

Building Bridges between Indo-European, Semitic and Pre-Greek

*A Study on the Origins of Loanwords in Ancient
Greek*

Thesis BA Linguistics

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Abbreviations

Languages and dialects

Akk.	Akkadian
Arab.	Arabic
Can.	Canaanite
CPAram.	Christian Palestinian Aramaic
Dor.	Doric
EgAram.	Egyptian Aramaic
EmpAram.	Empire Aramaic
Eth.	Ethiopian
Hebr.	Hebrew
Ion.	Ionic
JAram.	Jewish Aramaic
Lat.	Latin
Latv.	Latvian
MHG.	Middle High German
Mnd.	Mandaean
MoE.	Modern English
Myc.	Mycenaean
Nab.	Nabataean
NAss.	Neo-Assyrian
NBab.	Neo-Babylonian
OArm.	Old Aramaic
OE.	Old English
OSArab.	Old South Arabian
Palm.	Palmyrene
Pers.	Persian
Phoen.	Phoenician
Pun.	Punic
Sem.	Semitic
Sum.	Sumerian
Syr.	Syriac
Tigr.	Tigre
Ug.	Ugaritic

Other abbreviations

CAD	<i>Chicago Assyrian Dictionary</i>
EDG	<i>Etymological Dictionary of Greek</i>
H.	Hesychius
HALOT	<i>The Hebrew and Aramaic Lexicon of the Old Testament</i>
Il.	Iliad

Introduction

Previous research

The lexicon of Ancient Greek contains many foreign words. These words can be recognized, because they do not correspond with the Greek outcomes of Indo-European phonology and corresponding sound laws¹. Furthermore, the semantics of some Greek words are obviously not Indo-European, since their concepts were absent in this language of nomadic pastoralists from the Pontic steppes. Such concepts include words for certain plants, animals and sedentary habitation.

A solution for these obscure words with their various forms in Greek was proposed, namely the assumption of a Pre-Greek (or "Pelasgian") substrate from which Greek borrowed the words. Important developers of this theory were Furnée and Beekes. Based on variation in forms that were semantically close or identical, they reconstructed the phonology and morphology of this language. Besides that, they proposed a Pre-Greek etymology for a lot of Greek words.

On the other hand, scholars have tried to find a Semitic origin of these phonologically deviant Greek words. The first article in which this was done systematically, was written by A. Müller in 1877. Since then, especially in the nineteenth century, a large number of new proposals for Semitic loanwords in Greek have been made by, for instance, Muss-Arnolt (1892), Lewy (1895), etc. In total, around 500 of such etymologies (without mythical and personal names) have been proposed until now, though many of them have been rejected by more recent scholars, like É. Masson (1976) and Rosół (2013) as many proposals were semantically or phonologically improbable. Nevertheless, for a substantial amount of Greek words a Semitic origin cannot be denied.

Problem statement and hypotheses

However, some proposed etymologies contradict each other, and the question how to handle those is not trivial. I detected 72 Pre-Hellenistic Greek words that have both a Pre-Greek and Semitic etymology².

Beekes never excluded the possibility that some Pre-Greek words ultimately have a different origin (Beekes 2014 : 45), but he omits the topic in his research.

In this thesis, an attempt will be made to connect overlapping and contradicting etymologies of obscure, Pre-Hellenistic Greek words in order to answer the following research question:

Did Semitic loanwords enter the Ancient Greek lexicon via Pre-Greek?

The following hypotheses will be tested to answer the research question:

- Semitic loanwords have been incorporated in (a variant of) Ancient Greek directly;
- Semitic loanwords have been incorporated in Pre-Greek and have been borrowed via this substrate language in Ancient Greek.

¹ For example, an Indo-European */s/ regularly yielded /h/ and subsequently Ø in Greek. Words that contain a /s/ that is not secondarily formed, need an explanation. Many of such words appear to be loanwords.

² Of these words, 45 were called "PG" and 27 "PG?" by Beekes' EDG. Concerning the Semitic proposals, these were proposed at least once, but not always generally agreed upon by others.

Approach and limitation of material

During this research, I applied the following approach:

I started with a literature review on proposals of Semitic loanwords in Greek by Lewy (1895), É. Masson (1967), Szemerényi (1974) and Rosół (2013). The list of 500 loanwords was extended with in-depth information on Semitic words by HALOT Online (*The Hebrew and Aramaic Lexicon of the Old Testament*) and the CAD (*Chicago Assyrian Dictionary*). The Semitic forms in this thesis are adopted from HALOT and CAD. After that, I compared these etymologies by the ones provided by Beekes in the EDG. This resulted in a list of 72 Pre-Hellenistic Greek words that have both a Semitic and Pre-Greek etymology. The meanings of the Greek words and the Greek forms are adopted from the EDG.

Since this thesis requires a maximum of 10,000 words, I could not discuss all these 72 words. Therefore, I made a selection of 14 obscure Greek words from the aforementioned list that contributed well to my research question. For the discussion of these 14 words I analyzed and compared their distinctive features that would make them either Pre-Greek or Semitic. I critically looked at the (arguments of the) semantics, phonology and morphology of the words and formulated my own conclusion based on probability and facts, building bridges between the three language families.

Structure

This thesis is built up in the following way. A chapter about methodology will introduce the reader with Indo-European, Pre-Greek and Semitic. In this way, the reader is able to place the arguments that are given in the etymologies in context. After that, 14 lexemes and the arguments of their proposals will be discussed. The phonological and morphological arguments will be summarized in the preliminary conclusion. At the end, the conclusion will summarize the findings in this thesis in order to answer the research question.

Relevance

The results of this research will contribute to the knowledge of language contact between three language families, Indo-European, Pre-Greek and Semitic, in the Iron Age and maybe even in the Bronze Age. By establishing the donor language, one can determine where certain concepts originate and how they arrived in Greece. Besides that, the treatment of certain Pre-Greek features in this context can tell us more about the language(s) and its speakers. This research is useful for the linguistic study of Semitic languages as well, since the outcomes can elucidate which languages were spoken where and therefore it would contribute to the classification of Semitic languages and their position in the Middle East in the Bronze and Iron Age (see Chapter 1.3). These languages could have borrowed some of these words from another language family and such examples provide new insights for the field.

1. Methodology

1.1. Introduction to Indo-European and Greek

The origin of Indo-European

Greek is a sub branch of the Indo-European language family. This language family, which has daughter languages that developed in Europe and Asia, originated in the Pontic-Caspian steppes. Archaeological evidence of the Yamna culture (3300-2500 BC) is connected with the homeland and culture of the speakers of Indo-European by archaeologists like Anthony (2007 : 302). The Yamna culture was a nomadic pastoralist culture in the Pontic-Caspian steppes and is well-known for its typical burials in so-called kurgans, tumuli or burial mounds that are heaped over a burial chamber. Another characteristic of this culture is the sacrificing of horses, cows, sheep and goats.

The development of Greek

From the Pontic-Caspian steppes, the Indo-Europeans migrated to Europe and Asia. Presumably they used light, horse-pulled wagons. This explains the high mobility and spread in a short time span. These nomadic groups split up, so that dialects began to emerge and to enlarge. Leaving the steppes, they encountered other peoples that were living in the different parts of Eurasia. In the case of Greek, groups of Indo-Europeans arrived in different waves of migration in Ancient Greece. There they encountered a non-Indo-European population, to which they referred as "Pelasgians". Paragraph 1.2 will elaborate on this Pre-Greek population and its language(s). Many Pre-Greek words have been adopted in the Greek language.

In Ancient Greece, the Proto-Greek language manifested itself. Unfortunately, little is known about the dating of this proto-language. In Greece, Proto-Greek developed into multiple dialects.

The oldest attested dialect of Greek is Mycenaean, which was spoken in the Bronze Age Mycenaean Empire and was attested around the 14th and 13th century BC in a syllabic script: Linear B. After the collapse of the Mycenaean Empire (12th century BC), people migrated and the period of the Dark Ages (12th-9th century) followed. Although much is unknown about this period, artifacts from the Levantine coast have been found in Lefkandi, a coastal village in Euboea. These artifacts show that there were cultural and economic connections with the Levant from approximately 900 BC onward.

