# Report and Taxis in Herodotus's Histories: a systemicfunctional approach to the description of Ancient Ionic Greek 

# Reportagem e taxis nas "Histórias" de Heródoto: uma abordagem sistêmico-funcional para a descrição do Grego Jônico Antigo 

Daniel Couto-Vale<br>RWTH Aachen University, Aachen, Alemanha.<br>daniel.couto-vale@ifaar.rwth-aachen.de


#### Abstract

This article aims at describing how report and taxis were realised in Herodotus' Histories. For this purpose, I have organised the most frequent grammatical features of clauses in a small corpus in contrastive sets (systems). With this procedure, I have gathered evidence that both temporal nexuses and report status were realised in Ionic Greek by grammatical features of the clause, which preselected inflectional features of the Finite word and grammatical features of the Subject constituent. These grammatical features could be organised in a systemic network that included systems for determining whether clauses initiate or continue temporal sequences; whether the actor of the initiating clause is the same as the one of the continuant; in case of distinct actors, whether the first is more or less topical than the second; and, finally, whether clauses represent reported locutions or not.


Keywords: genitive absolute; accusative absolute; finite; process; clause.

Resumo: Este artigo tem como objetivo descrever como reportagem e taxe foram realizadas nas Histórias de Heródoto. Tendo em vista este propósito, organizei os traços gramaticais oracionais mais frequentes em conjuntos de opções contrastantes (sistemas). Com esse procedimento, consegui acumular evidências de que tanto os nexos temporais quanto o status de reportagem eram realizados em Grego Jônico por traços gramaticais oracionais, os quais pré-selecionavam traços inflexionais da palavra "Finita" e traços gramaticais do constituinte "Sujeito". Esses traços gramaticais foram passíveis de serem organizados em uma rede sistêmica que inclui sistemas para determinar se orações iniciam e/ou continuam sequências temporais; se o ator da oração iniciante é o mesmo que o da continuante; em caso de atores distintos, se o primeiro é mais ou menos tópico do que o segundo; e, finalmente, se as orações representam locuções reportadas ou não.
Palavras-chave: genitivo absoluto; acusativo absoluto; finito; processo; oração.

Recebido em 30 de janeiro de 2015.
Aprovado em 17 de junho de 2015.

## 1 Introduction

Did Herodotus of Halicarnassus state that Alexander of Ilion (Paris of Troy) stole a woman or that he is said to have stolen a woman? Did he really write that the prince of Ilion used not to pay for anything and that he even stole a woman from Hellas (Greece) or did he actually mean that by allegedly not considering women something to pay for, he is said to have taken Helen as his wife without paying for her and thus to have been taken to have stolen her? These are the kinds of questions that today's readers of the Histories have when they come to this precious text.

To answer such questions, not only must one recognise the formal patterns of a clause in Ionic Greek, but also be able to recognise the other patterns this clause could have taken in order to understand what is really meant. A good understanding of systematised grammatical
features is an essential ability for keeping track of the various kinds of meanings that wordings realise simultaneously and ultimately to be able to read the Histories and really appreciate the effort that this early historian has put in forging a notion of ethnographic works as empirical investigations. Without these meaningful contrasts, one cannot construe a reasonable chronological order for the discussed events nor distinguish the information that Herodotus presents to us as facts perceived by him personally from those he presents as reported locutions from unnamed informants. Unfortunately, grammatical accounts of Ancient Greek dialects have never been revisited from a systemic functional perspective and Process words have been so far only classified according to selected base and appended affixes. This lack of grammatical accounts of rank structure above the word leads to the current state of the art in which all grammar books of Ancient Greek present at most formally classified "syntactic" structures with very limited mapping to linguistic meaning. And that makes access to Herodotus's Histories much harder than it should be.

Recent works continue this long grammatical tradition of formal classification of verbs and consequent classification of clauses in the same terms. These works ${ }^{1}$ include Gramática Grega (FREIRE, 1997), The syntax and semantics of the verb in Classical Greek (RIJKSBARON, 2002) and Sintaxis del Griego Clásico (CRESPO; CONTI; MAQUIEIRA, 2003). Here, the description of each grammatical structure type can be broken in three steps: first, the authors define a word class in term of morpheme classes; secondly, they enumerate some functions of the defined word class; thirdly, they illustrate each enumerated function with examples that are either artificially created or taken from random canonical texts. In these works, there is little or no attempt to organise the illustrated meanings in sets of contrastive options. Even when some sets of contrasting examples are presented, they are presented as subsets of morphological categories in chapters covering "Aspects", "Modes and Tenses", "Infinitive", "Participle" and so on. Moreover, these works present neither a skew distribution of choices nor the coverage of their description. So what is described might not cover a particular corpus properly and the information might not be organised according to any frequency measure. In such grammars, what is foregrounded is

[^0]the possibility of combinations of morphemes inside a word and not the functions that words have in composite structures.

Departing from this tradition of classifying verbs by their inner structures and then projecting the same classification to the clause rank, I shall classify clauses according to a different philosophical and theoretical framework, a holistic and functional approach to human interaction and language. This framework divides the functions of language in our daily lives into experiential, logical, interpersonal, and textual components (HALLIDAY, 1979). In the experiential classification, I shall classify the kind of processes depicted by the clause; in the logical, how the figures are organised into sequences of projection or expansion; in the interpersonal, how the author and his informants relate to the episode; and, in the textual, how the entities construed in the discourse become topics and how topics are recovered in following clauses and then fade away. By adopting this systemic functional approach to linguistic analysis ${ }^{2}$ (HALLIDAY; MATTHIESSEN, 1999; HALLIDAY; MATTHIESSEN, 2004; HALLIDAY; MATTHIESSEN, 2014), this paper aims at describing clauses in Ancient Ionic Greek in a manner that makes the construction of meaning more direct and much more precise. With this description, I intend to help Greek researchers, professors and students to read this valuable world heritage, namely the Histories, with ease, and then demonstrate how we can use texts as an instrument for studying a language and how we can use our improved linguistic competence for reproducing more precisely the experience of those reading texts in the Ancient World.

## 2 Methodology

Herodotus of Halicarnassus is given the title "Father of History" because his writings are the oldest preserved texts in which a Greek writer tells to have systematically interviewed informants from different ethnic groups about past events and to have separated the reported events that were to him indisputable from minority, majority, and disputed opinions

[^1]of informants. The first narrated episode in his Histories is the sequence of "theft of women" that are said to have culminated in the worldwide famous and Eurasia-dividing sack of Ilion (Troy). This episode consists of the first five chapters of his work and was narrated with various language resources that delegate the responsibility for the content to his sources, a sophisticated writing style that makes these five chapters an adequate corpus for studying the linguistic resources of Ionic Greek for realising sequences of actions presented as the content of reported locutions.

