (passage 2), the poet explicitly says that when they (presumably both Greeks and Trojans) turned, their backs were uncovered:

- (2) πολλοὶ δὲ ὅττι ζοντο κατὰ ξρῶα νηλὺ Ἰξάλκῳ,
 ±μ'ν ἴτε στροφῶντι μετὰ φρενα γυμνωσεῖη
 μαρναμῶν, πολλοὶ δ' διαμπερ' ὠσπεδοῶ αἴτω (Iliad 12.427-429)

Secondly, the *Iliad* refers, apparently indiscriminately, to two different panoplies.⁴ One of these, worn by both Greeks and Trojans and their allies (e.g. Ajax, Idomeneus, Aeneas and Glaucos), did not include a *θήραξ* (Leaf 1960, 576). Upper-body armour in the other panoply is treated inconsistently. So Diomedes wears a *θήραξ* at the start of *Iliad* 5 (5.99), but line 5.113 has been understood as indicating that he fought without one. Menelaus too is wounded *διὰ ψῶρηκῶ πολυδαίδου* in *Il.* 4.136 (passage 1), but this armour is not mentioned in 4.185ff. and 4.213ff., where the wound is described again. When Poseidon exhorts the Greeks to arm themselves with their spears, shields and helmets, he does not refer to other pieces of armour (*Il.* 14.370ff.). Yet when the narrative resumes, the poet notes that they advanced in gleaming bronze (*Il.* 14.383).⁵

Thirdly, some passages are obscure. When Menelaus is wounded through his armour (passage 1), it is not clear in what way the *θήραξ* is *διπλόος* and, consequently, where the wound is. The 5th edition of *Liddell and Scott*, in its article for *διπτόμαι*, translated the line as 'the breastplate doubled (by the overlying belt) opposed... the dart'. Leaf and Edwards both argued that the breast- and back-plates met on each side: the plates overlapped, and so were

⁴ This Greek term may have unhelpful connotations, but is used here in a general sense.

⁵ This does not necessarily require bronze upper-body armour. The panoply also seems to be limited to a spear, shield and helmet in *Il.* 13.713ff., 15.125ff. and 15.478-483; see also Leaf 1960, 577.

doubled. Kirk insisted that “the clasps of the ζωστήρ must in any case meet at the front” and suggested that Menelaus was wearing a jerkin made of leather, which overlapped like a jacket.⁶ In a similar scene (passage 3) the same line and a half are employed, but the wound is in Polydorus’ back. Such a discrepancy may indicate the poet’s own uncertainty about the nature of this type of armour as well as the adaptation and misapplication of formulae in “typical scenes”.

(3) τ[ν β[λε μΥσσον □κοντι ποδ□ρκηω δ[ί]οω □Αξιλλει|ω
 ν[η]τα παρα[λ]σσοντω, |ψι ζωστ[ο]ρω |ξ[ο]εω
 ξρ[σ]ειοι σ[ν]εξον κα[ε] διπλ[ο]ω ≥ντετο ψ[θ]ρηφ (*Iliad* 20.413-415)

Fourthly, although the epithets used to describe a θώραξ⁷ may suggest metallic properties, as Stubbings argued (Stubbings 1962, 507), it is not necessary to conclude that the armour they describe was therefore metallic. The descriptions πανα[ε]ολω (*Il.* 11.374), λαμπρ[ή]ν γαν[υ]πντεω (*Il.* 13.265), α[ε]ολοψ[θ]ρηφ (*Il.* 4.489) and λευκοψ[θ]ραφ in Xenophon (*Anabasis* 1.8.9) indicate that the armour was bright, shining or even dazzling – perhaps from metallic discs attached to fabric.

Other adjectives seem to confirm even more clearly that the armour was made of metal, e.g. χάλκεος (*Il.* 13.371-372). And yet, in these instances, it is unclear whether the entire item was made of two metal plates, or consisted of metallic plates or discs attached to some kind of leather or linen jerkin. Even πολυδαίδαλος (*Il.* 4.136), which is often translated as ‘curiously or richly wrought’, can, according to *LSJ*, be used of weaving, and νεόσμηκτος could mean ‘recently cleaned’ (*Il.* 13.342), so neither adjective requires the armour to be metal. In any case, references in the *Iliad* (λινοθώραξ,⁸ *Il.* 2.529, 830),

⁶ Munro 1894 on 4.132, Edwards 1991 on 20.413-415, Kirk on 4.132-135.

