

TheOn Documentation

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Domain and scope of the ontology

The creation of TheOn is targeted towards a formal representation of divine interventions relating to humans in literary texts. In general, the aim was to try to define the concept of human and divine entities, since many times there is a blurred line separating the two, and understand better the types of relationships between them.

Our competency questions are:

- What kinds of divine interventions is it possible to classify?
- Is man impotent (i.e. can a human being achieve his goals?) when he has to face divine entities?
- In which ways men turn to divine entities in Greek tragedies?
- In which cases human will and subsequent actions conflict with those of divine entities?
- Which features allows us to consider a human entity similar to a god?
- Which features allows us to consider a divine entity similar to a human?

Bibliographical sources

In order to give some answers to the competency questions we asked ourselves, we turned to Prof. Camillo Neri, who teaches Ancient Greek language and literature. He helped us shed light on what to focus on in our analysis, and which bibliographical comments and editions of the literary texts were better to take into account for the research to be carried out. Our choice of tragedies was: *Prometheus Bound* and *Trojan Women* by Aeschylus, *Agamemnon* and *Medea* by Euripides, based on the criteria of linguistic and content variety and presence in our bibliographic sources. For more information about the sources we used, see the section at the end of the report.

Quantitative text analysis

A close reading of the literary texts and their commentaries was not enough to have a complete understanding of the text itself. Therefore, we decided to combine this approach with a statistical one, performing some NLP analysis on a small group of tragedies. In order to do that, we decided to use a wide variety of methods. In particular, we chose to exploit a combination of algorithms created in R and Python, along with the tool "VoyantTools" (voyant-tools.org).

The first study we did was a gender analysis starting from lists of relevant words, in order to assess gender predominance in each tragedy. The results allow us to have an idea of which are the most active characters, regardless of the actual protagonists of each tragedy.

Then, we proceeded to collect the most common five words in the tragedies, after having deleted stopwords and recurrent words relevant to our context. In the *Prometheus Bound*, for instance, the most common five words were Prometheus (94), shall (89), Zeus (55), chorus (36), gods (32). Such terms are nothing but expected, but it is interesting to point out how "shall" is the second most frequent word: something expressing a sense of duty and coercion. In fact, the dynamic between Zeus and Prometheus is a dynamic of contrast, with the latter resulting in being tortured. The condition in which the main character is subjected does assimilate him to a human being. Actually, even performing a topic extraction it is clear to the terms associated to the tragedy. They are Prometheus, shall, Zeus, suffer, herm, earth. The last one is particularly important, since it relates to the human word, even though the whole tragedy is set in Scythia, not accessible by humans.

The sentiment analysis performed on the tragedy confirms this thesis. The most negative sentences detected by an algorithm in R (i.e. "You will often scream in pain and sorrow, for Zeus' heart is pitilessly harsh, and everyone whose ruling power is new is cruel and ruthless"; "I may be miserable, but my distress does not make me desire to see such pain imposed on everyone—no, not at all").