In the 9th century BC, urbanization resulted in the first city states in Greece. The Greek culture flourished in the Classical Period (5th-4th century BC) and was followed by the Hellenistic Period.

1.2. Introduction to Pre-Greek

"Pelasgians"

A lot of Greek authors, starting from Homer, have been writing about or mentioned the "Pelasgians". They referred to a people that lived in Greece and spoke a different language than they did. Some names of divinities and place name are accompanied by the adjective "Pelasgian".

Apart from the mentions by Greek authors, little is known about this people and its language, because no written material has been transmitted. It is not even certain that we are dealing with one people and one language, because it is probable that Pre-Indo-European Greece was inhabited by several peoples, that spoke their own language or dialect.

However, too little is known about Pre-Greek to claim this with certainty. In this work, the term "Pre-Greek" will be used for both one people and one language, but it does not exclude that there may have been more substrate languages in Ancient Greece.

Linguistic evidence

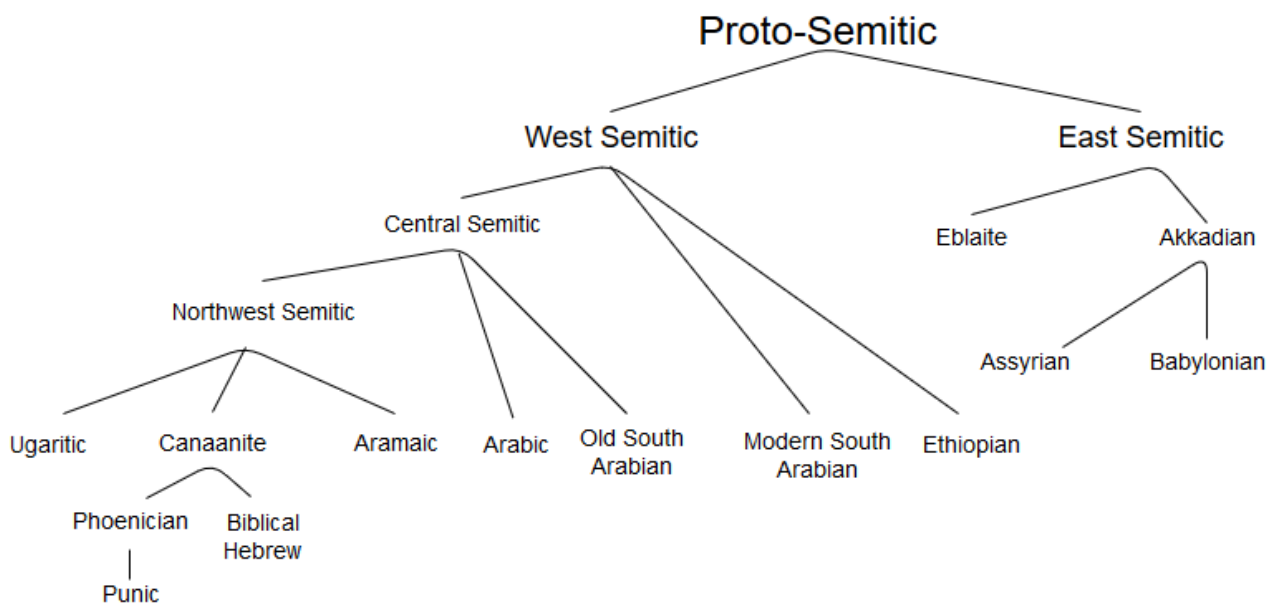
Another source of information about this people are place names and loanwords that became part of the Greek lexicon. These words contain phonological and morphological features that cannot be explained from an Indo-European perspective. Based on varying forms that are semantically and phonologically similar, Beekes (2010) and Beekes (2014) made an analysis of the Pre-Greek phonology, morphology and lexicon. Important markers of Pre-Greek words are affixes. For example, the suffix *-ινθ-* appears in place names, e.g. Κόρινθος 'Corinth', and in words like λαβύρινθος 'labyrinth', έρέβινθος 'chickpea' and ύάκινθος 'hyacinth'. As there are toponyms that contain Pre-Greek suffixes in the west of Asia Minor, it is possible that the people were originally from the west coast of Asia Minor and migrated into Greece. The language is clearly neither Indo-European nor Anatolian – the latter is a sub branch of Indo-European–, because the linguistic features are rather different and problematic. Therefore, Pre-Greek belongs to a language family that is yet unknown to us and linguistic research can develop our knowledge of this obscure language. After the arrival of the Indo-European Greeks, the language became a major substrate of the Greek language and culture.

1.3. Introduction to Semitic

The Semitic language family originates and was spoken in the Near East. The earliest attested Semitic language is Akkadian, which was attested from the 3rd millennium onwards. A characteristic feature of Semitic languages is the nonconcatenative morphology, i.e. a type of word formation in which the root is modified and is not formed based on a sequence of morphemes. In Semitic, the root clearly contains the lexical information and the vowels and affixes contain the grammatical information.

Classification

Classifying the Semitic language family proves to be difficult, because of a lack of distinctive phonological and morphological arguments; because of major time gaps between the languages; and because of the continuous contacts between the Semitic languages. Models have changed through time, but the model, which is most agreed upon is presented below. The languages that are present in this thesis are added.



Scheme 1. The classification of Semitic languages.

For the purpose of this thesis it is important to indicate the location and time of attestation of the most prominent Semitic languages in the Bronze and Iron Age. The major part of the following information is based on Gzella (2013).

Bronze age

- From 3000 BC onwards, Semitic-speaking people migrated in waves to Syrio-Palestine (Sekine 1973). There, a full urbanization started in the early third millennium BC. In this region, the various dialects of several peoples came in close contact with each other, which resulted in a clustering of dialect into Aramaic and Canaanite.
- At the same time, full texts of Akkadian were attested in the mid 3rd millennium BC until around the 8th century BC. Akkadian was spoken in Mesopotamia and was

written in a cuneiform script. The language became a lingua franca in the Near East, because of vast empires like the Akkadian Empire and the Old Assyrian Empire.

- In the second millennium BC, a form of Akkadian, Western Peripheral Akkadian, was spoken and written in the Syro-Palestinian area. This does not exclude the presence of unattested Semitic vernaculars.
- In the 15th-14th century BC, extensive influence of Hurrian, a language of unknown origin, appears in treaties, letters and administrative documents from various city-states in Levantine Syria (Wegner 2007).
- During the 13th-12th century BC, the language of Ugarit became well documented. The ancient city is well-known for its harbor, which was used to connect the Levant with Cyprus, Crete and the Cyclades by shipping. Documentation of this language ended with the Fall of Ugarit in 1175 BC.
- In Palestine in the Bronze Age, Akkadian was used for global communication. However, the Amarna letters³ show occurrences of "Canaanisms". Presumably, local Semitic vernaculars influenced the letters, because they were written by staff that lacked advanced knowledge of Akkadian.

Iron age

- Migrations took place in the Early Iron Age (1200-1000 BC). This caused linguistic changes and resulted in the following languages.
- Phoenician was spoken in the small, ancient cities Byblos, Tyre and Sidon. The Phoenicians were colonists and merchants and it is believed that they brought their alphabet to Greece. From the 8th century onwards, they traveled through the whole Mediterranean. The offshoot of Phoenician, Punic, was spoken in North-Africa. Phoenician stayed closely related to other first-millennium Canaanite languages, but developed a number of phonetic, morphological and lexical peculiarities of its own.
- Beside some less attested Canaanite languages or dialects from small kingdoms like Moabite, Edomite and Ammonite, the corpus of Canaanite mainly consists of Biblical Hebrew, which provided a lot of linguistic material. Nevertheless, the language of these texts changed through time and the vowels were added even later to the texts by the Masoretes in the 10th century. The Hebrew Bible contains poetic compositions that are very archaic or archaizing. These texts date back to around the 11th century BC (Gzella 2013: 29). After the Babylonian Exile (586 BC and onwards), Hebrew became gradually replaced by Aramaic.
- Aramaic appears for the first time at the beginning of the first millennium. Nomadic tribes settled in parts of Syria and Mesopotamia. When Aramaic became a written language, the language spread rapidly over the Fertile Crescent (8th-6th century BC). The grammatical flexibility and the script, which was not a cuneiform alphabet like Akkadian, was much easier to use for high mobile speakers and they adopted the

³ The Amarna letters are a diplomatic correspondence between the Egypt governance and its representatives in Canaan and Amurru during the New Kingdom (c. 1360-1332 BC). These clay tablets, written in Akkadian cuneiform were found in El-Amarna (Egypt).

language for legal, communicative and commercial purposes in the Neo-Assyrian and Neo-Babylonian Empires. The Babylonian dialect of Aramaic became even the lingua franca of the Achaemenid Empire. Thence, Aramaic spread across the entire Near East to Central Asia.