Herodotus (2.182.1) and Alcaeus (fr. 357 LP) to linen worn in battle seem to imply something entirely non-metallic. Linen armour has a long history of use in battle (Snodgrass 1999, 90), and it is reasonable to suppose that the Achaeans wore it in the *Iliad*, where armour is often first mentioned when it is pierced and the hero is wounded.

However, conclusions should not be drawn about the materials used, just from descriptions of heroes being wounded. There are examples of a bronze *θώραξ* and *γύαλα* being pierced (*Il.* 13.371-372), as well as instances where the material is not mentioned. A bronze *χιτών* used to protect Alcaeus is broken by Idomeneus (*Il.* 13.439-440), and Ajax breaks through Diomedes' shield, but not his breastplate (*Il.* 23.818-819). Although a bronze helmet given by Apollo deflects a spear (*Il.* 11.351), another bronze helmet is pierced (*Il.* 12.184). Mortal Aeneas breaks through two layers of Achilles' divine armour (*Il.* 20.267ff.). The poet seems more interested in the strength and skill of the heroes against armour, than in alluding to the material from which that armour was made.⁷

A final complication is that some items of armour are introduced as exceptional pieces handed down from the previous generation or taken as a prize (*Il.* 23.560ff.). Although such items are often described in great detail, and so might have provided us with a fuller understanding of Homeric armour, they are explicitly described as unusual. Phyleus' *θώραξ*, which is fitted with plates (passage 4), is one example of these, so perhaps should not be taken as indicative of the norm.

(4) πυκινίω δ'Υ οἰδ' ἄρκεσε ψῶρηφ,
τῶν ἐφ' ἄρει γυλοισιν ἄρηρτα: τῶν ποτε Φυλείω
ἄγαγεν ἄρ' ἐφ' ἄρηφ, ποταμοῖσιν ἄπο Σελλῶν ἐντοῶ.

⁷ Cf. the "men of our generation" motif, e.g. *Il.* 20.285ff.

φεῖνοω γὰρ οἷον ἴδωκεν ἄναρ ἄνδρῶν ἔφ' ἔτιω
 /ω π)λεμον φορῦειν δηλῶν ἄνδρῶν ἄλεπρ→ν (*Iliad* 15.529-533)

These problems of interpretation have been considered so difficult that Leaf argued that most, if not all, passages involving a *θήραξ* were post-Homeric interpolations (Leaf 1960, 577-578). Reichel attempted to resolve the problem of definition by suggesting that *θήραξ* originally referred to any piece of armour. This should certainly be born in mind when studying the cognate verbs, the poetic *θωρήσω* and the prose form *θωρακίζω*, because both these verbs can refer to armour in general, not metallic chest armour specifically. For example, Xenophon uses the verb for arming horses (*Cyropaedia* 8.8.22), though we cannot tell whether this use is a semantic extension, or a preservation of an original, more general, meaning.

2.2 THE EVIDENCE FROM MYCENAEAN ARCHAEOLOGY⁸

Since the publication of *LSJ* and of Leaf's commentary, Mycenaean archaeology has provided examples of the kinds of body armour in use during the period in which the *Iliad* was composed. However, the evidence of artefacts, several Linear B ideograms, artistic representations and references to armour on other Linear B tablets, have not fully explained the problematic passages in Homer.

The 16th century Mycenaean shaft-graves provide very little evidence of body-armour. Gold-foil breastplates seem to have been merely ceremonial. A fragment of linen, fourteen layers thick, may have been part of some kind of armour (an inference from references to such items in literature). However,

⁸ See Snodgrass 1999, 14-47.

we cannot know whether this was a jerkin which would have had metallic plates or discs attached to it, or which would have been used on its own.

The Dendra corslet (figure 1), from the Palace Period, consisted of a breast- and back-plate, to which were attached a neck-guard and two shoulder guards, with a small overlapping triangular piece to cover the area where the shoulder-pieces met. Three curved plates protected the lower part of the trunk. This, or something like it, might be what Diomedes is thought to be wearing at *Il.* 5.99, although such armour would considerably restrict mobility.