In this paper, I have adopted a non-traditional approach to the study of Ancient Greek, a strand of linguistic description that is supported by the Systemic Functional Theory of human adult languages. Since this is a novel approach that is drastically different from that which has previously been adopted in the study of Ancient Greek, I shall spend some pages to contrast it with the traditional approach.

Let's suppose there is a language in which a base can be preceded by a prefix $A$. If the base is preceded by the prefix $A$, then it must be followed by the suffix K. Otherwise, the base must be followed by one of two suffixes: L or M. In turn, the suffix M must be followed by one of three suffixes: X, Y or Z. In this language, there would be five structures, namely, AK, L, MX, MY, and MZ. The presence/absence of a prefix/suffix are formal features of a structure. These formal features are organised in Table 1. Now let's suppose there are two sets of contrastive features (S1, S2) and (R1, R2, R3) in this language and that these structures realise either one feature of one set (system) or one feature of each set (system) as shown in Table 2.

Table 1: Formal classification of word forms in a hypothetical language

|  |  | Prefix A | - |
| :---: | :---: | :---: | :---: |
| Suffix K | - | a bo $k$ |  |
| Suffix L | - |  | bo $l$ |
| Suffix M | Suffix X |  | bo me $x$ |
|  | Suffix Y |  | bo me $y$ |
|  | Suffix Z |  | bo me z |

Table 2: Systemic classification of word forms in a hypothetical language

|  | Feature S1 | Feature S2 |
| :---: | :---: | :---: |
| Feature R1 | abo $k$ | bo $l$ |
| Feature R2 | bo me $x$ | bo me $y$ |
| Feature R3 | bo me $z$ |  |

In Table 1, I organised structures according to the presence/ absence of prefix A in columns and according to the presence/absence of suffixes K, L, M, X, Y, and Z in rows. This kind of formal classification of structures is the one seen in traditional grammars. Differently from that approach, in Table 2, I organised structures according to the contrastive features of the system $S$ in columns and according to those of the system R in rows. This is the kind of classification that I shall use in this paper.

At this point, it must be highlighted that both classificatory systems have their own value. On the one hand, the formal classification produces a table that gives an overview of the available prefixes, infixes and suffixes of the language. However, it provides no global view of the available meanings. On the other hand, the semantically motivated classification (systemic network) provides the global view of the available meanings, but it does not provide a clear overview of the available bases, prefixes and suffixes. In other words, while the former classification focuses on theorising words as composite structures, the latter focuses on theorising words as resources that combine with their neighbours to constitute meaningfully contrasting composite structures. This means that both classificatory systems should further co-exist and that the observations I make in this paper should not be taken as a replacement of previous formal studies of verbs in Ionic Greek.

To describe the above-mentioned resources using both semantic and grammatical features, we need to make use of another classification system. In Systemic Functional Linguistics, one of the components of clause analysis consists of the experiential roles of represented entities. These roles include a process, the participants of this process and the circumstances in which it occurs. For instance, in clauses that depict actions ${ }^{3}$, the word that represents the action is the Process word. The

[^2]constituents that represent the actor and goal of the action are the Participant constituents, and the adjuncts that represent the time and place of the action are the Circumstance constituents. Another component of analysis consists of the interpersonal functions of clause constituents for the current exchange of information, services or goods. In this component, the constituent functions are divided into Addressee, Subject, Objects, Tense, Modality, Mood, and Finite. For our purpose here, it is only relevant to notice that the Process word and the Finite word can be but are not necessarily the same. Clause Analysis 1 shows a clause with a Process Finite word and Clause Analysis 2 a clause with a Process word and a Finite word in Ancient Ionic Greek.

| ${ }^{\circ}$ E $\lambda \lambda \eta$ П $\alpha \varsigma$ the Helenes | Tท̀̀ $\nu$ Про́́ $\mu$ ov Súvapıv Priam's power | $\kappa \alpha \tau \varepsilon \lambda \varepsilon \tau$ overthrow |
| :---: | :---: | :---: |
| Actor | Goal | Process |
| Subject | Object | Finite |

`The Hellenes allegedly overthrew Priam's power.'
Clause Analysis 1 - Clause with a Process word that is also the Finite word

| то⿱̃бเ ${ }^{\circ}$ E $\lambda \lambda \eta \sigma \iota$ those Helenes | ठó ${ }^{\circ} \alpha$ seem | $\pi \rho \tilde{\tau} \tau$ òv first | $\pi \varepsilon ́ \mu \psi \alpha \nu \tau \alpha \varsigma$ send | $\alpha \dot{\alpha} \gamma \bar{\gamma} \lambda$ оия a messenger |
| :---: | :---: | :---: | :---: | :---: |
| Actor | - | Time | Process | Goal |
| Subject | Finite | Adjunct | - | Object |

`They said those Hellenes seem to have first sent a messenger.'
Clause Analysis 2 - Clause with a Process word that is not a Finite word

In addition, we must also be aware that a Process word is a mere fragment of a greater clause structure and that the main meaning-making unit of human languages is the clause and not the Process word. If we were to analyse the structures of Process words isolated from the clauses

[^3]in which Process words occurred, we would inevitably reproduce the same traditional formal classification (independent analysis of inner structure) and be unable to produce a direct mapping between wordings and meanings. And there is a fundamental reason for this, as pointed out by Whorf (1956, p. 88-89) and theorised by Halliday and Matthiessen, (1999, p. 15-29), formal features are only "reactances" of "cryptotypes" (systemic features) and cryptotypes are not to be seen in any structure in isolation. The need for them is only perceived when generalisations are made that show not to work. Therefore, they are not "overt" (directly observable) but "covert" (necessary but not observable). In the present work, I adopt a "systemic" approach to grammar, which is a functional approach that explains the reasons for choosing formal features in a semantically motivated way. In other words, the kind of claim that I shall make in this paper take the form of "the choice of this observable pattern instead of that other means such and such". This approach differs from "non-systemic" formal classifications, because an exclusively formal classification does not provide a set of contrastive features that correlate with semantic choice. They are independent of semantics, thus semantically arbitrary.

Finally, traditional assumptions that Process words only realise "meanings" such as tense, aspect, mode, person, and number and that their themes are "meaningful" must be dropped. Process words may conflate with other functions of language and, because of this, inflections may realise a range of systemic features including those related to taxis and embedding. For instance, English Process words ending in "ing" may function as Tense tails as in "I am reading the paper", they may function as Conjunctive tails as in "I shall classify words by making meaningful clause contrasts", and they may also function as Restrictive words as in "a man wearing a hat". As we shall see when classifying finite clauses in the Histories of Herodotus, such a range of functions for words with identical forms happens not only in English, but also in Ionic Greek.