- Much is unknown about the origin of Arabic. However, it is known that nomadic Arabian tribes existed long before the rise of Islam in Syria-Palestine. This is visible in personal names and in loanwords (Gzella 2013 : 31).

Semitic loanwords

Ancient documents and archaeology have shown that the Semitic peoples, especially the Phoenicians and the people of Ugarit, were in contact with other Mediterranean peoples by means of colonizing, trade and correspondence about legal issues etc. Therefore, words were often mutually transmitted and became adopted in a foreign lexicon. This applied to Ancient Greek as well. Although the exact number is unknown, the Greek lexicon contains presumably hundreds of Semitic loanwords. However, when one tries to determine the exact donor language, several problems occur.

Firstly, because of the lexical importance of the consonantal root, consonants do not change that easily and are often identical in most of the Semitic languages.

Secondly, in most of the Semitic languages, the vowels were not written or added later. So, that makes it impossible to claim with certainty that a certain loanword was borrowed from a certain language, when there are attestations of the word in other languages, but written without vowels.

Thirdly, not all (stages of the) Semitic languages are attested. It is possible that a Greek word is obviously Semitic, but the exact form is not attested in any Semitic language. When a linguist applies sound laws, it may appear that the particular form can be reconstructed or assumed for a certain Semitic language.

2. Discussion of 14 loanwords in Greek

2.1. Same form, same meaning

2.1.1. γέλιγς ‘garlic’, or its cloves

First attestation: 5th-4th century BC (Hippocrates)

Greek forms: γέλιγς [f.] gen. -ῖδος, -ῖθος; plur. γέλιγεις, γέλιγιθεις; ἄλιγς, gen. -ῖδος, -ῖθος; ἀλιγίδια · σκόροδα (H.)

Semitic forms: Akk. *giddil*, *gidlu* ‘string (of onions or garlic)’; Hebr. *gādil* ‘tassel on cloak’, ‘wreaths of chain work on the capitals of the pillars’; Aram. (JAram., Mnd.) *g^edilā* ‘string’, Syr. Mnd. *g^ediltā* ‘plait’; Arab. *jadīl*, *jadīlal* ‘stretched rope, plait’;

A Semitic origin for the word γέλιγς had been proposed by Lewy 1895 : 32, formulating that γέλιγς is a borrowing of a Semitic form that is visible in Hebrew *gulgōlet* ‘skull’ and Aramaic *gulgultā* ‘skull, round stone’. This etymology is rejected by Rosół 2013 : 167.

Other attempts have been made to explain the form of γέλιγς as a reduplicated form **gel-gl* (Frisk 1 : 295) or **ge-glis* (Beekes 2010 : 265). Kroonen (2012) mentions two problems with these reconstructions. Firstly, Indo-European reduplication, i.e. repetition of (the initial part of) the root, is extremely rare in Indo-European nouns⁴. Secondly, the a-prefix in ἄλιγς cannot be explained from an Indo-European perspective, since IE did not have an a-prefix. Thence, Kroonen proposed a new etymology of γέλιγς and ἄλιγς. By assuming metathesis of **geglis* to **gelgis*, he reconstructs a full stem **gegl-*. The variant ἄλιγς can be explained, when one analyzes the word as an a-prefixed and reduced stem **a-ggl-*⁵. The suffix -ῖδ- or -ῖθ- was added to the root and are variants of the Pre-Greek suffix -ivθ-. These variants point to a prenasalized voiced dental -*ĩd-*.

Kroonen connects γέλιγς/ἄλιγς with Old Babylonian (Akkadian) *gidlu/giddil* with a specified meaning of the Semitic root *gdl* ‘to braid’, namely ‘string of onions or garlic’. This linkage requires an explanation for *dl* > *gl*. This is a relatively unproblematic sound shift as it occurs in the following example as well: Greek γλυκύς ‘sweet’ compared to Latin *dulcis* ‘id.’ (pre-form **dluku-*). Mycenaean *de-re-u-ko* (later: γλεῦκος ‘sweet wine, must’) shows the existence of *dl* > *gl* in Greek. The Proto-Greek form **gedlis* can now be connected with Akkadian *gidlu* via a Pre-Greek substrate.

Therefore, the Greek words γέλιγς are ἄλιγς a satisfactory example of an Akkadian loanword in Pre-Greek that was later borrowed by the Indo-European Greeks.

...

2.1.2. κάμμα ‘reed, Arundo donax, reed-fence, -mat’.

First attestation: 14th-13th century BC (Mycenaean)

Greek forms: κάμμα [f.], Myc. ko-no-ni-pi /konōni-phi/ (instr. pl), Ion. κάμμα.

⁴ The only two examples of this feature are: 1. b^he/i-b^hr-o- ‘beaver’; 2. k^we-k^wl-o- ‘wheel’

⁵ For a broader perspective on the features of the a-prefix in combination with an abnormal ablaut pattern in European context, cf. Schrijver 1997 and Kroonen 2012.

Derivatives: 1. κάνης, -ητος [m.] 'reed mat'; 2. κάνηκες· πλέγματα ταρσῶν 'windings of wickerwork' (H.); 3. κανοῦν, Ion. κάνεον, epic also -ειον [n.] 'reed basket, dish' (Il.; substantivized adjective); etc.

Semitic forms: Akk. *qanû(m)* 'reed'; Hebr. *qane* (< **qanay*) 'reed (Arundo donax), stalk', JAram. *qanyā* 'reed, stalk, measuring reed (rod)' EmpArm. *qn*'; Syr. *qanyā*; CPArm. *qny*'; Mnd. *qaina*; Arab. *qanā, qanāt* 'reed, stalk'; Pun. *hqn' zk'* (fem.) 'the pure reed'; Ug. *qn* 'shoulder socket, gullet, aromatic reed'; Eth. *qanōt*, rarely *qēnōt* 'thorn'

Other forms: Sum. *gin* 'reed'; Lat. *canna* 'reed, etc.' (Greek loanword)

The Semitic origin of the word κάνηα has been acknowledged from 1867 onwards by e.g. A. Müller 1877: 276; Lewy 1895: 99; É. Masson 1967: 47-48; Rosół 2013: 44-45; etc. The Semitic forms might have been borrowed from Sumerian *gin* 'reed'. The Semitic emphatic velar *q* [k'] lost its emphatic element and was regularly substituted into Greek κ, e.g. Hebr. *qəṣī'ā* > κασ(σ)ία 'cassia'. Rosół explains the geminate -vv- from Sem. *n* with the example of κιν(ν)άμωνον < Hebr. *qinnāmon*; JAram. *qnmwn/qnmn*; etc. É. Masson argues, without substantiating her claim, that the loanword was probably introduced in Greek by a Phoenician model. The word is widely attested in Semitic, but not in Phoenician (it exists however in Punic). As the word appears as *q(a)n-* in most Semitic languages, all with the meaning 'reed', it is not possible to determine the donor language.

Beekes (EDG: 636) mentions the Semitic words, but calls the word Pre-Greek. He agrees with Furnée : 303, who claims that derivatives like κάνηαθρον 'cane or wicker carriage' are clearly Pre-Greek formations. Therefore, the word could have been of Anatolian origin. The Mycenaean form shows that α/o vary. Other arguments for Pre-Greek origin are the variation v/vv and the short final -α.

These two visions do not have to compete, if one assumes that κάνηα has a Semitic origin and was borrowed, maybe via Anatolia, in a Pre-Greek language and was from there borrowed in Greek. In Pre-Greek, a possible loan **qan(n)(a)* could have developed a variety of forms and derivatives.

...

2.1.3. κανών 'straight rod, bar, stave or grip to handle the shield, directive, rule, model, etc.'