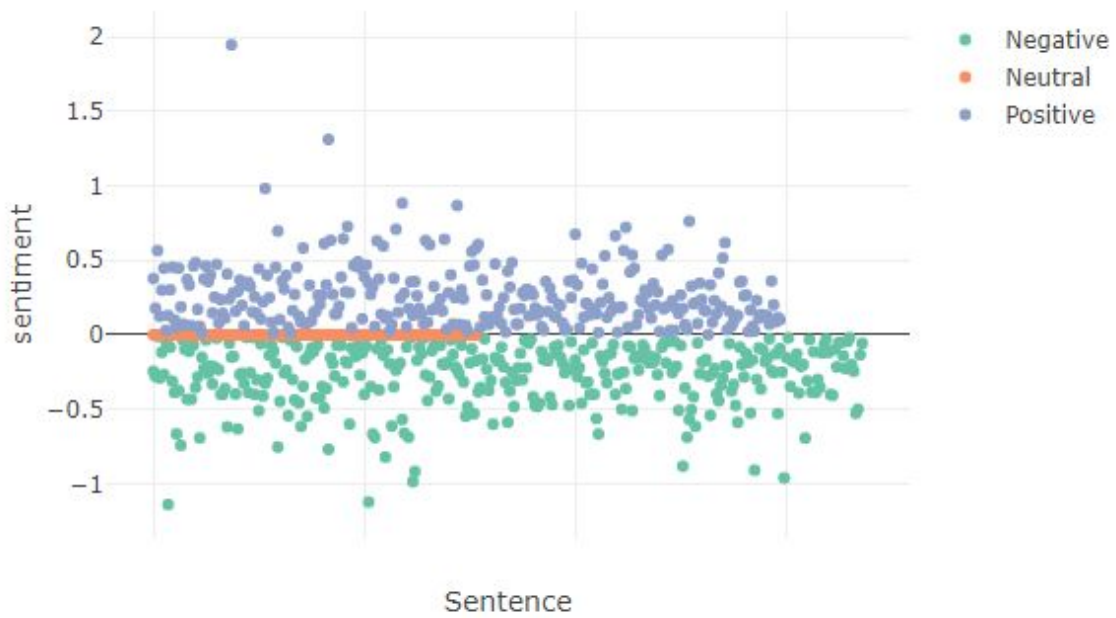
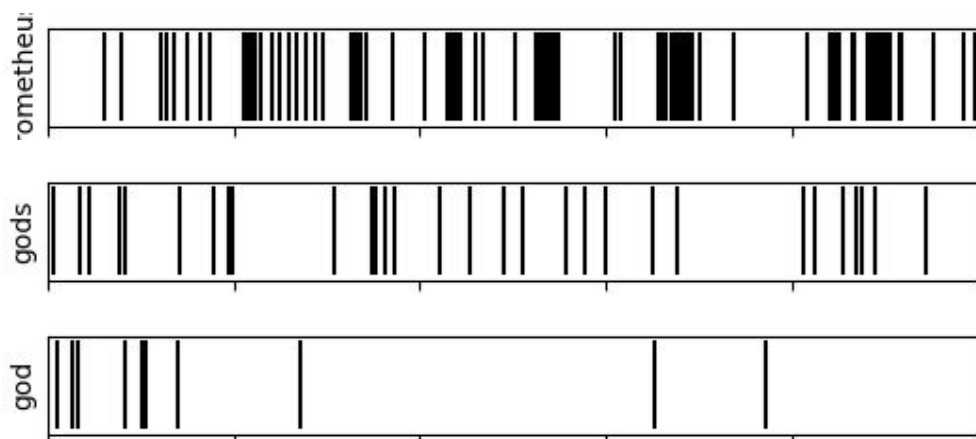


Fig. 1: Sentiment analysis on *Prometheus Bound*.

As it clear from the sentiment graph, at the end a negative sentiment prevails: the main reason is that Prometeo refuses to obey to Zeus' orders and he ends up thrown down a cliff. This confirms the dynamic of contrast between gods that have different powers: Zeus can choose the destiny of Prometheus as if he was a man, and Prometheus can't do anything but resign to his fate. Aeschylus clearly tried to create empathy between Prometheus and the spectators of the tragedy without actually involving any man in it. In fact, the plot dispersion analysis shows the prevalence of the "forecasting god" on the other divine entities in the text.



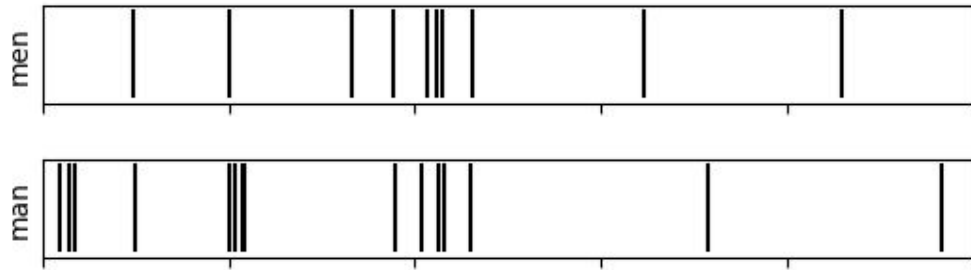


Fig. 2: Plot dispersion in *Prometheus Bound*.