### 2.1 Corpus Annotation

For annotating the five-chapter corpus and retrieving statistics, I used the UAM Corpus Tool developed by O'Donnell (2010). The first step of corpus annotation consisted of segmenting the five chapters in clauses, then annotating them with clause features according to experiential,
logical, interpersonal, and textual meanings (HALLIDAY, 1963). When annotating the clauses from above, I separated the ones that represented the processes of the narrated episode from the ones that represented the historical research procedures using the attributes "episode", "notepisode", "research", and "not-research". Then I separated wordings presented as reports from those presented as simple phenomena with the tags "report-status" and "fact-status". The difference between a fact wording and a report wording is that, for the former, the reader is expected to construe entities in our common instantiated experience (model) of the world whereas, for the latter, the reader construes a semiotic entity, i.e. a locution or an idea, in this model of reality (HALLIDAY, 1970), which, in its turn, may be used to construe another model of the world or another version of the containing one.

As for the experiential classification, I separated episode states from episode events and classified processes as either projecting or non-projecting. In this paper, I focus on sequences of actions, that is, of non-projecting events carried out by persons. I also annotated projection relations between each episode process and Herodotus's research observations and temporal relations of processes within the episode. These relations were either paratactic or hypotactic depending on whether the primary clause is given the same or more prominence as or than the secondary. When the relation was levelled (paratactic) the primary clause was marked as taking an initiating role in the relation and the secondary clause a continuing role. When the relation was unlevelled (hypotactic), the primary clause was marked as taking a dominant role in the relation and the secondary a dependant role. The type of relation was marked as either projection (citations and reports) or expansion (elaborations, extensions, and enhancements) (HALLIDAY; MATTHIESSEN, 2014, p. 428-556). The segmentation of the first five chapters of the Histories into clauses is given in the translation in Appendix I.

## 3 Reported Locutions

The episode of the Ilionian war (Trojan war) is presented as something that the wise men amongst Persians have recounted as having happened, i.e. as a reported locution of these men, and not as something that actually happened, i.e. as a series of facts. In the end, an alternative version of the beginning of the episode is presented as a reported locution
of the Phoenicians. By using these five chapters to describe the linguistic system of LOCUTION-REPORT-STATUS, I have identified that, in Ionic Greek (Ion: Halicarnassus: 484-425 BC), ${ }^{4}$ when a clause reported the locution of others, specialised structures were chosen for Finite/Process words, which are different from those of a clause that represents what Herodotus states to have happened or that represents his comments about happenings. Both the Finite/Process words and the Subject constituent (when there is one) react to this systemic contrast. The pair of two clause complexes below illustrates this meaningful grammatical contrast. ${ }^{5}$
(1) Locution
 ${ }_{88}$ and then $\mathrm{go}_{\mathrm{B} 2}$ to the Asia ${ }_{89}$ the Priam's power overthrow ${ }_{\mathrm{A} 2}$ ${ }_{88}$ then they would have come to Asia ${ }_{89}$ and overthrown Priam's rule' (Hdt. 1.4.3)

## Fact

$$
\begin{align*}
& { }_{88} \text {, and then } \mathrm{go}_{\mathrm{B} 1} \text { to the Asia }{ }_{89} \text {, the Priam's power overthrow }{ }_{\mathrm{A} 1}  \tag{2}\\
& \text { ' }{ }_{88} \text {, then they came to Asia }{ }_{89} \text {, and overthrew Priam's rule' (Alternative to Hdt. 1.4.3) }
\end{align*}
$$

Since there is a clause contrast that reflects (redounds and construes) a semantic contrast, I conceive of these two meaningful classes of clauses, namely locution-report and non-locution-report, as grammatical features of the clause in Ionic Greek, which integrate the interpersonal system of LOCUTION-REPORT-STATUS. So far, based on the empirical data that I have collected, this system is composed of two features, namely locution-report and non-locution-report.

[^4]With such a description of potentiality, I make no claim based on the text analysed that all locution-report wordings and non-locution-report wordings are represented in Ionic Greek with the above forms for Process terms since it is the case that there are other clause contrasts within this episode and outside of it that I have not taken into consideration. This kind of claim would demand an all-covering systemic network for clauses, which is not within the scope of this paper. Moreover, I also do not claim that the system of LOCUTION-REPORT-STATUS is sufficient for describing Ionic Greek as far as content accountability is concerned since there are other contrasts for clauses expressing whether what is being narrated consists of an idea-report, a fact or something else. Nonetheless, the contrast between Herodotus's most frequent wordings (locution-report) and his less frequent wordings (non-locution-report) is there to be seen and must be taken into consideration from a systemic functional perspective. Examples 1-2 contain four clause-constitutional inflectional types of Finite/Process words. They are indexed A1, B1, A2, and B2. All clauses analysed in the present work have Finite words with one of these four inflections or a fifth one indexed C.

### 3.1 Word Types

When describing the inner structure of Process words, I shall avoid both the term "aorist" and the term "theme" because of the long tradition in the study of Ancient Greek of assigning meanings directly to them. In the grammatical description that shall follow, the term "word" has a precise definition. A word is already a grammatical structure. It is an instance of a word type that has occurred inside a clause. However, it is not a graphological structure, that is, it is neither a selectable character string (substance or "selectable" form) nor the result of metamorphic operations ("recognisable" form). It is also not a segment of a character sequence (letters, diacritics, space and punctuation). A word is indeed realised by a segment of a character sequence, but it is not the segment itself. In other words, a word is a "virtual" entity that is realised by a "real" segment of a character sequence.

Therefore, there is no such thing in this description as inflecting a "word" to arrive at its "form". When I evoke the notion of "word form", it means "word-realising form" in so far as realisation is concerned. As for instantiation, I shall describe a segment of a character sequence as
something that matches a word form. This implies that a "form-matching" phenomenon instantiates both the form and the word that the form realises.

Every word in a wording (linear sequence of words) is an instance of one or more word classes (systemic and formal features) and the conjunction of instantiated word classes is the word type (direct class). The word is said to be a token of the word type. One of the systemic features of a word is the lexical term also known as lexical item, the other systemic features are called inflectional features. The formal features of the word include the presence/absence of a Prefix, Base, and Suffix morphemes, and their order. Each constituent of a word is a morpheme (grammatical atom) and each morpheme has a lexical term, a substantial feature, which is an index to a term-specific string (substance) that serves as a model that is transformed in the graphological structure. Finally, there is a set of metamorphic/transformational features (metamorphoses). And, being grammatical atoms, morphemes have no inner grammatical structure per definition. Graphological systemic networks, graphological features, and graphological structures belong to the graphological stratum and shall not be discussed here. To move the tradition of formal analysis to the background and still sustain a connection to it, I shall replace the heavily charged categories of "present", "aorist", "future", and "perfect" themes


All word forms for observed lexical terms and for the five indexed inflections of words are metamorphosed variants of the $\alpha$-base substance of the lexical term of Process and Finite words: $\tilde{\eta} \lambda \theta$ for the lexical term

 morpheme may be accompanied or not by a non-inflectable fragment such as $\kappa \alpha \tau$ (Prefix morpheme) depending on whether the Process term is fragmented or non-fragmented. Being fragmented or not is a lexical feature (related to a lexical term) and not an inflectional feature (inflection-related).