First attestation: 14th-13th century BC (Mycenaean)

Greek forms: κανών -όνος [m.], Myc. ko-no-ni-pi /konōni-phi/ (instr. pl)

Derivatives: denominative verb κανονίζω 'to measure, decide'; κανονίς 'ruler, frame, etc.'; etc.

Semitic forms: Akk. *qanû(m)* 'reed'; Hebr. *qane* (< **qanay*) 'reed (Arundo donax), stalk', JAram. *qanyā* 'reed, stalk, measuring reed (rod)' EmpArm. *qn*'; Syr. *qanyā*; CPArm. *qny*'; Mnd. *qaina*; Arab. *qanā, qanāt* 'reed, stalk'; Pun. *hqn' zk'* (fem.) 'the pure reed'; Ug. *qn* 'shoulder socket, gullet, aromatic reed'; Eth. *qanōt*, rarely *qēnōt* 'thorn'

Other forms: Sum. *gin* 'reed'; Lat. *canna* 'reed, etc.' (Greek loanword)

Some scholars claim that κανών is borrowed from Semitic independently from κάννα (e.g. Lewy 1895: 133; Hofmann 1950: 132; etc.). The connection between those words is by the intermediate step *'stave of reed'. Others claim that κανών is a derivation of κάννα (e.g. Chantraine 1933: 160; É. Masson 1967: 48; etc.).

For the full treatment of the Semitic etymology, see κάννα (2.1.2.)

Concerning morphology, Rosół 2013: 45-46 gives two examples of Semitic loanwords that have a similar formation as κανών: ἀρραβών, -ῶνος [m.] < Hebr. *'ērābōn* etc. and χιτών - ῶνος [m.] < Ug. Phoen. *ktn*, Hebr. *kuttōnet*. However, in the case of κανών, there are no Semitic forms with the element *-ōn-*.

It seems more likely that κανών developed after κάννα was borrowed into (Pre-)Greek.

...

2.1.4. κόφινος 'big basket'

First attestation: 5th century BC (Strattis)

Greek forms: κόφινος [m.]

Semitic forms: Akk. *quppu* '1. wicker basket or wooden chest, 2. cage, 3. a box for silver and precious objects'; JAram. *qwp̄h* 'basket', *qupp̄^eta* 'chest'; EmpAram. *qwp* 'chest, big basket', *qph* 'basket'; Mnd. *qupa* 'basket, round boat'; CPAram. *qwp* 'basket'; Arab. *quffa* 'big basket'; Ug. *qpt* 'box, chest, basket'; Eth. *qafo* 'kind of basket'

Other forms: Lat. *cophinus*, whence MoE *coffin*, MHG *koffer*, etc.

The word is widespread in Semitic, but is absent in Hebrew, Phoenician and OSArabian. Lewy (1895: 115) proposes a connection with Hebrew *hōpen* 'hollow hand'. However, this is not as semantically satisfactory as the proposal of Rosół 2012b (see Semitic forms). As shown before, Semitic *q* can easily be adopted as κ. The /u/ is phonetically not that distant from /o/ and the substitution /p/ > /p^h/ is quite common as well (e.g. φακός < Hebr. *pak*).

It is possible that this word is a loanword within the Semitic language family and that they all go back to the Akkadian form that has other meanings as well. It is unclear which Semitic language the donor language of the Greek form is.

Beekes makes a connection with κόφος, probably 'basket-load', κοψία· χύτρα 'earthen pot' and κόψα· ὕδρια 'water bucket, urn'. In this way, it becomes visible that the word has different suffixes (-iv- and -σα). This points to a Pre-Greek origin. Although this may seem contradictory, this does not have to be the case. If a form **qup(p)-* is borrowed from Semitic into Pre-Greek, it is still possible to produce these forms by adding the different suffixes, before it was borrowed by Greek.

....

2.1.5. πλίνθος 'brick, air-brick'

First attestation: 7th-6th century BC (Alcaeus)

Greek forms: πλίνθος [f.]

Semitic forms: Akk. *libittu/labittu* 'brick, adobe, bricks of different materials'; Hebr. *l^ebenā* 'sun-baked brick, flagstone, tile'; EmpAram. *lbnh* 'brick'; JAram. *l^ebentā* 'brick'; EgAram. *lbnh*; Syr. *l^ebentā/bettā*; Mnd. *lybn*, *lybt*; Can. *labinat*; Arab. *libn/labin* (coll.); Ug. *lbnt* 'brick'; OSArab. *lbn, lbt šmš*; Eth. *lebn*; Proto-Semitic **la/ibint*

This word is widely attested in the Semitic language family, but not in Phoenician⁶. The attested forms point to a Proto-Semitic form **la/ibint* (e.g. in Rosół 2013: 81). Multiple scholars claim that *πλίθος* is the result of metathesis of /l/ and /b, p/ (e.g. Szemerényi 1974: 149 : *libint-* > *pilinth-* > *πλίθ-*). More examples of metathesis are known and some will occur in this thesis.

As Classical Greek has a phoneme /b/ that is used in other Semitic loanwords as well (e.g. *βύσσος* < Sem. *būš*), the /p/ needs explaining. Rosół provides the following example to explain the substitution of Semitic /b/ to Greek /p/: *ῥσσωπος* < Hebr. *'ēzōb*, Eth. *'azāb*, *'azōb*. However, Akkadian has the form *zūpu* and Arabic *zūfā*, which discounts this argument as it is unknown which language is the donor language of the Greek word. However, his second example is more convincing: *πέλανος* < Pun. *bl*; Hebr. *b^elil*; Arab. *balīla*. In some of the following words one will find other examples of devoicing. Rosół suggests secondary influence of words in *-ιβθος* to explain /t/ > /t^h/. Although not every Semitic form has both /n/ and /t/, this can be explained by assimilation and by the fact that feminine words have a /t/ in a construct state, e.g. Hebr. *libnat*.

Beekes argues that the word is of Pre-Greek origin, because of the suffix *-ιβθ-*, a well-known Pre-Greek suffix, cf. *Κόρινθος* 'Corinth', *ἀσάμινθος* 'bathtub' etc. Another argument is the semantic field of architecture. It would be unexpected if speakers of Proto-Indo-European, who lived as nomadic pastoralists, would have such an architectural word.

Since the morphology of the word makes one suspect that the word is Pre-Greek and most Semitic forms, which are normally very strict regarding consonantal roots, either include /n/ or /t/, an alternative proposal may be presented.

The suffix *-ιβθ-* may have been phonetically realized as a prenasalized dental *-ĩT-*⁷. If a Pre-Greek word would have been borrowed by Semitic people, they would not have a way to write these phonemes. They would either write the nasal part as <n> or the dental part as <t> or both as <nt> in some cases. The wide attestation can be explained by an early borrowing from Pre-Greek. The word could have entered the Semitic language family by trade routes in Anatolia.

...

2.1.6. *τύμπανον* 'kettledrum, hand drum'

First attestation: 6th century BC (Aesop)

Greek forms: *τύμπανον* [n.]; *τύπανον*

⁶ The suggestion of Muss-Arnolt 1892: 70-71 "Perhaps the Greeks learned brick-making from the Phoenicians." is therefore not sufficiently substantiated.

⁷ Kroonen 2012 : 291 suggests that the variation of the suffixes *-ĩδ-* or *-ĩθ-* point to a prenasalized voiced dental *-ĩd-*. However, Proto-Semitic has a phoneme /d/ and a loanword that included a /d/ would have been unproblematically adopted as /d/, thus not as /t/ as is shown in the Semitic forms. Therefore, I prefer the more neutral term "dental".

Semitic forms: Hebr. *top* 'hand-drum, tambourine'; JAram. *tuppā* 'tambourine'; CPArm. **tp* 'tambourine'; Arab. *duff* 'hand-drum'; Phoen. pi. pt. *mtp̄p* 'drummer'; Ug. *tp* 'drum, tambourine' Semitic root: *tpp* 'to beat the drum'

The word for 'hand drum'/'tambourine' only appears in the Central Semitic languages. Both É. Masson (1967: 94-95) and Rosól (2013: 101-102) think that a Semitic origin of the Greek word is very probable. A Semitic geminate /pp/ is realized as Greek /mp/ more often, cf. λαμπάς, -άδος < *lappad- < Hebr. *lappid*; JAram. *lpd*, *lappidā*. É. Masson concludes: "Le mot grec serait donc composé d'un radical sémitique *tupp-* auquel on aurait ajouté le suffixe d'instrument *-ανο-*".