Figure 1. Dendra corslet

In the Late Period, the Warrior Vase depicts soldiers wearing stiff but non-metallic jerkins, which stand well away from the body and have long sleeves. The white dots on the warriors' "shirts" may represent metal discs. The vase would therefore attest linen used as a support for armour, whereas Homer, Herodotus and Alcaeus describe linen itself used as armour. Other vase paintings depict similar items, while the ideograms on the Pylos tablets seem to represent a short-sleeved variety. The *Iliad* does not enable us to determine whether the arms were covered or not.

There is almost no evidence from the Dark Age (1200-750 BC): either there was no armour, or linen or leather corslets were used, but have not survived. Bronze plate armour was apparently used again in the late 8th century, and subsequently became the standard for hoplites.

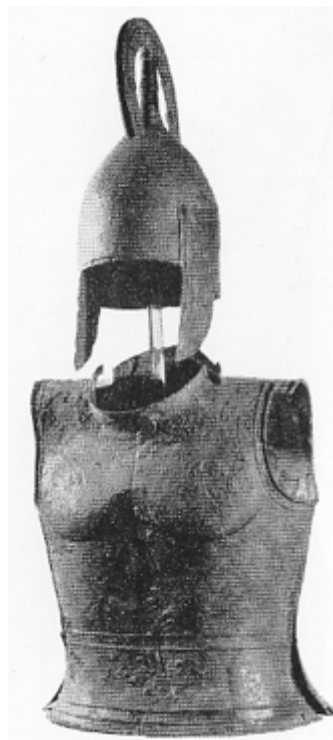


Figure 2. Late-Geometric Argive panoply

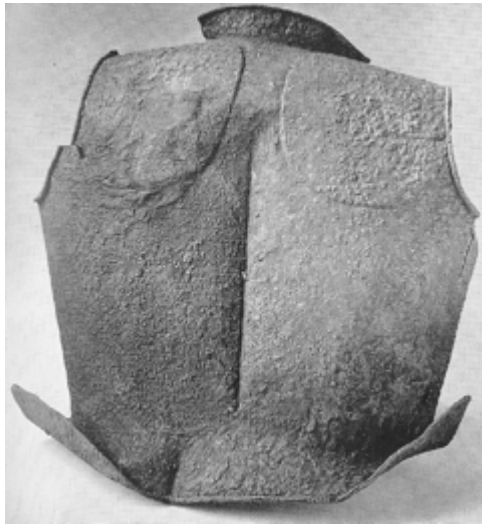


Figure 3. 7th century Olympic back-plate

Armour similar to the Late-Geometric Argive panoply (figure 2) or the 7th century Olympic back-plate (figure 3) was probably what the first reciters of the *Iliad* (and their audiences) pictured the heroes wearing. Indeed, such bronze “breastplates” have also influenced modern readers of Homer.⁹ However, Mycenaean archaeology has produced evidence for various types of upper-body armour, and this diversity is comparable with the variety known to the oral tradition that lies behind the *Iliad*.

2.3 APPROACHES AVAILABLE TO THE GENERAL LEXICON

The wealth of cultural information is, clearly, too great to be covered comprehensively in a non-encyclopaedic lexicon. The lexicographer is therefore presented with the problem of how to explain what a *θώραξ* was, in

⁹ Leaf and others seem to have thought that *θώραξ* denoted something like hoplite armour and so proposed to excise any passage involving one. See Leaf 1960, 577-578; Stubbings 1962, 506.

such a way that readers can understand the text before them without being overburdened with data. At the same time, it is desirable to preserve and make accessible whatever further research has been done. Readers should also be encouraged, though not compelled, to consider the wider context, linguistic and cultural, of the word they look up.

An appropriate solution, in the case of a word like *θώραξ*, which refers to an artefact, would be to include an illustration or diagram, as Autenrieth did in his *Homeric Dictionary* (see figure 4).



Figure 4. Illustration from the *Homeric Dictionary*

However, the use of a diagram still leaves the problem of selecting the type of armour to be illustrated. The choice of artefacts, artistic representations and simplified diagrams is as large as the number of types of armour known from the *Iliad*. Further, two-dimensional illustrations might not show clearly whether the back was protected or not.

However, electronic editions on CD-ROM or on the World Wide Web offer other possibilities. Three-dimensional models could be the clearest way to illustrate the construction of a complex artefact like a *θώραξ*. The use of colour would help to indicate the materials involved.

Other items can be illustrated using similar methods. Plans, animations and photographs could all be used to explain the components of a trireme, or the layout of houses and temples. Diagrams can be used to illustrate the spatial relationships which are expressed by prepositions.

