

BiBLindex

LYON, 2-4 June, 2014

**INTERNATIONAL WORKSHOP  
ON COMPUTER-AIDED  
PROCESSING OF  
INTERTEXTUALITY IN ANCIENT  
LANGUAGES**

# Text re-use and narrative context: digital narratology?

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# Intertextuality: definition

Quotation

...

...

...

...

...

**Allusion** as a part of the literary design of the author

# Text re-use and digital searching

## Boolean searching

- *Poetria noua > Musisque deoque*
- *Bibliotheca Teubneriana Latina*
- *LLT-A / LLT-B*
- ...

## CHANGE OF APPROACH

### Comparing two texts / multi-text searching

*Tesserae*

### Comparing one text to many

*Musisque deoque* (cooccorrenze)



LATIN

GREEK

ENGLISH

OTHER TOOLS

SOURCES

Sort  by  and format as  Show  results at a time.31251 results in 313 pages.  
Go to page: [1](#) [2](#) [3](#) [4](#) [5](#) [\[next\]](#) [\[last\]](#)

	target phrase	source phrase	matched on	score
1.	<a href="#">valerius flaccus 1.254</a> rapta simul veribus <b>Cereremque dedere canistris.</b>	<a href="#">verq. aen. 1.701</a> Dant famuli manibus lymphas, <b>Cereremque canistris</b>	ceres, do, canistri-canistrum	11
2.	<a href="#">valerius flaccus 5.30</a> <b>imposuere rogo</b> lacrimasque et munera flammis	<a href="#">verq. aen. 6.308</a> <b>impositique rogis</b> iuvenes ante ora parentum:	impono, rogam-rogus	11
3.	<a href="#">valerius flaccus 3.574</a> quis tales impune moras <b>casusve laborve</b>	<a href="#">verq. aen. 6.602</a> quos super atra silex iam iam <b>lapsura cadentique</b>	labor, cado	11
4.	<a href="#">valerius flaccus 3.453</a> nec <b>triviis ululare</b> velim pecorique satisque	<a href="#">verq. aen. 4.609</a> nocturnisque Hecate <b>triviis ululata</b> per urbes,	ululo, triuium-triuius	11
5.	<a href="#">valerius flaccus 2.92</a> adclinem scopulo <b>inveniunt miserentque</b> foyentque	<a href="#">verq. aen. 2.645</a> Ipse manu mortem <b>inveniam; miserebitur</b> hostis	inuenio, misereeo	11
6.	<a href="#">valerius flaccus 4.51</a> <b>effusisque genas</b> lacrimis rigat. 'ibimus' inquit	<a href="#">verq. aen. 6.686</a> <b>effusaeque genis lacrimae</b> , et vox excidit ore:	effundo, gena-genae, lacrima	11
7.	<a href="#">valerius flaccus 1.396</a> fuscata nube diem dum plenas <b>nectare cellas</b>	<a href="#">verq. aen. 1.433</a> stipant et dulci distendunt <b>nectare cellas</b> ,	cella, nectar-necto	11
8.	<a href="#">valerius flaccus 1.193</a> ipse ter aequoreo <b>libans carchesia</b> patri	<a href="#">verq. aen. 5.77</a> Hic duo rite mero <b>libans carchesia</b> Baccho	libo, carchesium	11
9.	<a href="#">valerius flaccus 2.138</a> <b>servantem. manet</b> illa viro famulasque fatigat	<a href="#">verq. aen. 2.160</a> Tu modo promissis <b>maneas, servataque serves</b>	seruo, maneo	11
10.	<a href="#">valerius flaccus 2.131</a> adfore iam luxu <b>turpique cupidine captos</b>	<a href="#">verq. aen. 4.194</a> regnorum immemores <b>turpique cupidine captos.</b>	cupido, turpe-turpis, capio-captus	11
11.	<a href="#">valerius flaccus 2.453</a> flebile succedens cum <b>fracta remurmurat unda.</b>	<a href="#">verq. aen. 10.291</a> qua vada non sperat nec <b>fracta remurmurat unda,</b>	frango, unda-undo, remurmuro	11
12.	<a href="#">valerius flaccus 6.146</a> Exomatias <b>venatus alit</b> nec clarior ullis	<a href="#">verq. aen. 8.318</a> sed rami atque asper victu <b>venatus alebat.</b>	alo, uenatus-uenor	11