Another etymology that fits especially the variant τύπανον, is the derivation of the verb τύπτω 'to poke, stab, beat with a weapon or a stick'. The word consists of the root τυπ- and the suffix -ανο-. The form τύμπανον would then have arisen by nasalization. However, archaeologists and music historians teach us that the instrument and its use is completely identical in Greek and Semitic. This instrument was used in cults of chthonic divinities. Greek context show us that the tambourine was used in the cult of Cybele and Dionysus. This points to an oriental origin rather than a Greek internal one.

As Beekes lists the etymologies of τύμπανον, he adds his own by arguing that the variant points to Pre-Greek origin. This variation occurs in many Greek words of Pre-Greek origin and is the consequence of prenasalization of consonants. Additionally, Beekes mentions the Pre-Greek suffix -αν-.

In my opinion, the etymology by É. Masson sufficiently deduces the noun from Semitic, explaining the features that the EDG calls "Pre-Greek". The word could have been borrowed via Asia Minor into Greek, whereas the variant τύπανον could have been secondarily created on the basis of τύπτω.

2.2 Same meaning, phonologically less precise

2.2.1. κημός ‘muzzle, plaited lid of the balloting urn, fyke for fishing, cover for nose and mouth’

First attestation: 6th-5th century BC (Aeschylus)

Greek forms: κημός [m.], Dor. κᾱμός

Semitic forms: Akk. *kamû* 'to bind'; Arab. *kamma* 'to cover, to hide, to apply a muzzle', *kimāma* 'muzzle'

Other forms: Lat. *cāmus* 'muzzle', borrowed from Dor. κᾱμός

M. Masson (1986a: 217f) proposed a new etymology for the obscure word κημός. He connects the word with the Akkadian verb *kamû* 'to bind' and Arabic verb *kamma* 'to cover, to hide, to apply a muzzle' and the noun *kimāma* 'muzzle'.

This connection is rejected by Rosół 2013: 180 without an explanation. However, the clear semantic similarities cannot be ignored.

The consonants correspond, but the vowel is more problematic. The Greek forms point to a pre-form **kām-*, but Semitic shows forms with short /a/. As the attested forms are verbs and Semitic uses non-concatenative morphology, the vowels (and affixes) do not bear lexical, but grammatical information. The noun *kimāma* 'muzzle' is an example of this alternation of vowels. Therefore, it is not impossible that a Semitic noun that is derived from a Semitic root **km(m)* is the source of Greek κημός.

In his EDG, Beekes follows Furnée in his connection of κημός with χαβός 'muzzle' and χαμός (both in Hesychius). According to him, the interchange μ/β and κ/χ points to a Pre-Greek origin.

These alternations are not present in Semitic, so they must have emerged in the language that borrowed the word. For example in Pre-Greek or in (late) dialectal Greek (as it only appears in Hesychius). Spirantization occurred more often in Hellenistic times, e.g. χαυών 'kind of cake' (LXX) < Sem. cf. Akk. *kamānu* (<m> is pronounced as [w]), Hebr. **kawwān*, Ug. *kn[m]*.

We can safely assume that κημός and its Semitic counterparts are related, although it is unclear which language the donor language is. Furthermore, a Pre-Greek intermediate stage is possible, but not necessary.

...

2.2.2. μήρινθος ‘cord, thread’

First attestation: 8th century BC (Homer)

Greek forms: μήρινθος [f.], σμήρινθος [f.]. Cf. μήρινς, and further σμῆριγξ, -ιγος 'hair'; σμήριγγες· πλεκταί, σειραί, βόστρυχοι (H.), see μῆριγξ.

Semitic form: Arab. *marr* 'cord'

M. Masson (1987a : 40-42) proposed a new etymology for μήρινθος, a Greek word that looks suspiciously non-Greek as well. He proposes a relation with Arabic *marr* 'cord', which is formally probable as for the consonants (when one omits the suffix -ινθ-). Moreover, he makes a strong case because of the semantics. Rosól 2013: 194 rejects the etymology without explanation.

Beekes (in EDG) calls the word Pre-Greek because of the suffix -ινθ- and the occurrence of s-mobile, cf. σμήρινθος etc. Furthermore, he mentions a possible connection with the (denominative?) verb μηρύομαι 'to draw up, furl, wind (up)', however, not by adaptation. Furnée 218 reconstructs *μῆρυς 'clew' to explain the variation.

The word is obviously Pre-Greek, because of the well-known suffix. Since it is remarkable that Arabic is the only Semitic language in which the word is attested, it is possible that Arabic borrowed the word from Pre-Greek. The Doric form of the verb μηρύομαι is μαρύομαι and explains the /a/ in Arabic. On the other hand, the form μαρύομαι shows us that the word could be borrowed from Arabic and adjusted in Pre-Greek as well, but this is a less probable solution, since there is no other evidence for such language contact.

...

2.2.3. πλάστιγξ 'scales' (Att.)

First attestation: 6th-5th century BC (Aeschylus)

Greek forms: πλάστιγξ, -ιγγος [f.], πλήστιγγες [pl.] 'id.'

Semitic forms: Hebr. *peles* 'scales'

Several etymologies have been proposed for the word πλάστιγξ. Some scholars claim that the noun is derived from πλάσσω 'to knead, mold' < QIE *pld^h-ie/o-⁸. Others argue that the word is connected to the IE root *plth₂-, c.f. Gr. πλατύς 'flat'. Both etymologies are mentioned in EDG. Although these connections are formally possible, the semantics are problematic as they do not correspond.

On the other hand, Beekes claims that πλάστιγξ is from a stem πλαστ-. The variant πλήστιγγες is a hapax legomenon and would point to a stem with a long ā: *πλᾱστ-. According to Beekes, the word is Pre-Greek, because of the Pre-Greek suffix -ιγγ-.

A Semitic origin of the word is proposed by Lagarde (1879-80, II : 38) and is mentioned in Muss-Arnolt 1892 : 122. Lagarde compares the Hebrew word *peles* 'scales' with the obscure word and concluded that a form *plst* is borrowed into Greek and that a "fremdartigen endung" was added. Although this etymology was rejected by Rosól (2013: 201), I would like to take this etymology into consideration, because of the semantical resemblance. The word occurs twice in the Hebrew Bible⁹ and in no other Semitic language. The structure of *peles* points to a segolate¹⁰. As segolates evolved from old Semitic words, this suggests

⁸ The root structure in *pld^h- cannot be Indo-European. Hence, Beekes (in EDG) calls the word Pre-Greek.

⁹ Namely in Proverbs 16:11 and in Isaiah 40:12.

¹⁰ Segolates are evolved from old Semitic words, that ended in two consonants, of the structure CVCVC with stress on the penultimate (instead of the ultimate). This is because the second vowel (segol) is an epenthetic vowel. An example of an segolate is: *melek* from the stem *mark-* 'king' < **milk* 'king'.

that *pēles* is both old and of Semitic origin. HALOT carefully points to the Semitic root *pls*. This root occurs in Akkadian *palāsu* 'to see, look'; Biblical Hebrew *pls* 'to observe, examine'; Phoenician *pls* in the personal name Bʿlpls "Baal has regarded". In Proverbs 16:11, *pēles* is followed by *mozne mišpaṭ* 'scales of judgement', belonging to God. As it is a stylistic feature in Hebrew poetry to mention one concept by using two synonyms, it is very likely that the word for 'scales' still could have the connotation of divine judgement (the text in Isaiah does not have this connotation). The concept of divine judgement corresponds neatly with the semantics of the Semitic root *pls* 'regard, observe, examine'. Compare the weighing of the heart of the dead by the Egyptian god Anubis, followed by judgement.

The consonants in both Greek and Hebrew are identical, but the /t/ in Greek does not occur in the Hebrew word. Lagarde does not explain what kind of form *plst* in Hebrew would be. A Hebrew ending in -t occurs in feminine words, but this word is masculine. However, there are exceptions, e.g. *ʾabot* 'fathers' and this could be one of them. If this is the case, a plural or construct form is borrowed in Greek. Another possibility is that the /t/ is inserted by the borrowing language, but under unclear circumstances.