To sum up, the textual analysis we carried out shows that Prometheus is characterized as a human being rather than a divine entity, thus making the author's choice to portray a god as a man, impotent towards his destiny.

We carried out the same analysis on all of the tragedies we decided to study. Some interesting results came out from the *Agamemnon* of Euripides, too.

The linguistic analysis performed on the tragedy revealed one of the main themes of the whole trilogy: the term “woe” is the most common, with 39 occurrences (the others are “leader”, 38, “home”, 35, “Clytemnestra”, 32, and “lord”, 31) and it is a common feeling for the human characters, who are all, in a sense, victims of a higher will like puppets in the hands of the gods. This human condition is also evident from the fact that the terms god and gods are more frequent with respect to the name Agamemnon, even if he should be the main character. An explanation for this phenomenon comes from the fact that because gods are heavily present in the plot, mainly with their indirect influence on the characters' actions.

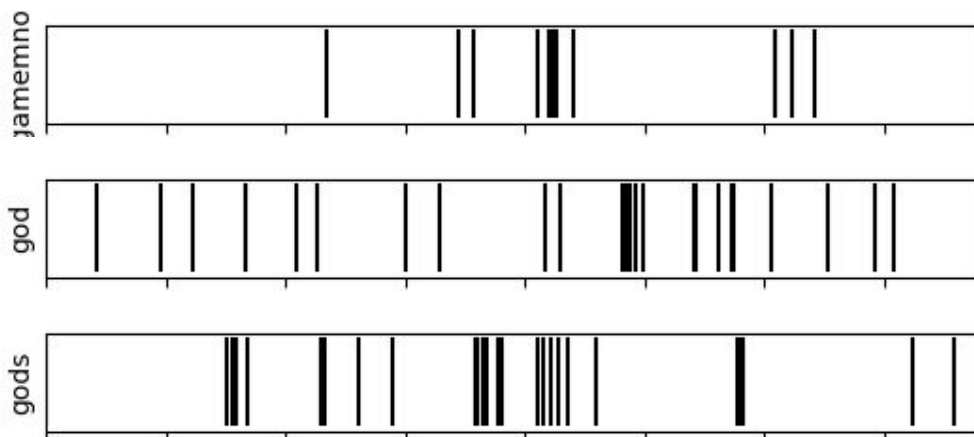


Fig. 3: Sentiment analysis on *Agamemnon*.

The sentiment analysis highlights a strong predominance of negative sentences, as Fig. 4 shows, since they are mainly connected to this conflictual relationship with gods.