|  | 1 | 2 |
| :---: | :---: | :---: |
| A | ท๋ $\lambda \theta \mathbf{o v}$ <br> $\eta \lambda \theta \varepsilon \varsigma$ <br> $\eta \lambda \theta \varepsilon$ <br> そॅ $\lambda \theta$ о $\mu \varepsilon v$ <br> ぞ $\lambda \theta \varepsilon \tau \varepsilon$ <br> ท $\lambda \theta \mathrm{ov}$ | غ̀入Өعiv |
| B | غ̀ $\lambda \theta \omega \stackrel{ }{ }$ <br> غ̀入Өóvtes <br> غ̀ $\lambda$ Өóv <br> غ̀ $\lambda \theta$ óv $\tau \alpha$ <br> غ̀ $\lambda$ Өoṽ $\alpha$ <br> غ̀ $\lambda \theta$ oũ $\sigma \alpha ı$ | غ̀ $\lambda \theta$ óv $\tau \alpha$ <br> غ̀̀Өóvtas <br> غ̀ $\lambda$ Oóv <br> غ̀ $\lambda$ Өóv七 $\alpha$ <br> غ̀ $\lambda$ Өoũ $\sigma \alpha v$ <br> غ̀ $\lambda$ Өoú $\alpha \alpha \varsigma$ |
| C | غ̀入Өóvtos <br> غ̀ $\lambda$ Өóvт $\omega$ v <br> غ̀ $\lambda$ Өóvtos <br> غ̀ $\lambda \theta o ́ v \tau \omega \nu$ <br> غ̀入Өoúoŋs <br> $\dot{\varepsilon} \lambda \theta o u \sigma \varepsilon ́ \omega v$ |  |

The first cryptic（non－lexical，non－inflectional）system to be described is the one whose feature is realised by an $\varepsilon$－prefix removal metamorphosis that turns $\alpha$－base substances such as $\tilde{\eta} \lambda \theta$ into the form $\varepsilon ̌ \lambda \theta$ and such as $\varepsilon \tilde{L} \lambda$ into the form $\varepsilon ̌ \lambda$ ．Forms created with $\varepsilon$－prefix removal operation realise non－$\varepsilon$－prefixed Base morphemes and the remaining realise $\varepsilon$－prefixed ones．

In addition，some lexical terms of Process／Finite words have a $\sigma$－ending－$\alpha$－base and others a non－$\sigma$－ending－$\alpha$－base．These are also lexical features．On the one hand，a non－$\sigma$－ending－$\alpha$－base can be extended with one of the following five suffix sets（subparadigms）：ov－subparadigm ${ }_{\mathrm{A}}$ ， $\varepsilon ı v$－subparadigm $A_{A 2}, \omega v$－subparadigm ${ }_{B 1}$ ，ov $\tau \alpha$－subparadigm ${ }_{B 2}$ and óv $\tau 0 \zeta$－subparadigm ${ }_{C}$ as seen in Tables 3and 4．On the other hand，a $\sigma$－ending－$\alpha$－base can be extended with one of other five subparadigms： $\alpha$－subparadigm ${ }_{\mathrm{A} 1}$ ，$\alpha \sigma \alpha 1$－subparadigm ${ }_{\mathrm{A} 2}, \alpha \varsigma$－subparadigm ${ }_{\mathrm{B} 1}$ ，$\dot{\alpha} \nu \tau \alpha-$ subparadigm ${ }_{\mathrm{B} 2}$ ，and óv $v \tau \varsigma_{-}$－subparadigm ${ }_{\mathrm{C}}$ as seen in Table 5 ．

In addition to the features $\sigma$－ending－$\alpha$－base and non－$\sigma$－ending－ $\alpha$－base，there is another lexical system that has an effect in the selection of subparadigms：namely，whether the term has a $\mu \eta v$－followed－$\alpha$－base or a $v$－followed－$\alpha$－base．Tables 3,4 ，and 5 display forms for terms with a $v$－followed－$\alpha$－base．Tables 6 and 7 display forms for $\mu \eta v$－followed－$\alpha$－ base terms，respectively a term with a non－$\sigma$－ending－$\alpha$－base and another with a $\sigma$－ending－$\alpha$－base．





On the one hand, inflections of $\mu \eta \nu$-followed- $\alpha$-base non- $\sigma$ -ending- $\alpha$-base terms have suffixes from ó $\mu \eta v$-subparadigm ${ }_{\mathrm{A} 1}$, $\dot{\varepsilon} \sigma \theta \alpha 1-$ subparadigm $_{A 2}$,ó $\mu \varepsilon v o \zeta \varsigma_{-s u b p a r a d i g m ~}^{B 1}$, ó $\mu \varepsilon v o v$-subparadigm ${ }_{\mathrm{B} 2}$, and oućvov-subparadigm ${ }_{C}$. On the other hand, inflections of $\mu \eta v$-followed-$\alpha$-base $\sigma$-ending- $\alpha$-base terms have the Base morpheme followed by a Suffix morpheme with a lexical term of $\alpha \mu \eta v$-subparadigm ${ }_{A 1}, \alpha \sigma \theta \alpha 1-$ subparadigm $_{A 2}$, $\alpha \mu \varepsilon v o \zeta$-subparadigm ${ }_{B 1}$, $\dot{\alpha} \mu \varepsilon v o v$-subparadigm ${ }_{B} 2$, and $\alpha \mu \varepsilon ́ v o v-s u b p a r a d i g m_{C}$.

Finally, the word types in A1 cells are said to be conjugated because they have ${ }^{6}$ a person-number agreement inflectional feature of the CONJUGATION system, the word types in A2 cells are said to be non-agreeing because they have no agreement inflectional feature, and the word types in B1, B2, and C cells are said to be absolute because they have a gender-number agreement inflectional feature of the ABSOLUTION system. Appendix II shows the subnet work of word, which is traversed by selecting inflectional features (agreement and constitution) and lexical features. The selection of graphological features is a consequence of the selection of lexical and of inflectional features at the grammatical stratum.