**Source Text:** vergil.aeneid**Target Text:** valerius\_flaccus.argonautica**Unit:** line**Feature:** stem**Stoplist size:** 10**Stoplist basis:** corpus**Stop words:** qui, quis, sum, et, in, is, hic, non, ego, ut**Max distance:** 999**Distance metric:** freq**Score cutoff:** 8**Filter:** off

# Typical scenes in epic poetry

Homer's *Iliad*

Battle

Arming scenes

Duels

Sacrifices and meals

Divine interventions

Invocations

# Typical scenes in epic poetry

Homer's *Odyssey*

Voyage

Departures

Arrivals

Geography

Sacrifices and meals

Divine interventions

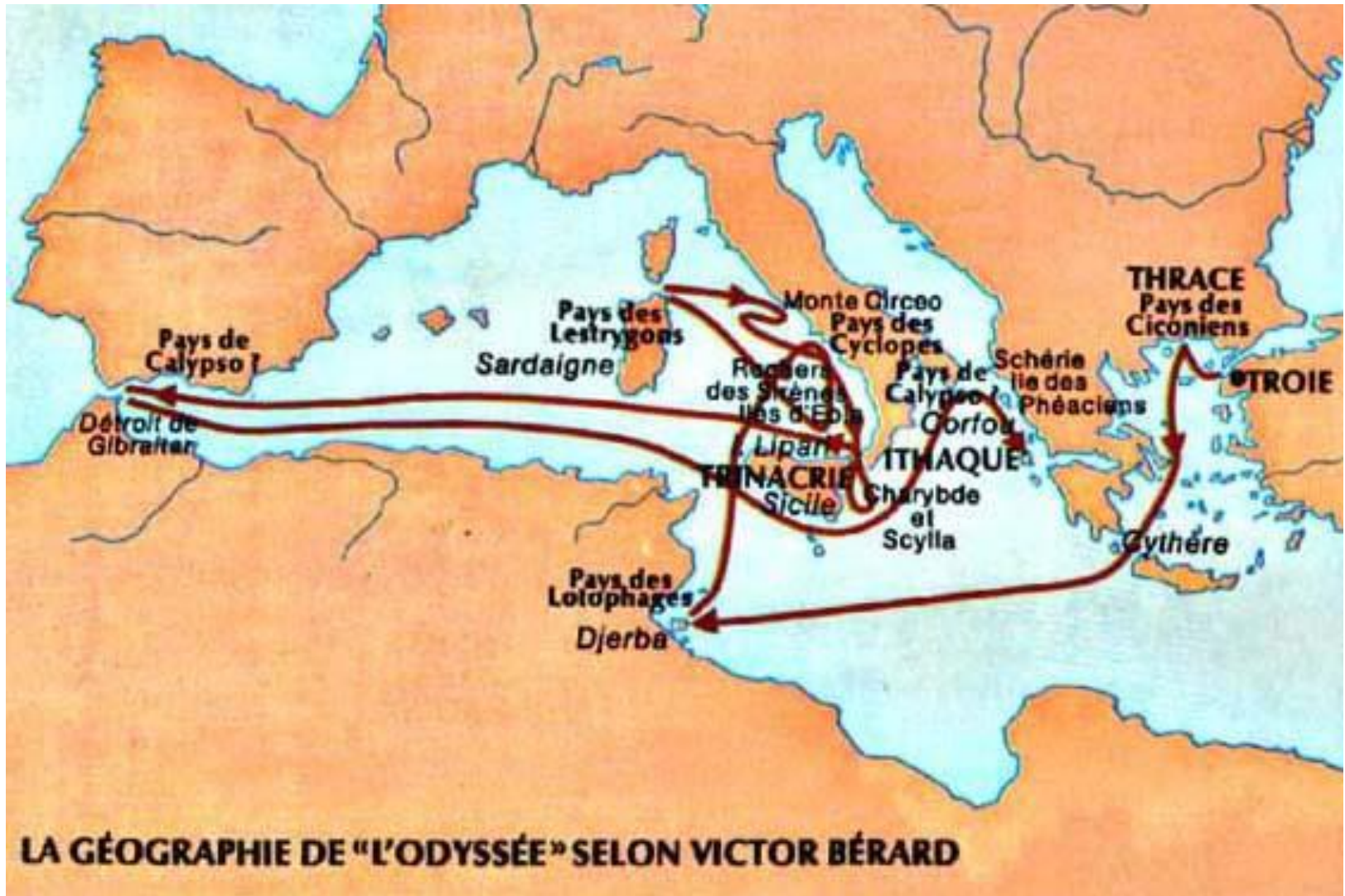
Invocations

# Arming scene





# Geography



# Geography



# Epic duel





# Epic duel



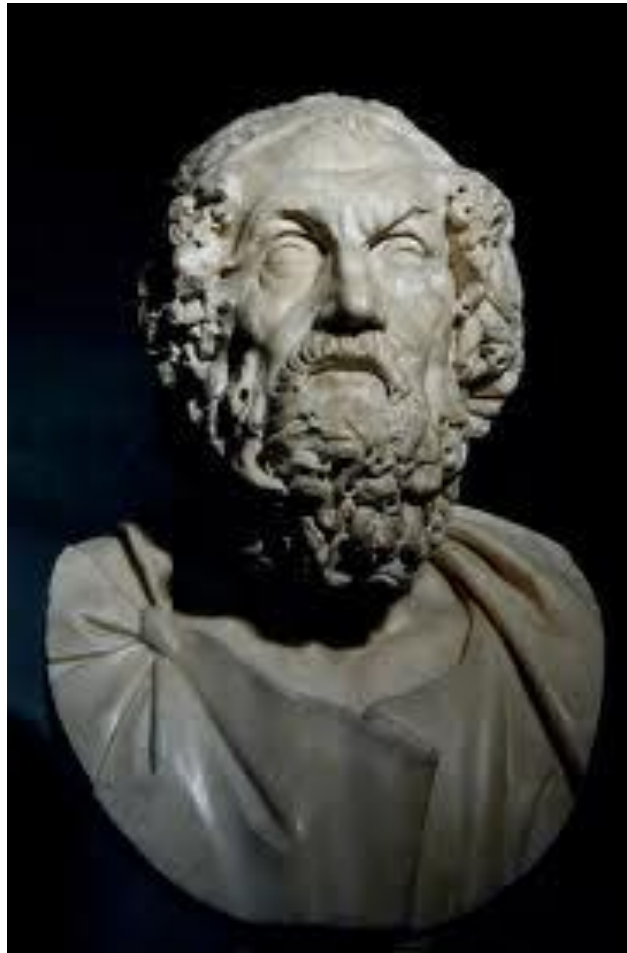
# Departure



# Arrival



# Homer



# Homer





# Valerius Flaccus, *Argonautica* 4 (end) - 5 (beginning)

4.637-732: passage through the Symplegades.

4.733-762: arrival in the land of the Mariandyni

BOOK \_\_\_\_\_ DIVISION

5.1-72: Mariandyni; **death** and **burial** of Idmon and Tiphys; Ancaeus chosen as helmsman.

5.73-176: **departure**, **voyage** along southern coast of Black Sea; Argonauts pass the Chalybes, Carambis and Prometheus.

5.177-216: evening and **arrival** in the Phasis. Prayer of Jason.

5.217-277: **invocation** of a Muse (*dea*) and the situation in Colchis.