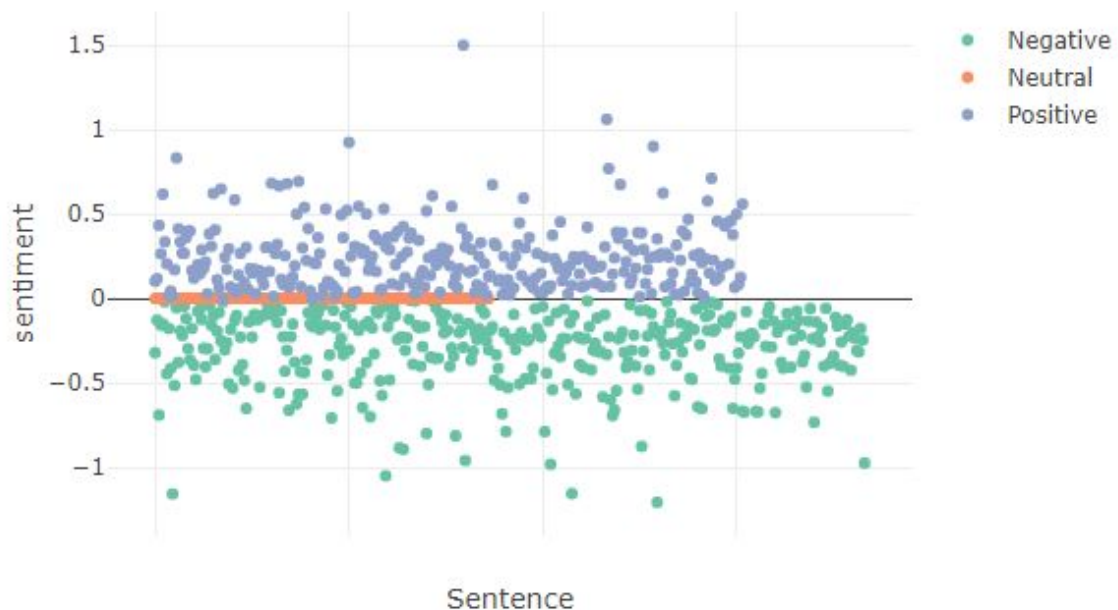


Fig. 4: Sentiment analysis of *Agamemnon*.

Finally, in the case of *Medea* of Euripides, as opposed to the *Agamemnon*, there is a strong predominance of divine entities throughout the plot.

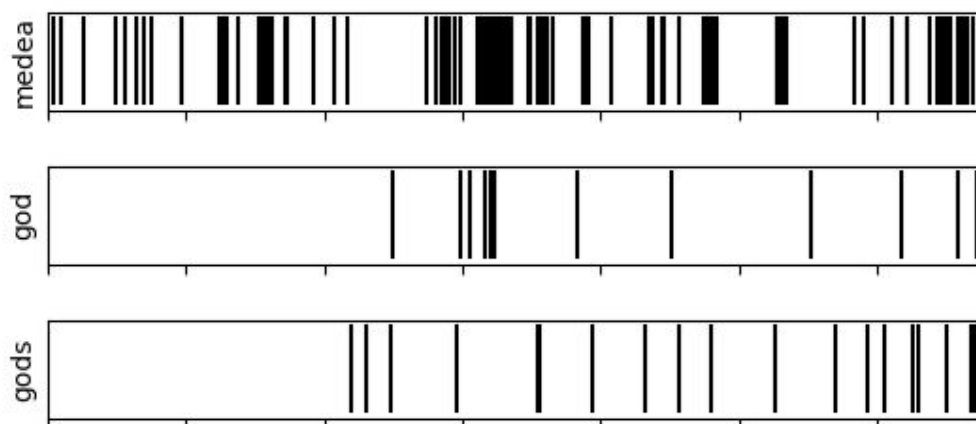


Fig. 5: Plot dispersion of *Medea*.

What does this tell us? From this diagram, it is clear Medea is the predominant character, while the frequency of “God” and “gods” is relatively low. This is why, thanks to a close reading of the text itself, in which Medea is associated to a sorceress and figures like Circe,

we deduced that **she actually has some characteristics of a goddess**. In addition, the “genderize” algorithm confirms that there is a **female dominance in the sentences of the tragedy** despite the fact that everyone, besides Medea and the nurse, is a male character. This result comes from the fact that the main character itself turns to female gods, creating an empathic relationship with them.

The association between Medea and a female divine entity is also clear from her actions, since **no god ever intervenes in her decisions**. This is confirmed by the **final *deus ex machina*** that ends the tragedy and allows the story to reach a conclusive resolution, but also from one of the most positive sentences detected by the algorithm: “lives like mine achieve the greatest glory”.

Finally, our observations can be summed up by this clustering graph that involves the choice of a tragedy with a very “classic” structure like *Ajax* by Sophocles. It is possible to notice that *Agamemnon* and *Prometheus* are closer to the destiny of *Ajax*, a hero subjected to the gods’ will, while *Medea*, since she makes her own decisions, is more characterized by freedom of thought and will.