The absence of the first vowel in Greek does not occur only in this case, but also in e.g. γρύψ, -υπόξ / γρυβός < Akk. *kurību*; Hebr. *k^erub*; etc.; cf. σκορπίος in this thesis (2.2.5).

As a conclusion, the obscure Greek word πλάστιγξ may well be a Semitic loanword, because of clear semantic and phonological parallels. By assuming a Pre-Greek intermediate stage, the Pre-Greek suffix -ιγγ- can be explained. Subsequently, this word arrived in Greek.

...

2.2.4. σαγήνη 'large fishing net, trawl'

First attestation: 6th century BC (Aesop)

Greek forms: σαγήνη [f.], Cypr. ἀγάνα (H.)

Semitic forms: Akk. *šikinnu* 'fishing net'

Other forms: Lat. *sagēna*

Szemerényi (1974 : 149) provides an etymology for the somewhat obscure word σαγήνη. This word, together with the Cyprian form ἀγάνα (/s/ > /h/), points to an early Greek form **sagānā*. He claims that this word is borrowed from a Semitic source which appears in Akkadian as *šikinnu* 'large net with floats and weights'. This form can be reconstructed as **šakānu*. As Greek did not have a phoneme /š/, the usual substitution of this phoneme is to /s/, e.g. σίγλος, σίκλος < Akk. *šiqu*; Ug. *ṭql*; Hebr. *šeqel* etc. The substitution of /k/ to /g/ does not occur very often as Greek did have a phoneme /k/. However, there are other examples of this feature. One is provided by Rosół 2013 : 83: γρύψ, -υπόξ / γρυβός < Akk. *kurību*; Hebr. *k^erub*; Pun. *krb*; etc.

Beekes (EDG: 1300) connects σαγήνη with σάγουρον [n.]· γυργάθιον 'net' (H.) by claiming that the words are similar, but have a different suffix. The suffix -ήνη is Pre-Greek (cf. Ἀθήνη). A Pre-Greek origin would explain the initial σ- as well. If the word would be Indo-European, the /s/ would have regularly become /h/ or /Ø/.

The word is clearly Pre-Greek, since two different suffixes can be added for the same word and toponyms like Κυρήνη 'Cyrene', Μεσσήνη 'Messene', Μυκήνη/Μυκῆναι 'Mycenae' show the same suffix. An alternative for a Semitic origin might be that Akkadian borrowed the word from Pre-Greek. It is noteworthy that this word is not attested in any other Semitic language, although the speakers used fishing nets. A Pre-Greek σ may have been phonetically realized as [ʃ] and would explain Akkadian /š/.

On the other hand, the example ἀπήνη "four-wheeled wagon" (Hebr. 'opan; JAram. 'opanna; Ug. apnm (dual), apnt (pl.)) contains a /n/ in Semitic as well. This example either shows that the /n/ is (partially) Semitic or that both words are examples of Pre-Greek loanwords in Semitic.

...

2.2.5. σκορπίος 'scorpion'

First attestation: 8th-7th century BC (Hesiod)

Greek forms: σκορπίος [m.]

Semitic forms: Akk. *aqrabu* 'scorpion'; Hebr. 'aqrāb 'id'; JAram and CPAram 'aqrabbā 'id'; Syr. 'eqqarbā 'id'; OArm. EgArm. Nab. Palm. Mnd. 'raqb 'id'; Arab. 'aqrab 'id'; OSArab. 'qrb 'id'; Eth. 'aqrab 'id', Tigr. 'arqab and 'arqab 'id'; Nab., Hatra 'qrbn 'id'

Other forms: Latin *scorpius*, -iō (borrowed from Greek)

The scorpion is attested in almost all prominent Semitic languages in almost the same form. Nevertheless, metathesis of /q/ and /r/ occurs often. Rosół (2013 : 95-97) labels the lexeme as West-Semitic. He argues that the Akkadian word is a West-Semitic word in a wordlist. He explains the initial σ- as prothesis. The sound ' /ʃ/ is unknown to the Greek phoneme inventory and became zero. Semitic /q/ is substituted as /k/, cf. κάββα (2.1.2). Semitic /b/ became /p/ in Greek, cf. πλίνθος (2.1.5). Concerning the loss of the first vowel, Rosół provides multiple examples of unstressed vowels that were deleted when a word is borrowed in Greek; e.g. γρύψ, -υπόσ / γρυβός < Akk. *kurību*; Hebr. *k'rub*; etc.

Beekes (EDG: 1359) agrees with Furnée (1972) that σκορπίος is connected to κάραβος, καράμβιος, *σκαραβαῖος, κεράμβυξ, κεράμβηλον, κηραφίς, γραψαῖος. He argues that all these forms have the structure **kara^mp-*, except for γραψαῖος and σκορπίος. This leaves an opening to the thought that σκορπίος may have another origin. The only other linguistic feature that would point to a Pre-Greek origin is the occurrence of s-mobile. Furthermore, Beekes mentions that Indo-European did not have a word for scorpion, as the homeland of Indo-Europeans was north of the Black Sea. Beekes concludes that they must have adopted it from a different language when they arrived in the Mediterranean area.

Both Semiticists and specialists in Pre-Greek agree on the idea that σκορπίος is not a derivation from PIE **skerp-* 'to scratch', cf. OE *sceorfan* 'to scratch' and Latv. *šķērpēt* 'to cut grass'.

As the semantics of Greek and Semitic are identical and the substitution do not cause major problems, it is safe to assume that the word is of West-Semitic origin. It is possible that the word was affected by the comparable forms of Furnée or that folk-etymology played a role.

...

2.2.6. τίτανος 'lime, plaster, crayon, marble-scrapings'

First attestation: 8th-7th BC (Hesiod)

Greek forms: τίτανος [f.]; τέτανος· κονία, χρίσμα, ἄσβεστος 'dust, plaster, unslaked lime' (Hesychius).

Semitic forms: Hebr. *śid* 'lime'; JAram. *sidā* 'lime, plaster'; Syr. *saidā* 'lime'; Arab. *šīd* 'lime, plaster on a wall, mortar'.

Rosól (2012a) proposed a new etymology for the Greek word τίτανος. He connects this obscure word with the semantically identical Semitic words listed above. He explains the initial /t/ by assimilation to the /t/ in the next syllable. Another possibility he mentions is folk-etymological influence of the word for Titans (sg. Τιτάν, -ᾶνος; pl. Τιτᾶνες). The substitution of /d/ > /t/ is rather rare. Nevertheless, Rosól provides two examples of other Semitic loanwords that contain a voiced consonant, but a voiceless consonant in Greek: κάμηλος < Sem. cf. Hebr. *gāmāl*; Aram. *gāmlā*; Arab. *jamal* 'camel'; and ὕσσωπος < Sem. cf. Hebr. *'ēzōb*; Eth. *'azāb*, *'azōb*; etc. To account for the "v-suffix", two other examples of this are mentioned: κόφινος < Sem. cf. Akk. *qurru*; Emp.Aram. *qwp*; etc. and τύμπανον < Sem. cf. Hebr. *top*; JAram. *tuppā*; Arab. *duff*; Ug. *tp*; etc.

The variation in s-phonemes within Semitic can be explained by Proto-Semitic phonology. Proto-Semitic /ʕ/ (voiceless alveolar lateral fricative) or s² yields /ʕ/ <ś> in Biblical Hebrew; /s/ <s> in Aramaic; /ʃ/ <š> in Arabic. This corresponds neatly with the attestations of the word 'lime'. One may conclude from this that τίτανος was borrowed from a Central Semitic language and that the concept of the word precedes the split within the Central Semitic languages. Unless the initial /t/ was a Greek substitution of Semitic /ʕ/, which would point at Hebrew or Proto-Central Semitic as a donor language, it is not possible to determine the donor language, because of assimilation or folk-etymology.

Beekes claims that this word must be a loan, like most expressions of 'chalk'. According to him, the variation ε/ι and the suffix -αν- point to a Pre-Greek origin.

Again, these two different claims can be united, if one assumes that some Semitic loanwords entered the Greek lexicon via Pre-Greek.

...