[^5]Table7: ${ }_{\varepsilon} \delta 1 \alpha \pi \rho \alpha ́ \sigma \sigma o \mu \alpha 1,{ }_{\alpha} \delta \varepsilon \varepsilon \pi \rho \eta \xi \dot{\alpha} \mu \eta \nu{ }_{\mu} \delta^{\delta 1} \alpha \pi \rho \eta \prime \xi о \mu \alpha 1,{ }_{\pi} \delta 1 \alpha \pi \dot{\varepsilon} \pi \rho \alpha \kappa \mu \alpha \iota$

|  | 1 | $\delta \iota \alpha \pi \varrho \dagger ¢ \boldsymbol{\alpha} \boldsymbol{\sigma} \boldsymbol{\theta} \boldsymbol{\alpha}$ | 2 |
| :---: | :---: | :---: | :---: |
| A | бєєпŋך $\zeta \dot{\alpha} \mu \eta \nu$ бเєпৎŋ́ $\zeta \omega$ <br>  <br>  <br>  ঠเєாழŋ́そ $\alpha \vee \tau о$ |  |  |
| B |  <br>  <br>  <br>  ঠı $\alpha \pi \varrho \eta \xi \alpha \mu \varepsilon ́ v \eta$ $\delta \iota \alpha \pi \varrho \eta \xi \alpha \mu \varepsilon ́ v \alpha \iota$ | $\delta \iota \pi \varrho \eta \xi \dot{\alpha ́ \mu} \mu v \mathbf{v}$ бь $\alpha \pi \varrho \eta \xi \alpha \mu \varepsilon ́ v o v \varsigma$ бькпюך $\grave{\alpha} \mu \varepsilon$ коь <br>  ঠı $\alpha \pi \varrho \eta \xi \alpha \mu \varepsilon ́ v \eta \nu$ <br>  |  |
| C |  | $\delta \iota \pi \varrho \eta \xi\langle\mu \varepsilon ́ v o v$ $\delta \iota \alpha \Pi \varrho \xi \alpha \mu \varepsilon ́ v \omega \nu$ ঠı $\alpha$ @ך $\grave{\alpha \mu \varepsilon ́ v o v ~}$ $\delta \iota \alpha \pi \varrho そ \grave{\alpha ́ \mu} \mu \varepsilon ́ v \omega \nu$ бь $\alpha$ Пך $\xi \alpha \mu \varepsilon ́ v \eta \varsigma$ $\delta \iota \alpha \pi \varrho \eta \xi \alpha \mu \varepsilon \nu \varepsilon ́ \omega \nu$ |  |

### 3.2 Report Status and Report Projection

The first five chapters of the Histories comprise of 115 clauses. 12 clauses represented the research process: 10 of which represented saying processes enacted by informants as in ${ }_{01} \Pi \varepsilon \varrho \sigma \varepsilon ́ \omega v ~ \mu \varepsilon ́ v ~ v u v ~ o i ́ ~$ $\lambda o ́ \gamma เ 01$ «»» $\phi \alpha \sigma \grave{\imath}$ «»» ( ${ }_{01}$ amongst Persians the wise currently say that «»») and 2 of which represented opinions of Herodotus himself as in ${ }_{114}$ tòv
 the one $\left[\left[_{115}\right.\right.$ who... $\left.]\right]$ to be amongst the Hellenes). 5 clauses belonged neither to the research nor to the episode. They can be divided in two groups: 3 clauses represent mental processes of informants as facts: ${ }_{33}$ oú $\gamma \dot{\alpha} \varrho$ है $\chi o v \sigma \iota ~ \tau o v ̋ v o \mu \alpha\left[\left[{ }_{34} \ldots\right]\right]\left(_{33}\right.$ they do not have the name [ $\left[{ }_{34}\right.$ with which... ]]), ${ }_{94} \eta^{\eta} \gamma \eta \nu \tau \alpha \iota$ ( ${ }_{94}$ they have taken), and ${ }_{98}$ عv́@í $\sigma \kappa 0 v \sigma \iota$ ( ${ }_{98}$ they judge); and the other 2 represent these mental processes as reports of what informants said (locution reports): ${ }_{72}$ vo $\mu i \zeta \varepsilon \iota v$ ( ${ }_{72}$ though the Persian
 have always taken). The remaining 98 clauses represent events and states of the episode.

In the episode, 1 clause was presented as a fact, 3 as the author's opinions, 1 as an idea reported by informants, and 57 as locutions reported by informants. The total does not cover $100 \%$ of the clauses representing the episode because some of them are embedded clauses that delimit territories, identify seas, and the like, whereas others are "reports within reports" since they represent in a recursive way what informants said, thought, or said they thought that others had said, thought, or said they thought.

The 57 clauses that represent reported locutions of informants were further annotated on their roles in projection relations with nonepisode clauses representing saying processes. They were annotated for whether they were initiating clauses in a projection relation, continuing clauses, dependent clauses, dominant clauses, or not in a projection relation with a non-episode clause. Figure 1 displays the absolute frequencies of this classification.

In Figure 1, it can be clearly seen that a reported locution status was realised in the text most often ( 36 times, $65 \%$ ) without a projecting clause such as the dominant ${ }_{51} \lambda \varepsilon \gamma \gamma \sigma \sigma \iota\left({ }_{51}\right.$ they said) or the dependent
 the Hellenes confirm). Since secondary reports (what informants said others said) and tertiary reports were not included in these 57 clauses, it was noticed that all primary reports of locution were realised with constitutional inflections of Finite Process words. These consist of inflections A2, B2, C among others not discussed in this paper. When there was projection between a research clause and an episode one, there was no Conjunctive word such as ő ő for primary report of locutions. For them, the constitutional inflection of the Finite Process word functioned as Conjunctive, i.e. the inflection was conjunctive.

As there were neither initiating nor continuing reported locutions, the grammatical symptoms of paratactic locution-reporting projections could not be attested. Constitutional inflections of Finite Process words were not recursively applicable as tense in English is. ${ }^{7}$ Therefore, secondary and tertiary reports - report within report within report - were construed with the same constitutional inflections as primary reports, what

[^6]makes these inflections incapable of construing the distance between the author and the source of the content. Projection was the only linguistic resource capable of creating reports within reports since it was recursively applicable. It remains to be verified to what extent rhetorical relations were responsible for maintaining the report level in discourse. Such a discursive linguistic analysis was not carried out in the present work.


Figure 1: Frequency of reported locutions in each projection role

## 4 Parataxis

The episode of the Ilionian War narrated by Herodotus in the first five chapters of the Histories is composed of several sequences of actions. Grammatically, these sequences were represented by clause complexes and a particular character of them is that they were realised most of the time not by Conjunctive constituents, but by conjunctive constitutional inflections of the Finite Process word. Three main types of action sequences could be differentiated based on grammatical features: the clause complex either represented a sequence of actions by the same person or a sequence consisting of a triggering action by someone and a reaction by someone else; in the second case, clause complexes
represented the triggering actor either as more or less topical than the reacting one.

### 4.1 Someone's action sequence

In all examples of sequences of actions by the same actor, only the last Process word has an A-row inflection. All non-last material, verbal and mental processes in a temporal sequence are realised by B-row inflections. If we conceive of temporal nexuses as something that is realised by two interrelated clauses, we can say that B-row inflections were preselected for every clause that was the first one in any temporal nexus in which it takes a role. As discussed in Section 3, B-row inflections are said to be absolute because these they are an entry condition for the system of ABSOLUTION. In addition, the Subject constituents of clauses with B1 inflection are typically in nominative case and those of clauses with B2 inflection is typically in accusative case. For this reason, I shall call these two constitutional inflections respectively nominative-absolute (B1) and accusative-absolute (B2). The C-row inflection shall accordingly be named genitive-absolute (C). The two A-row inflections shall, for the time being, be named conjugated (A1) and non-agreeing (A2).