Electronic editions will also permit hyperlinks to more encyclopaedic commentary. They could also provide access to the textual sources themselves, supporting the article and providing further material for research. Hyperlinks can provide references to texts not normally covered by student lexica, such as the descriptions of noteworthy *θήρακες* in Pausanias (1.21.6, 6.19.7 and 10.26.3), which include items of remarkable workmanship dedicated in temples. The interface can be configured so that the students themselves can choose whether to view this extra material, according to their interests and level of Greek.

Such supporting material does not have to be restricted to words referring to artefacts. It can be applied even to a word as abstract as *ψυχή*, which had a great range of connotations at different times, and in different philosophical schools. For such concepts, hyperlinks could be given to an encyclopaedic article, or to passages from Aristotle's *De Anima*, or to Platonic dialogues in which the nature of the *ψυχή* is discussed. Links to the texts would be a particularly useful addition to student dictionaries which do not include citations, since they can lead the student to a deeper understanding of a word than is possible from a short citation.

However, it is the printed lexicon which forms the basis of the other versions, and it must be useable independently. Consequently, the formatting conventions must be designed to communicate as much information as possible, as clearly as possible, in a limited space.

Below is shown a proposed entry for the word *θώραξ* in the Cambridge Greek lexicon,¹⁰ which attempts to meet these criteria.

θώραξ -κος Ion. θώρηξ -ηκος *m.* | Aeol. nom. pl. θόρρακες

1 armour for the upper body, **corslet, cuirass, breastplate** Hom. +; (made of linen) *Il.* Alc. Hdt. (cf. λινοθώρηξ); (made of chain mail) Hdt.; (made of two metal plates, usu. bronze, oft. w. παναίολος or πολυδαίδαλος) *Il.* A.R. (may refer only to the breastplate itself, to other parts, or to the armour as a whole); (of hoplite armour) Th. X. D. Plb.

2 (transf.) **armour** —*of a city's outer wall* Hdt.

3 the front of the upper body (either the part which would be covered by a breastplate, or which offers protection), **chest, rib-cage** E. Ar. Pl.

Key to the entry structure and formatting conventions:

In sense 1, the reader is presented with several types of information which are distinguished by font and by style (plain text, bold and Helvetica). A definition in plain text should enable the reader to understand any textual usage and choose a suitable translation for the author, setting and register. Three suggested translation glosses have been included in bold.

References to the most important authors are included in a different font. Here “Hom. +” indicates that the word is common in poetry and prose from

¹⁰ This student-level Greek-English lexicon currently being edited by Dr. Anne Thompson emphasises semantic groupings, rather than syntactic structures.

Homer onwards. By noting which authors refer to each type of *θώραξ*, the article gives an outline of the history of the word, and so will help the reader to determine which type or types should be understood in a particular passage.

Additional notes are included in brackets to distinguish them from the definition. Introductory comments, such as “(made of linen)” introduce a subsection and associate it with particular authors. They may also give details of grammar or usage, as in “(transf.)” in sense 2, indicating that Herodotus’ use is a transferred one.

Explanations which follow the list of authors supply additional, but secondary, philological and cultural details. Here note “(cf. λινοθώραξι)” and “(may refer...)”. These attempt to communicate something of the variety attested in literature and in the archaeological evidence, and also indicate to the reader that there is more information to be understood than is given by the simple translation glossa, “breastplate”.

In sense 2, a long dash introducing italicised text marks a “context indicator”. This offers information about usage in a specific passage.

In sense 3, the brackets contain information which elaborates on the definition, here offering a choice between two possible explanations for this sense, in relation to sense 1. From the information given under sense 3, the reader should be able to understand the anatomical use of *θώραξ* in the Hippocratic Corpus and Aristotle (e.g. *De Arte* 10; *Historia Animalium* 493a5), even though, for reasons of space, it is not discussed in the printed edition. In the electronic versions, additional commentary and hyperlinks to these texts can be given.

3. CONCLUSION

Cultural material may be integrated into a non-encyclopaedic lexicon by framing the verbal descriptions with clear and accessible formatting conventions, by including images, and by employing the full range of multimedia and hypertext technologies. By showing as well as telling, we can guide students through the article. This allows us to acknowledge the textual ambiguities and cultural uncertainties while avoiding confusion, so that we introduce wider issues of interpretation, and stimulate the students' interest in the cultural context, as well as in the details of the literary texts.

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