5.278-295: divine intervention: Juno and Minerva. WAR.

5.296-328: Argonauts make their way to the **city and palace** of Aietes.

# Vergil, *Aeneid* 6 (end) - 7

6.893-901: exit from the Underworld.

BOOK \_\_\_\_\_ DIVISION

7.1-7: **Death** and **burial** of Caieta; **departure**.

7.8-24: **voyage** along the coast; Argonauts pass Circe.

7.25-36: dawn and **arrival** in Tiber.

7.37-106: **invocation** of the Muse Erato and the situation in Latium.

7.120-147: prayer of Aeneas; sacrifices.

7.148-285: Trojans make their way to the **city and palace** of Latinus.

7.286-640: divine intervention: Juno and Allecto. WAR.

7.641-646: invocation of the Muses (*deae*).

7.647-817: catalogue of the Italians.

# Apollonius Rhodius, *Arg.* 2 (end)- 3 (beginning)

2.815-898: Mariandyni; **death** and **burial** of Idmon and Tiphys; Ancaeus chosen as helmsman.

2.899-1259: **departure** and **voyage** along southern coast of Black Sea; Argonauts pass Carambis and Prometheus.

2.1260-1285: night and **arrival** in the Phasis. Prayer of Ancaeus.

BOOK \_\_\_\_\_ DIVISION

3.1-5: **invocation** of the Muse Erato.

3.6-166: **divine intervention**: Hera, Athena, Aphrodite and Eros. LOVE.

3.167-212: Argonauts make their way to the **city and palace** of Aietes.