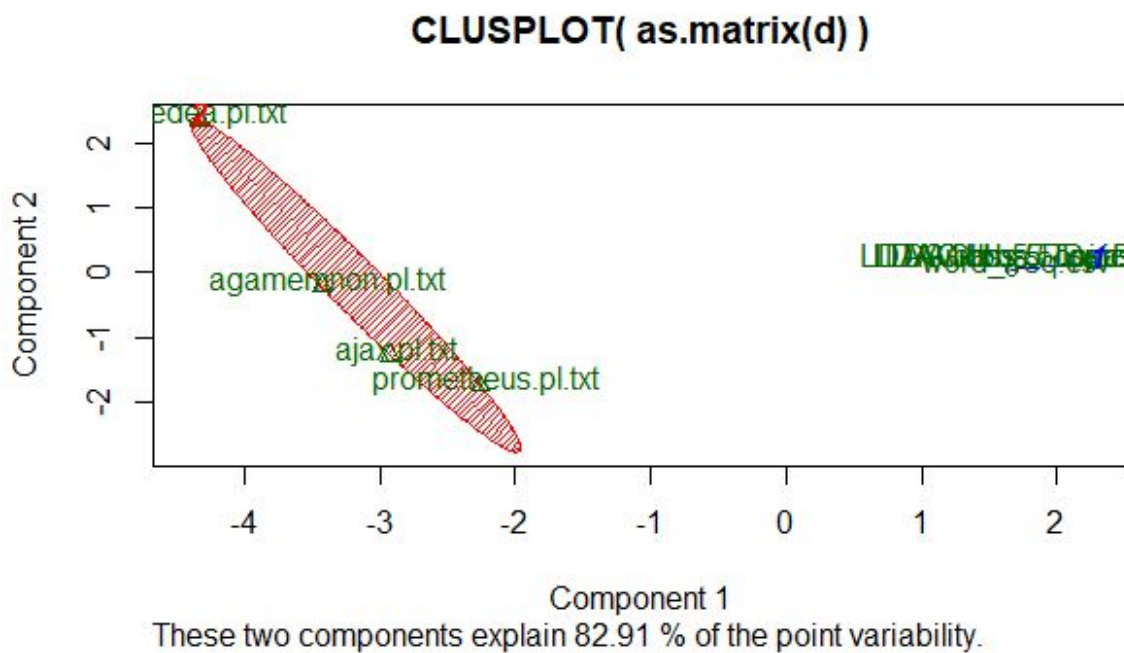


Fig. 6: Cluster analysis of *Prometheus*, *Agamemnon*, *Medea*, *Ajax*.

Reuse of existing ontologies

We chose to reuse three ontologies: Semiotic, Drammar and INTRO. For the first one, we decided to develop the class “information entity”, exploiting the pre-established concept that a meaning is interpretant of any information entity. In our ontology, this implies that the mental concept the meaning refers to can be both an agent and a process. The “has interpretant” object property proved to be useful to relate an information entity with its formal expression as well. In fact, that kind of entity, especially when it comes to a text, has a formal way of interpretation that includes many kinds of literary features. The two interpretative sides are disjoint?. The second one means to describe the dramatic feature in fiction, in particular from an action point of view. Because we needed to represent the content of the literary texts by means of agents involved in actions, we found some Drammar classes useful, starting from “drama entity” and its division into “drama enduring” and “process”. The process itself is then divided into “action” and “unintentional process” both referring to a boolean datatype “isIntentional”. This last part of the taxonomy was fundamental to define which divine interventions took over humans’ will, and which human actions were, instead, fully intentional. In fact, from this point on TheOn developed further the knowledge representation for ancient theater, specifying whether the unintentional processes an agent took part in were induced by a divine entity or not, if they affected some other agent or if they had some correspondence on the formal expression point of view, other than the “meaning one”. Speaking of formal features, that class and its subclasses was reused from INTRO, which means to model the intertextual relationships within texts, and further specified.

Developing the ontology

The approach that was chosen to develop our ontology was a top-bottom one, starting from the most general classes and reaching the most specific instances. For the full documentation of our classes, see [here](#).

Typical Use Cases

We chose some instances in order to have concrete examples on how our ontology should be used.

Examples

1- Agamemnon

Required background knowledge: Agamemnon and his fleet want to leave for Troy but, due to a hybris action that he performed against Artemis, the winds are against. To appease the anger of the goddess, he must sacrifice his daughter.