### 4.1.1 Nominative/accusative absolute

In temporal sequences of actions, the only order that was realised was a sequence of accusative-absolute clauses followed by one nonagreeing clause. The fact that only this order occurred does not necessarily imply that the inverse order was not possible. Even if all documented clause complexes in Ionic Greek were to be analysed, such non-existence claims would not be sustainable. What can be claimed is that all that did happen happened in this order and that a linguistic analysis that applies only to this order is sufficient for the set of examples that we have. This means that clause complexes such as Examples 1-2 would be explained in term of a temporal relation and that wordings as in Example 3 would not be treated as one clause complex, but as two separate clauses with the current explanation.

$$
\begin{align*}
& { }_{89} \text {, the Priam's power overthrow }{ }_{\mathbf{A} 2}{ }^{88}{ }^{\prime \prime} \mathrm{gO}_{\mathbf{B} 2} \text { to the Asia }  \tag{3}\\
& { }_{89} \text { ' they would have overthrown Priam's rule }{ }_{88} \text {, they would have come } \\
& \text { to Asia and...' (Second alternative to Hdt. 1.4.3) }
\end{align*}
$$

In the tradition of systemic functional analysis, two clauses in tactic relation that cannot come in inverted sequence without altering the tactic meaning are said to have a paratactic relation, that means, a relation in which two clauses are taken to have the same status in discourse - one would replace the other as discursive focus creating no discursive stack and whose order is consequently fixed. As I assumed a fixed order for such structures, the temporal nexus between the two clauses is to be understood as paratactic. In other words, the first clause initiates a temporal nexus and the second clause continues it. Specifying it further, all classes that initiate a temporal nexus with the following clause have a nominative/ accusative absolute Finite Process word as long as the actor for the two clauses is the same. A clause that both initiates a temporal nexus with the following and continues another with the previous - middle clauses in a chain of clauses - have started either with the Conjunctive word $\kappa \alpha \iota$ in Example 4 or with the Conjunctive word $\varepsilon \in v \theta \varepsilon \tilde{v} \tau \varepsilon v$ in Example 5.
 ${ }_{03}$ those first from the $\left[\left[_{04}\right.\right.$ red called $\left.]\right]$ sea $\mathrm{go}_{\mathrm{B} 2}$ to
 this the sea ${ }_{05}$ and occupy ${ }_{\mathbf{B} 2}$ that the territory $\left[{ }_{06}\right.$ that also now
 occupy $\quad]]_{07}$ immediately nautical-travel long execute $_{A}$ ${ }_{03}$ they would have come from the sea $\left[{ }_{04}\right.$ called Red $\left.]\right]$ to this sea ${ }_{05}$ occupied that territory $\left[\left[_{06} \text { that they still occupy }\right]\right]_{07}$ and moved on to large sea travels' (Hdt.1.1.1)

$$
\begin{align*}
& { }_{40} \text { navigate }_{\text {B2 }} \quad-\quad \text { big ship to Aia i.e. the Colchide and to Phase } \tag{5}
\end{align*}
$$

$$
\begin{aligned}
& \text { river }{ }_{41} \text { there } \quad \text { accomplish }{ }_{\mathrm{B} 2} \quad \text { also the other things }\left[\left[_{42}\right.\right. \text { of those }
\end{aligned}
$$

$$
\begin{aligned}
& \text { to do came ]] }{ }_{43} \text { stole }_{\text {A2 }} \text { the king the daughter Medeia } \\
& { }_{40} \text { they would have come back south in a big ship to Aia, i.e. Colchide, and to the } \\
& \text { Phase river }{ }_{41} \text { there they would have accomplished the remaining of that }\left[\left[_{42}\right.\right. \text { for } \\
& \text { which they came }]]_{43} \text { and stolen the king's daughter Medeia' (Hdt. 1.2.2) }
\end{aligned}
$$

### 4.2 Someone's action, someone else's reaction

Not all sequences of actions were realised by one and only one actor. There were also sequences that start with a person's action and end with someone else's reaction. These sequences had one of the two grammatical structures below.

### 4.2.1 Genitive absolute

When the one who acts first is topical in the current discourse state, i.e. when the first actor is already the topic of the text, then the reason-causal nexus was realised with the genitive absolute inflection in the Finite Process word. For instance, Example 6 begins with a clause complex that sets Alexander of Ilion as the topic and the Hellenes as a subtopic. The reason-causal nexus starts with an action by Alexander (topic) and ends with a reaction by the Hellenes (subtopic). The genitive absolute (C) inflection of the Finite Process word in Clause 57 realises a paratactic reason-causal nexus between this clause and Clause 58. The Finite word in Clause 58 has a non-agreeing (A2) inflection, which, on its turn, construes a locution-status for the whole sequence.

[^7]
### 4.2.2 $<$ Conjunctive..., $<>$ Conjunctive...

When the first one to act is less topical than the reacting person, then the reason-causal nexus was realised with an A-row inflection in the Finite Process word of the first clause - as in the cases when both actions have the same actor - and with the lexical term $\delta \varepsilon$ as an inner Conjunctive word in both clauses. The inner Conjunctive word occupied the second position of the clauses. For instance, Example 7 begins with a clause complex (40-43) that sets the Phoenicians as the topic and

Colchide as a subtopic. The reason-causal nexus starts at Clause 44 with an action by the king (subtopic) and ends at Clause 47 with a reaction by the Phoenicians (topic).




```
44 send c2 - the Colchs king to the Hellade spokesman ...47 they -
v́\piок@ív\alpha\sigmaӨ\alphaь ...
answer A2 ...
' they would have come ... }\mp@subsup{4}{41}{}\mathrm{ there they would have accomplished ... }\mp@subsup{}{43}{}\mathrm{ and stolen
the king's .. }\mp@subsup{4}{4}{}\mathrm{ the Colchian king would have sent a diplomat to Hellade ... }\mp@subsup{4}{47}{}\mathrm{ and
they would have answered ... (Hdt. 1.2.2-3)
```


### 4.3 Frequencies

There were seven realisation operations involved in the abovementioned description of meaning-making resources in Ionic Greek. Five of them consist of selecting one of five constitutional inflections of the Process word: conjugated, non-agreeing, nominative-absolute, accusative-absolute, and genitive-absolute. Once these selections of the initiating and continuing clauses were specified, there was still the possibility of inserting a Conjunctive word at the initial position of middle clauses in someone's action sequence and an inner Conjunctive word at the second position of both initiating and continuing clauses when the reaction-triggering actor is less topical then the person who reacts. The frequency in which these realisations happen in the text is seen in Figure 2. SAS stands for "Someone's Action Sequence", SASR for "Someone's Action Someone else's Reaction", T for "topical" and N for "non-topical", i stands for "initiating", ci for "continuing and initiating", c for "continuing".