# Example 1: Bending a headland

Statius, *Achilleid* 1.677-8

**raditur** alta

Lemnos

Valerius Flaccus, *Argonautica* 5.107-8

alta Carambis

**raditur**

Vergil, *Aeneid* 7.10

proxima Circaeae **raduntur** litora terrae

Apollonius Rhodius, *Argonautica* 2.943-4

**Κάραμβιν** ἄμ' ἡελίοιο βολῆσιν

**γνάμψαντες**

Apollonius Rhodius, *Argonautica* 4.300-1

οὐδὲ **Κάραμβιν**

**γνάμψαν**

**γνάμψαντες** = bend, follow the bends of  
**radere** = scrape, shave, stay close to, skirt

# Example 2: Sounds from the coast

Valerius Flaccus, *Argonautica* 5.141

pervigil **auditur** *Chalybum labor*

Valerius Flaccus, *Argonautica* 5.168-70

tum *gemitu* propiore *chalybs* densusque revulsis  
rupibus **audiri** montis *labor* et grave Titan  
vociferans, fixos scopulis dum vellitur artus.

Vergil, *Aeneid* 7.15

hinc **exaudiri** *gemitus* iraeque leonum

# Example 3: White + night

Valerius Flaccus, *Argonautica* 5.70-1

etenim dat **candida** certam  
nox Helicen.

Vergil, *Aeneid* 7.8-9

nec **candida** cursus  
luna negat

# Example 4: Invocation of the Muse

Apollonios Rhodius, *Arg.* 3.1  
Εἰ δ' ἄγε νῦν, Ἑρατώ,  
“So come on, Erato”

Vergil, *Aeneid* 7.37  
Nunc age..., Erato,  
“Come on now, Erato”

Valerius Flaccus, *Arg.* 5.218  
Incipe nunc cantus alios, dea,  
“Begin now, goddess, other songs”

Apollonios Rhodius, *Argonautica*

Vergil, *Aeneid*

Valerius Flaccus, *Argonautica*

4 books = 1-2 + 3-4

12 books = 1-6 + 7-12

8 books = 1-4 + 5-8

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# Narratological categories

- Place of the action

City

Palace

- Epic action

**Voyage** and its different stages (a) **Departure**

(b) **Arrival**

**Death**

**Burial**

- Rhetorical structure

**Invocation of the Muse**

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## Test case:

### Valerius Flaccus, *Argonautica* 4 (end) - 5 (beginning)

- **Book/poem's structure** (*proemium*; middle of the book/poem; end of the book/poem)
- **Rhetorical structures** (narrative; direct speech; simile; digression; invocation; brief apostrophe; prayer)
- **Epic action** (voyage; illness; death; burial; flying *fama*; divine intervention)
- **Place of the action** (city; palace; underworld; sea)
- **Time of the action** (sunrise; sunset; night)
- **Proper nouns** (of people, gods, lands, ships, constellations)

# Test case:

## Valerius Flaccus, *Argonautica* 4 (end) - 5 (beginning)

### Some philological questions

- Importance of sub-categories for researchers:
  - Symplegades* (strait; geography)
  - Phasis* (river; geography)
  - Tiphys* (male character; pilot; Argonaut)

# Test case:

## Valerius Flaccus, *Argonautica* 4 (end) - 5 (beginning)

### Sub-categories

#### Voyage

##### 4.733-762 : arrival

- 733 : the ship touches the shore
- 734 : a person (Echion) goes off and scouts around
- 735-736: message to deliver
- 737 : the king goes to meet the heros
- 738 : the king brings them in his palace
- 741-758: speeches
- 760: feast
- 761-762: invocation to gods

# Test case: Valerius Flaccus, *Argonautica* 4 (end) - 5 (beginning)

## Some philological questions

- Importance of sub-categories for researchers:
  - Symplegades* (straits; geography)
  - Phasis* (river; geography)
  - Tiphys* (male character; pilot; Argonaute)
- 4.707: a proper noun indirectly referred by a pronoun
- 5.166: *Hiber* (people) but rhetorical figure (metonymy → people for land)
- 5.48 : Aeson referred as 'male character' or just as 'male'

# Test case:

## Valerius Flaccus, *Argonautica* 4 (end) - 5 (beginning)

### Some technical questions

- How many mark-up and submark-up can we consider for the same portion of lines?
- Is it possible to tag a series of lines and, simultaneously, a single word?
- Have we to follow a specific order in submarking-up?
- How long does it take to mark-up in this way a text of 1000 lines?

# Narratological mark-up

**Automatically** → Topic modeling?

Cf. <http://tesseract.caset.buffalo.edu/cgi-bin/lisa.pl>

+

**Manually** → team of philologists AND digital scientists