Named individual	Object property	Named individual
Agamemnon	intends	Agamemnon_goes_to_Troy_plan
Agamemnon_goes_to_Troy_plan	achieves	Agamemnon_goes_to_Troy_goal (dp: goal achievement: F)
Agamemnon_goes_to_Troy_plan	is in conflict with	Punishment_of_Agamemnon_plan
Agamemnon	takes part in	Agamemnon_Sacrifices_Iphigenia (isIntentional: F)
Arthemis	intends	Punishment_of_Agamemnon_plan
Punishment_of_Agamemnon_plan	achieves	Punishment_of_Agamemnon_goal (dp: goal achievement:T)

Punishment_of_Agamemnon_plan	develops_into_process	Agamemnon_must_Sacrifice_Iphigenia (isIntentional: T)
------------------------------	-----------------------	---

2- Prometheus

Required background knowledge: Zeus decided that he would no longer give men fire. Thus, very sad and dark period began on Earth. Prometheus, pity for humanity's fate, stole fire and gave it to men. When Zeus found out, he decided to punish him by chaining him to a cliff.

Named individual	Object property	Named individual
Prometheus	intends	Stealing_fire_plan
Stealing_fire_plan	achieves	stolen_fire (dp: goal achievement: T)
Stealing_fire_plan	developes_into_process	Prometheus_being_punished
Prometheus	takes_part_in	Prometheus_being_punished
Stealing_fire_plan	in conflict with	men_without_fire
Zeus	intends	men_without fire
Zeus	intends	Punishment_of_Prometheus_plan
Punishment_of_Prometheus_plan	achieves	Punishment_of_Prometheus_goal (dp: goal achievement: T)
Punishment_of_Prometheus_goal	developes_into process	Punishment_of_Prometheus

Zeus	takes part in	Punishment_of_Prometheus
Prometheus	intends	Invocation_plan
Invocation_plan	achieves	freeing_of_Prometheus_goal (dp: goal achievement: F)
Inovocation_plan	develops_into_process	Prometheus_Invocation

3- Medea

Required background knowledge: Because Jason decided to marry another woman, Medea, for revenge, kills their children, despite Jason's attempt to save them.

Named individual	Object property	Named individual
Medea	Intends	killling_children_plan
killling_children_plan	achieves	killling_children_goal (dp: goal achievement:T)
Medea	takes part in	killling_children
Jason	intends	saving children plan
saving children plan	achieves	saving children goal (dp: goal achievement F)
Killing_children_plan	in conflict with	saving children plan

Medea then leaves on the chariot of the Sun, with the dramatic mechanism of deus ex machina. This is a prerogative of a divine entity, not a human one.

Named individual	Object property	Named individual
Medea	takes_part_in	Generic action
Generic action	is represented by	deus ex machina Medea
deus ex machina Medea	appears in the skenè as	divine entity

4- Cassandra

Required background knowledge: Apollo gives Cassandra the gift of prophecy in exchange of her love towards him, but she denied after having received it. Apollo then spits on her lips and condemns her to stay unheard forever.

Named individual	Object property	Named individual
Apollo	intends	Punishment of Cassandra plan
Punishment of Cassandra plan	achieves	Punishment of Cassandra goal (dp: goal achievement: T)
Punishment of Cassandra plan	develops_into_process	Cassandra_must_be_unheard
Cassandra	takes part in	Cassandra_unheard (isIntentional_ F)

5- Formal features

Required background knowledge: The iambic pentameter is the metrical verse typical of deus ex machina.

Named individual	Object property	Named individual	Data property
Deus ex machina	has textual concretization	pentameter (metrical verses)	
Zeus	has epithet action	Xenios	means “protector of foreign people”.

Knowledge extraction

We chose to represent the knowledge extraction by reporting **some representative verses** of the abovementioned tragedies. In addition, we decided to include a verse from the Bible in order to show how the categories we outlined can be used also for texts other than the tragic ones. Users can explore **key concepts** and **topos** of this knowledge domain **through highlighted words** that will appear simply **hovering on the text**.