Figure 2: Frequency of reported locutions of each systemic type
Figure 2 that the current linguistic description presented in this paper explains some aspects such as inflection of Process/Finite words and presence of Conjunctive words of 19 clauses out of a pool of 115 (16.5\% of coverage).

## 5 Conclusion

In this paper, I have analysed sequences of actions presented as the content of reported locutions in Ionic Greek both systemically and functionally. With this approach, I was able to identify five constitutional inflections of Finite words - all of which with one exception were also Process words - and to organise them paradigmatically as meaningfully contrasting variants in terms of grammatical features. Different combinations of those grammatical features were realised by the insertion of Conjunctive words and the pre-selection of constitutional inflections of the Finite word (See Appendix II).

Such a systemic functional description of meaning-making resources departs from a tradition of morphologically motivated models of Ancient Greek. Traditionally, structures with absolute inflections such as those systematised here have been analysed as if they were relative-like clauses with a participle agreeing in gender-number-case with the antecedent, but somehow different. The explanations oftentimes
are short lines such as "the absolute participle is generally in genitive (Latin, in ablative)" (FREIRE, 1997, p. 241), "the interpretation of such participle constructions is determined by the context and by the semantic characteristics of the states of affairs involved" (RIJKSBARON, 2002, p. 122) or " $[\mathrm{it}]$ is semantically equivalent to a subordinate clause" (CRESPO; CONTI; MAQUIEIRA, 2003, p. 314). They make no claims of why a structure was selected instead of others and which meanings such a selection carries. How exactly a different or an equivalent meaning is to be construed would be left to the intuition of the readers. With a systemic functional approach, one can better tackle the description of semantically relevant contrasts in a language. And then, when reading a text in that language, starting with such a semantically motivated account of linguistic resources leads to a better and easier understanding of an original text.

Finally, up to this point, only a few $\alpha$-base inflections of Finite words have been described systemically. Such a partial work with such a small corpus can be taken at most as a first step towards a grammar because it only covers a very small region of the systemic options of the clause in Ionic Greek. The incompletion of clause description and the coverage of $16.5 \%$ are evidences of this. However, with this work I hope to have at least opened a path for a future collective development of more delicate grammatical accounts of ancient languages, dialects and work piece idiolects such as Ancient Greek, Aeolic, Ionic, Attic, Doric, and Common Greek and Homeric and Biblical Greek.

## References

CRESPO, E.; CONTI, L.; MAQUIEIRA, H. Sintaxis del Griego Clásico. Madrid: Gredos, 2003.
FREIRE, A. Gramática Grega. 2. ed. São Paulo: Livraria Martins Fontes, 1997.

HALLIDAY, M. A. K. Class in relation to the axes of chain and choice in language. In: WEBSTER, J. J. (ed.). On Grammar. London: Continuum, 1963, p. 95-105.
HALLIDAY, M. A. K. Language structure and language function. In: WEBSTER, J. J. (ed.). On Grammar. London: Continuum, 1970, p. 173-195.

HALLIDAY, M. A. K. Modes of meaning and modes of expression: types of grammatical structure and their determination by different semantic functions. In: WEBSTER, J. J. (ed.). On Grammar. [S.1.: s.n.], 1979, p. 196-218.
HALLIDAY, M. A. K.; MATTHIESSEN, C. M. Construing experience through meaning: a language-based approach to cognition. London/New York: Continuum, 1999.
HALLIDAY, M. A. K.; MATTHIESSEN, C. M. An Introduction to Functional Grammar. New York: Oxford University Press, 2004.
HALLIDAY, M. A. K.; MATTHIESSEN, C. M. Halliday's Introduction to Functional Grammar. 4. ed. London/New York: Routledge, 2014.
O'DONNELL, M. UAM Corpus Tool: guia do Usuário Versão 2.6. [S.1.], 2010.

RIJKSBARON, A. The Syntax and Semantics of the Verb in Classical Greek. 3. ed. Chicaco/London: The University of Chicago Press, 2002 (an introduction).
WHORF, B. L. Language thought and reality: selected writings of Benjamin Lee Whorf. Cambridge, MA: The MIT Press, 1956.

## APPENDIX I - Translation

${ }_{01}$ amongst the Persians the wise currently say ${ }_{02}$ the Phoenicians were to blame for the conflict ${ }_{03}$ they would have come from the sea [ $[04$ called Red ]]to this sea ${ }_{05}$ occupied that territory [ $\left[_{06}\right.$ that they still occupy $\left.]\right]_{07}$ and moved on to large sea travels ${ }_{08}$ transporting Egyptian and Syrian stocks ${ }_{09}$ they would have gone to a few cities including to Argos ${ }_{10}$ Argos was always prominent among the cities in the territory [ $\left[{ }_{11}\right.$ now called Hellade ]] ${ }_{12}$ the Phoenicians would have come to Argos ${ }_{13}$ and shored their stock there ${ }_{14}$ on the fifth or seventh day counting from the day [ [ ${ }_{15}$ they had arrived ]] all goods would have been put on sale ${ }_{16}$ and quite a few women including the daughter of the king would have gone to the seashore ${ }_{17}$ her name would have been ${ }_{18}$ according to that which the Hellenes confirm » Io of Inachos $_{19}$ they would have stopped by the ship prone ${ }_{20}$ and negotiated the goods $\left[\left[_{21} \text { that best met their taste }\right]\right]_{22}$ when the Phoenicians would have shown signs ${ }_{23}$ they would "catch" them ${ }_{24}$ most of the women would have escaped ${ }_{25}$ but Io and others would have been "stolen" ${ }_{26}$ they (the Phoenicians) would have entered the ship ${ }_{27}$ and set course ${ }_{28}$ navigating away around Egypt ${ }_{29}$ this is how Io would have gone over to Egypt ${ }_{30}$ say the Persians and not the Hellenes ${ }_{31}$ and this would have been the first of the criminal deeds ${ }_{32}$ after this, some Hellenes ${ }_{33}$ the Persians do not have the name [ ${ }_{34}$ with which they could be called ]]» would have smuggled among Phoenicians to Tyron $_{35}$ the Persians say ${ }_{36}$ and stolen the king's daughter Europe ${ }_{37}$ they might have been from Crete ${ }_{38}$ this would have made them even ${ }_{39}$ but then criminal Hellenes would have committed a second crime ${ }_{40}$ they would have come back south in a big ship to Aia, i.e. Colchide, and to the Phase river ${ }_{41}$ there they would have accomplished the remaining of that $\left[{ }_{42}\right.$ for which they came $\left.]\right]_{43}$ and stolen the king's daughter Medeia ${ }_{44}$ the Colchian king would have sent a diplomat to Hellade ${ }_{45}$ to request indemnity for the theft ${ }_{46}$ and to reclaim the daughter ${ }_{47}$ the others (the Hellenes) would have answered ${ }_{48}$ that since the foreigners (the Phoenician) had not paid them (the Hellenes of Argos) an indemnity for the theft of the Argian woman Io ${ }_{49}$ they themselves would not pay one to the foreigners ${ }_{50}$ two generations after this $«_{51}$ the Persians say» Alexander of