2.2.7. χλαῖνα 'upper-garment, mantle', originally worn only by men

First attestation: 8th century BC (Homer)

Greek forms: χλαῖνα [f.]; κλανίσκιον

Semitic forms: Akk. (NAss., NBab.) *gulē/ānu* 'overcoat'; Hebr. *g^llom* 'cloak, wrap'; JAram. *g^llimā*; Syr. *glaimā*;

Other forms: Lat. *laena* 'a thick woolen cloak worn over a toga or pallium, fastened by a pin'; Pers. *kelim* 'carpet'

The origin of this non-Indo-European word seems problematic, as scholars want to connect this lexeme with several others like *χλανίς*, *χλαμύς* etc. A Semitic etymology was proposed by Szemerényi 1974 : 148. He explains the forms in the following way: "The form *χλαῖνα* is regularly developed from **χλαμ-γα*, and gave rise to **χλαινίδιον* which was dissimilated to *χλανίδιον*; on this by retrograde formation a new basic word *χλανίς* was built". I agree with Rosół (2013 : 107-108) that these explanations are not very phonologically and morphologically convincing.

The distribution of this word shows that the word it is (Central) West Semitic. The word probably became a loanword in Neo-Assyrian and Neo-Babylonian (cf. HALOT). These Akkadian languages were spoken around 1000-600 BC. On first sight, Akkadian *gulē/ānu* 'overcoat' resembles Greek *χλαῖνα* the most, because of the presence of /n/ instead of /m/. The Greek diphthong /ai/ can indeed be developed from **χλαμ-γα*, as Szemerényi suggested, if the stem vowel is α or ο and the yod infects the consonant and creates a diphthong with /i/ before it, cf. PIE **g^wm̥jō* > **ban-iō* > *βαίνω* 'I go'. However, the falling accent, indicated by the circumflex, supposes a contraction of vowels. So far, no explanation for this occurrence has been given by others. An alternative donor language can be Aramaic: Jewish Aramaic *g^elimā*; Syriac *glaimā*. Especially the Syriac form resembles Greek *χλαῖνα*, although Syriac was spoken from the first century AD onwards and can therefore not be the donor language.

Semitic /g/ yielded /k/ and /k^h/ in Greek and seems quite unusual phonetically, as Greek had a phoneme /g/. However, this substitution appears more often in Semitic loanwords, e.g. in *κάμηλος* < Sem. cf. Hebr. *gāmāl*; Aram. *gāmlā*; Arab. *jamal* 'camel'; etc. There are examples of Semitic loanwords, which show the shift from plosive to aspirate as well, e.g. Greek *κόφινος* < Sem. cf. Akk. *quppu*; Emp.Aram. *qwp*; etc. This variation is a Pre-Greek feature as well.

Beekes (in EDG) calls *χλαῖνα* Pre-Greek and proposes this reconstruction *χλαῖνα* < **χλάν-γᾶ*. The stem **χλάν-* can explain the word *χλανίς* as well. Further, he connects the word to *χλαμύς* (see next section) and therefore mentions the following Pre-Greek features: interchange ν/μ, interchange χ/κ and the suffix -υδ-.

The phonology and semantics of both Greek and Semitic remarkably correspond, so that we may conclude that these forms must be connected. Possible candidates for the donor language are Akkadian and, more likely, Aramaic, depending on how one reconstructs the stem: **χλαμ-γα* (Szemerényi) or **χλάν-γᾶ* (EDG). The variation in Greek between a stem in -μ and -ν can be the result of sound changes within Pre-Greek. Moreover, a Pre-Greek intermediate stage explains the variation of χ- and κ- and the suffix -υδ-.

As *χλαῖνα* and *χλαμύς* are semantically corresponding, we can assume that a Semitic lexeme ending in -/m/ was borrowed in Pre-Greek and was later included in the Greek lexicon.

...

2.2.8. *χλαμύς* 'upper-garment for men, especially for traveling or for battle'

First attestation: 7th-6th century BC (Sappho)

Greek forms: *χλαμύς*, gen. -ύδος, accus. -υν [f.]

Semitic forms: Semitic forms: Akk. (NAss. NBab.) *gulē/ānu* 'overcoat'; Hebr. *g^lom* 'cloak, wrap'; JAram. *g^elimā*; Syr. *glaimā*

Other forms: Lat. *laena* 'a thick woolen cloak worn over a toga or pallium, fastened by a pin'; Pers. *kelim* 'carpet'

For a detailed account of this word, see *χλαῖνα* (section above).

Rosól (2013 : 109) assumes that *χλαμός* is borrowed independently from *χλαῖνα*. Szemerényi (1974 : 148) explains the form in the following way: "The Semitic original must have been *gilamu* (type *qital*)" which gave the *υ*-stem *χλαμός*, *-ύν* in Greek; the general *δ*-stem *χλαμυδ-* is a Greek innovation on the basis of the ambiguous nominative".

Nouns of the Semitic type **qitāl* occur in Akkadian, Arabic and a few in West Semitic languages. It is hard to confirm this claim, because the word is not attested in Arabic and the Akkadian word is presumably a West Semitic loan. Moreover, this *-u(m)* is only present in Akkadian, as short, unaccented vowels like **-u* were apocopated in Hebrew and Aramaic. Therefore, I will not adopt this theory.

Accordingly, a Semitic language (presumably Aramaic; cf. *χλαῖνα*) provided Pre-Greek with a lexeme (**gVIVm*) and speakers of Pre-Greek added the suffix *-υδ-*. Within a Pre-Greek stage, variation of *ν/μ* and *χ/κ* occurred and in this way, the forms *χλαμός* and *χλαῖνα* can be connected.

2.3. Preliminary conclusion

After analyzing Semitic loanwords in Greek word by word, it is essential to summarize the results in an overview of features. In the scheme below the relevant words are given for each feature and the list of Semitic forms are restricted to the most probable candidates for the donor language.

To strengthen the arguments, some other words that I had collected, but not discussed in this thesis are placed in *italics*.

2.3.1. Summary of Pre-Greek phonological features

	Greek	Semitic
interchange κ/χ	κημός, χαβός χλαῖνα, κλανίσκιον <i>μαλάχη, μάλβακα [acc.]</i>	Akk. <i>kamû</i> ; Arab. <i>kamma</i> Akk. <i>gulē/ānu</i> ; JAram. <i>g^limā</i> ; Syr. <i>glaimā</i> <i>Hebr. malluah; JAram. malluhā</i>
interchange μ/β	κημός, χαβός	Akk. <i>kamû</i> ; Arab. <i>kamma</i>
interchange θ/δ	γέλις, ἄλις; gen. -ῖδος, -ῖθος	Akk. <i>gidlu</i>
interchange ν/μ	χλαμός, χλαῖνα	Akk. <i>gulē/ānu</i> ; JAram. <i>g^limā</i> ; Syr. <i>glaimā</i> ;
-/+ geminate -vv	κάννα, κανών	Akk. <i>qanû(m)</i> ; Hebr. <i>qane</i> ; etc.
-/+ nasalisation	τύπανον, τύπανον <i>ἀπήνη, λαμπήνη</i>	Hebr. <i>top</i> ; JAram. <i>tuppā</i> ; Ug. <i>tp</i> <i>Hebr. ’oran; JAram. ’oranna; Ug. apnm (dual), apnt (pl.)</i>
interchange ᾶ-/Ø-	γέλις, ἄλις	Akk. <i>gidlu</i>
interchange ε/ι	τίτανος, τέτανος <i>σίλφιον, σέλπον (H.)</i>	Hebr. <i>śid</i> ; JAram. <i>sidā</i> ; Arab. <i>šīd</i> <i>Hebr. sirpād</i>
interchange α/ο	κάννα, Μυσ. ko-no-ni-pi κανών, Μυσ. ko-no-ni-pi <i>μαλάχη, μολόχη, μολάχη</i>	Akk. <i>qanû(m)</i> ; Hebr. <i>qane</i> ; etc. <i>Hebr. malluah; JAram. malluhā; Arab. mullāh</i>

Scheme 2. Summary of Pre-Greek phonological features.