Class: Deus_ex_machina

*"Medea **appears aloft in a winged chariot upon the mechane**, which rises from behind the skene."*

*"Whistles and shrills with rapid beat of wings./ There cometh nought but to my spirit brings/ Horror and fear./ **The DAUGHTERS OF OCEANUS draw near in mid-air in their winged chariot.**"*

Class: Mental_UnintentionalProcess

*"Clitaemnestra: Do not imagine that I am Agamemnon's spouse. A phantom resembling that corpse's wife, **the ancient bitter evil spirit of Atreus**, that grim banqueter, **has offered him in payment**, sacrificing a full-grown victim in vengeance for those slain babes."*

*"Chorus:Frenzied in soul you are, **by some god possessed** "*

*"But when he **had donned the yoke of Necessity**, with veering of mind, impious, unholy, unsanctified, **from that moment he changed his intention** and began to conceive that deed of uttermost audacity. For wretched delusion, counsellor of ill, primal source of woe, makes mortals bold. So then he hardened his heart to sacrifice his daughter"*

*"Così arrivarono **al luogo che Dio gli aveva indicato**; qui Abramo costruì l'altare, collocò la legna, legò suo figlio Isacco e lo depose sull'altare, sopra la legna. 10Poi **Abramo stese la mano e prese il coltello per immolare suo figlio.**"*

Class:INT_Motif

*"Ah me! Ah me! what wafture nigh at hand,/ **As of great birds of prey**, is this I hear?/ The bright air fanned/ Whistles and shrills **with rapid beat of wings.**"*

Class:INT7_Interpretament

La differenza tra l'eroe tragico (Agamennone che sacrifica la figlia Ifigenia) e

Abramo balza agli occhi facilmente. L'eroe tragico rimane tutto dentro la sfera etica... Diversa la situazione di Abramo Egli ha cancellato con la sua azione tutta l'etica ottenendo il suo telos superiore fuori di essa, rispetto al quale ha sospeso l'etica. (...)"

Class: Punishment

"Io: *Tell me **who has bound you fast in this ravine.** /Prometheus:
Zeus by his will."*

Class: Revenge

"For, in her pity, holy **Artemis is angry at the winged hounds of her father**, for they sacrifice a wretched timorous thing, together with her young, before she has brought them forth. An abomination to her is the eagles' feast."

Sparql queries

In order to understand the validity of our ontology, we also decided to perform some queries that could answer our competency questions through Apache Jena Fuseki.

1

- ***What kinds of divine interventions is it possible to classify?***

PREFIX TheOn: <http://www.TheOn.org>

PREFIX drammar: <http://www.purl.org/drammar#>

PREFIX http: <http://www.w3.org/2011/http#>

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX owl: <http://www.w3.org/2002/07/owl#>

SELECT ?agent ?process ?class ?divineintervention

WHERE{

 ?agent <http://www.TheOn.org#takes_part_in> ?process.

 ?agent a <http://www.TheOn.org#Human_Entity>.

 ?process a ?divineintervention

}

LIMIT 25

	agent	process	divineintervention
1	TheOn:#Medea	TheOn:#Killing_children	owl:NamedIndividual
2	TheOn:#Medea	TheOn:#Killing_children	TheOn:#Revenge
3	TheOn:#Agamemnon	TheOn:#Agamemnon_sacrifices_Iphigenia	TheOn:#Mental_UnintentionalProcess
4	TheOn:#Agamemnon	TheOn:#Agamemnon_sacrifices_Iphigenia	owl:NamedIndividual
5	TheOn:#Clitemnestra	TheOn:#Killing_of_Agamemnon	TheOn:#Mental_UnintentionalProcess
6	TheOn:#Clitemnestra	TheOn:#Killing_of_Agamemnon	owl:NamedIndividual