Priam [ [ ${ }_{52}$ who had heard this ]] would have ordered ${ }_{53}$ to make a woman from Hellade his own through theft ${ }_{54}$ knowing for sure ${ }_{55}$ that he would not pay an indemnity ${ }_{56}$ since the others also do not ${ }_{57}$ on these grounds he would have stolen Helen ${ }_{58}$ and in response the Hellenes would have apparently first sent a messenger ${ }_{59}$ to reclaim Helen ${ }_{60}$ and to request an indemnity for the theft ${ }_{61}$ they would have brought this to the table ${ }_{62}$ and the others would have asked them based on the theft of Medeia ${ }_{63}$ how they could demand ${ }_{64}$ that they receive an indemnity from others ${ }_{65}$ if they themselves do not pay 'tributes' ${ }_{66}$ nor return properties ${ }_{67}$ when they are reclaimed ${ }_{68}$ up to this point these would have been isolated mutual thefts ${ }_{69}$ but after that Hellenes would have committed an immense crime ${ }_{70}$ they would have marched to Asia ${ }_{71}$ before the others have marched to Europe ${ }_{72}$ though the Persian would consider ${ }_{73}$ it would be an act of criminal men ${ }_{74}$ to steal women ${ }_{75}$ to put such a weight on those [ $[76$ who were stolen $]]_{77}$ up to the point of making revenge ${ }_{78}$ would be an act of the insane ${ }_{79}$ because none of those [ ${ }_{80}$ who were stolen ]] [[and ${ }_{81}$ who were sane ]] would have asked for permission ${ }_{82}$ for it is clear that they would not have been stolen ${ }_{83}$ if they themselves did not want to ${ }_{84}$ they, those from Asia, would have made no political discourse ${ }_{85}$ the Persians say ${ }_{86}$ when women would have been stolen ${ }_{87}$ Lacedaemonian Hellenes would have put together a large army because of a woman ${ }_{88}$ and then would have come to Asia ${ }_{89}$ and thrown down Priam's power ${ }_{90}$ after this they would have always taken ${ }_{91}$ the Hellenic world to be aggressive against them ${ }_{92}$ so the Persians would be integrated in Asia and in foreign folks [ $\left[{ }_{93}\right.$ who inhabit it $\left.]\right]_{94}$ they have taken ${ }_{95}$ that Europe and the Hellenic world have separated themselves (from Asia) ${ }_{96}$ the Persian say ${ }_{97}$ it would have happened this way ${ }_{98}$ and judge ${ }_{99}$ that the sack of Ilion would have given birth to their hatred against the Hellenes ${ }_{100}$ about Io the Persians do not tell the same as the Phoenicians ${ }_{101}$ instead of theft, she would have consented ${ }_{102}$ they (the Phoenicians) say ${ }_{103}$ and gone to Egypt ${ }_{104}$ since in Argo she would have had intercourse with the captain of the ship ${ }_{105}$ and after she learned ${ }_{106}$ she was pregnant ${ }_{107}$ she would have been ashamed with her parents ${ }_{108}$ and in this way she would have wanted ${ }_{109}$ to navigate away with the Phoenician ${ }_{110}$ before
it became too evident ${ }_{111}$ Persians and Phoenicians currently tell these versions ${ }_{112}$ and I do not take sides about this ${ }_{113}$ whether it happened in this or that way ${ }_{114}$ but I myself consider the one [ $\left[{ }_{115}\right.$ who did the first of the criminal acts ]] to be amongst the Hellenes.

## APPENDIX II - Network




[^0]:    ${ }^{1}$ Grammars are cited as a whole because I refer to the whole grammars as models of Ancient Greek and not to the description of particular linguistic phenomena in them.

[^1]:    ${ }^{2}$ The cited books are "Introductions to Functional Grammar" and are cited here because their reading as a whole is essential for understanding the extent of the phenomenological commitments that one makes when creating a Systemic Functional Model of a language. These are the three reference books in Systemic Functional Linguistics.

[^2]:    ${ }^{3}$ There are other kinds of processes in Systemic Functional Linguistics. For a

[^3]:    more detailed overview of this analysis component, I refer to the chapter Clause as Representation of the book An Introduction to Functional Grammar (HALLIDAY; MATTHIESSEN, 2004, p. 168-305).

[^4]:    ${ }^{4}$ All claims of linguistic potentiality should be taken as provisory statements to be further studied. The geopolitical and temporal restriction should be taken as the maximal extent to which any claims might be applicable and not a statement that claimed potentiality applies to all utterances of the given geopolitical and temporal cut of Ancient Greek.
    ${ }^{5}$ Each example consists of a series of complete clauses. Each clause starts with a subscript number that corresponds to the clause index in the considered segment of Herodotus' Histories. These indexes are also present before each clause of the English translation in Appendix I.

[^5]:    6 "have" is loosely employed here in the sense of "being a subclass of".

[^6]:    ${ }^{7}$ English permits not only primary tenses as in I read the article, I am reading the article and I am going to read the article, but also secondary and tertiary tenses as in I am going to be about to have read the article.

[^7]:     ${ }_{50}$ second - $_{51}$ say $»$ generation after that Alexander the Priam's
     [ [ ${ }_{52}$ hadheard this ]] order ${ }_{53}$ to him from the Hellade through theft
     to become woman ${ }_{54}$ know certainly ${ }_{55}$ that not would give indemnity
    
    ${ }_{56}$ since - those give ${ }_{57}$ so - stole $_{C}$ his Hellen ${ }_{58}$ the
     Hellenes seem messenger $_{59}$ forst reclaim - Hellene ${ }_{60}$ and
     indemnity the theft to request
    ${ }_{50}$ two generations after this ${ }_{51}$ the Persians say » Alexander of Priam [ $\left[{ }_{52}\right.$ who had heard this ]] would have ordered ${ }_{53}$ to make a woman from Hellade his own through theft ${ }_{54}$ knowing for sure ${ }_{55}$ that he would not pay an indemnity ${ }_{56}$ since they also do not ${ }_{57}$ on these grounds he would have stolen his Helen ${ }_{58}$ and in response the Hellenes would have apparently first sent a messenger ${ }_{59}$ to reclaim Helen ${ }_{60}$ and to request an indemnity for the theft' (Hdt. 1.3.1)