2.3.2. Preliminary conclusion: phonological features

- interchange κ/χ: The Semitic donor languages show no variation in their consonants. Semitic /k/, /g/ (and <h>) were substituted in Greek as both κ and χ. So, this variation cannot have emerged before the borrowing from Semitic and developed via Pre-Greek.
- interchange μ/β: This alternation does not appear in Semitic as well and must be a development in Pre-Greek.
- interchange θ/δ: In this case, Akkadian /d/ is the source for Greek γ. The variation must have emerged in a Pre-Greek stage.
- interchange ν/μ: This variation is present in Semitic, cf. Akk. *gulē/ānu* and JAram. *g^limā*. However, it is more likely that this variation occurred in a Proto-Greek stage, because of the analysis: **glam-ia* > χλαῖνα. The /m/ changed into /n/ at the end of a syllable. These loanwords were borrowed into Pre-Greek, cf. the Pre-Greek suffix in χλαμύς. However, the alternation ν/μ is rather a Proto-Greek than Pre-Greek feature.
- -/+ geminate -vv-: The geminated -vv- is not attested in Semitic. Presumably, this variation occurred in Pre-Greek or in Greek by folk-etymology.
- -/+ nasalization: Of the two examples, none of the Semitic languages demonstrates a nasal or nasalization. These alternations must have emerged in Pre-Greek or are caused by partial assimilation in Greek.
- interchange á- ~ zero: Akkadian *gidlu* does not have a variant with /a/ before it. As a prothetic /a-/ in combination with the zero grade in the next syllable is a typical substratum feature throughout the languages of Europe, we can safely assume that this is a Pre-Greek feature.
- interchange ε/ι: The Semitic examples clearly show that /i/ was the original vowel and ε is secondary. This variation may be a Pre-Greek feature, but can be the result of dialectal variation as well.
- interchange α/ο: These cases show that a borrowed Semitic /a/ can vary with /o/ in Greek. This is hard to explain from a Greek perspective, so it may be a Pre-Greek feature.

2.3.3. Summary of Pre-Greek morphological features

	Greek	Semitic
suffix -ινθ-	μήρινθος πλίνθος άσάμινθος λαβύρινθος σμίνθος	Arab. <i>marr</i> Hebr. <i>l^ebenā</i> ; JAram. <i>l^ebentā</i> ; Arab. <i>libn/labin</i> ; Ug. <i>lbnt</i> ; etc. Proto-Semitic <i>*la/ibint</i> <i>Akk. assammû</i> <i>Hebr. d^ebir</i> ; Pun. <i>dbr</i> <i>Akk. (u)šummu</i> ; Arab. <i>šīm</i>
suffix -ιδ-/-ιθ-	γέλις, ἄγλις; gen. -ιδος, -ιθος	<i>Akk. gidlu</i>
suffix -υδ-	χλαμύς; gen. -ύδος	<i>Akk. gulē/ānu</i> ; JAram. <i>g^elimā</i> ; Syr. <i>glaimā</i> ;
suffix -αν-	τίτανος τύμπανον σαργάνη	Hebr. <i>śid</i> ; JAram. <i>sidā</i> ; Arab. <i>šīd</i> Hebr. <i>top</i> ; JAram. <i>tuppā</i> ; Ug. <i>tp</i> ; etc. <i>Hebr. śrg</i> ; JAram. <i>srag</i> ; Arab. <i>saraja</i> ; etc.
suffix -ιν-	κόφινος	<i>Akk. qurru</i> ; EmpAram. <i>qwp, qph</i> ; Arab. <i>quffa</i> ; Ug. <i>qpt</i> ; etc.
suffix -ιγγ-	πλάστιγξ; gen. -ιγγος σάλπιγξ; gen. -ιγγος	Hebr. <i>peles</i> <i>Akk. šulpu</i> ; Ug. <i>tlb</i>
suffix -ήνη	σαγήνη άπήνη	<i>Akk. šikinnu</i> <i>Hebr. ’oran</i> ; JAram. <i>’oranna</i> ; Ug. <i>apnm (dual), apnt (pl.)</i>
suffix -σα	κόφινος, κόψα	<i>Akk. qurru</i> ; EmpAram. <i>qwp, qph</i> ; Arab. <i>quffa</i> ; Ug. <i>qpt</i> ; etc.
nom. in -ᾶ	κάννα μάλθη, μάλθᾶ σμίνθος, σμίνθα (H.)	<i>Akk. qanû(m)</i> ; Hebr. <i>qane</i> ; etc. <i>Hebr. melet</i> ; Syr. <i>mlāṭā</i> ; Arab. <i>milāṭ</i> <i>Akk. (u)šummu</i> ; Arab. <i>šīm</i>
s-mobile	μήρινθος, σμήρινθος	Arab. <i>marr</i>

Scheme 3. Summary of Pre-Greek morphological features.

2.3.4. Preliminary conclusion: morphological features

- suffix -ινθ-: Apart from the word πλίνθος, which may be a Pre-Greek loanword in Semitic, all forms show clearly no sign of this suffix or even a /n/ or dental. This Pre-Greek suffix was placed directly behind the loanword and shows obviously that the words were borrowed from Semitic into Pre-Greek and later into Greek.
- suffix -ῖδ-/-ῖθ-: This suffix is not present in the Akkadian form as well and must have been added in Pre-Greek.
- suffix -υδ-: This suffix is not present in Semitic and is added by Pre-Greek.
- suffix -αν-: This suffix is added in Pre-Greek as well.
- suffix -ιν-: This suffix is added in Pre-Greek as well.
- suffix -ιγγ-: This suffix is added in Pre-Greek as well.
- suffix -ήνη: Both examples contain a /n/, that could have the same origin as the suffix -ήνη. They may be loanwords from Pre-Greek. Another explanation is that the mutual /n/ is partially Semitic.
- suffix -σα: This suffix must have been added in Pre-Greek.
- nominative in -ᾶ: this nominative ending is presumably Pre-Greek, because there is no motive to think that it was present in Semitic.
- s-mobile: The /s/ is absent in the Arabic word and this makes it likely that this is a feature of Pre-Greek or Greek.

3. Conclusion

The purpose of this thesis is to answer the following research question:

Did Semitic loanwords enter the Ancient Greek lexicon via Pre-Greek?

The sample of fourteen Semitic loanwords in Greek with a possible link to Pre-Greek has shown that this question can be confirmed. It is proven that the second hypothesis is correct: Semitic loanwords have been incorporated in Pre-Greek and have been borrowed via this substrate language in Ancient Greek. The arguments for this conclusion are listed below.

In ten Semitic loanwords a Pre-Greek suffix was attached to the Semitic word. This has proven to be a strong argument, because there are no traces of these suffixes in the Semitic forms. Therefore, they must have been added after borrowing in Pre-Greek.

Another morphological argument is the Greek word κάββα that ends in -ᾶ. Although the word is clearly Semitic, the short /a/ in this ending is not of a Semitic origin.

Moreover, the strong consonantal root structure of Semitic does not allow any variation in consonants to prevent loss of lexical information. Hence, it is quite remarkable that Greek forms show variation in consonants, although they are clearly semantically and phonologically related. Although it is yet unclear why these sounds alternated after borrowing from Semitic, these alternating words were transmitted via Pre-Greek into Ancient Greek.

Additionally, four loanwords show alternation of vowels. Despite the fact that a lot about Semitic vowels is yet unknown, it is evident that Semitic was not the source of the vowel alternation in these four loanwords. Especially important is the feature of interchange ᾶ-/Ø- in combination with the zero-grade in the next syllable. This feature is recognized as a substratum feature of languages throughout Europe.

Besides that, this research seems to indicate that Pre-Greek and Semitic mutually influenced each other. From the discussed words, both πλίνθος and σαγήνη contain a well-known Pre-Greek suffix. In the first case, the Semitic forms show an alternation in consonants, which can be explained by the prenasalized dental in Pre-Greek. The latter word is less obvious, because the Akkadian word *šikinnu* contains a /n/ as well. However, the word is evidentially Pre-Greek, since the word occurs with two different Pre-Greek suffixes and the suffix -ήνη is attested in toponyms as well. Akkadian is the only Semitic language in which the word is attested, which makes it probable to think that it is an example of a Pre-Greek loanword in Semitic.

Recommendations for future research

As the constraint of this thesis allowed me to treat fourteen words, I would recommend to search the Greek lexicon in order to find more examples of Semitic loanwords in Greek via a Pre-Greek stage. Furthermore, a semantic analysis would be very informative to learn which concepts were borrowed by a Greek or Semitic language. This can develop our ideas about these ancient cultures.

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