The property “takes part in” connects an Agent to a process, however our named individuals that have this property are for the most part human entities. Why do some of them take part in unintentional processes? This leads to the next query, which examines the actions in our tragedies that do have a plan with a goal. Agamemnon’s action is therefore the result of an action performed by Artemis as punishment.

```
SELECT  ?agent ?plan ?goal  ?trueorfalse ?process ?divineinterventions
```

```
WHERE {
```

```
?agent <http://www.purl.org/drammar#intends> ?plan.
```

```
?plan <http://www.purl.org/drammar#achieves> ?goal.
```

```
?goal <http://www.TheOn.org#goal_achievement> ?trueorfalse.
```

```
?plan <http://www.TheOn.org#develops_into_process> ?process.
```

```
?process rdf:type ?divineinterventions.
```

```
}
```

```
LIMIT 25
```

	agent	plan	goal	trueorfalse	process	divineinterventions
1	TheOn:#Artemis	TheOn:#Punishment_of_Agamemnon_plan	TheOn:#Punishment_of_Agamemnon_goal	""True""	TheOn:#Agamemnon_must_sacrifice_Iphigenia	TheOn:#Punishment
2	TheOn:#Artemis	TheOn:#Punishment_of_Agamemnon_plan	TheOn:#Punishment_of_Agamemnon_goal	""True""	TheOn:#Agamemnon_must_sacrifice_Iphigenia	owl:NamedIndividual
3	TheOn:#Apollo	TheOn:#Punishment_of_Cassandra_plan	TheOn:#Punishment_of_Cassandra_goal	""True""	TheOn:#Cassandra_must_be_unheard	TheOn:#Punishment
4	TheOn:#Apollo	TheOn:#Punishment_of_Cassandra_plan	TheOn:#Punishment_of_Cassandra_goal	""True""	TheOn:#Cassandra_must_be_unheard	owl:NamedIndividual
5	TheOn:#Prometheus	TheOn:#Invocation_plan	TheOn:#Freeing_of_Prometheus_goal	""False""	TheOn:#Prometheus_invocation	owl:NamedIndividual
6	TheOn:#Prometheus	TheOn:#Invocation_plan	TheOn:#Freeing_of_Prometheus_goal	""False""	TheOn:#Prometheus_invocation	TheOn:#Invocation

Thus, looking at the result of this query, it is possible to classify some of the divine interventions codified in our ontology, seeing whether their goals succeeded or not. Why are the goals of Prometheus not achieved? Because, according to our thesis, Prometheus is chosen to be portrayed as a human entity, despite being allegedly a divine entity.

2

- ***Is man impotent (i.e can a human being achieve his goals?) when he has to face divine entities?***

Analysing the different classes agents belongs to, it will be possible to assess that in the tragedies we examined, agents who achieve their goals in spite of another agent that is a human entity tend to be divine entities. Prometheus represents an exception and this could arise some doubts regarding his status of god.

```
SELECT ?agent ?plan ?goal ?trueorfalse
```

```
WHERE {
```

```
?agent <http://www.purl.org/drammar#intends> ?plan.
```

```
?plan <http://www.purl.org/drammar#achieves> ?goal.
```

```
?goal <http://www.TheOn.org#goal_achievement> ?trueorfalse.
```

```
}
```

```
LIMIT 25
```

	agent	plan	goal	trueorfalse
1	TheOn:#Agamemnon	TheOn:#Agamemnon_goes_to_Troy_plan	TheOn:#Agamemnon_goes_to_Troy_goal	""False""
2	TheOn:#Arthemis	TheOn:#Punishment_of_Agamemnon_plan	TheOn:#Punishment_of_Agamemnon_goal	""True""
3	TheOn:#Zeus	TheOn:#Punishment_of_Prometheus_plan	TheOn:#Punishment_of_Prometheus_goal	""True""
4	TheOn:#Medea	TheOn:#Killing_children_plan	TheOn:#Killing_children_goal	""True""
5	TheOn:#Apollo	TheOn:#Punishment_of_Cassandra_plan	TheOn:#Punishment_of_Cassandra_goal	""True""
6	TheOn:#Prometheus	TheOn:#Invocation_plan	TheOn:#Freeing_of_Prometheus_goal	""False""

3

- ***In which ways men turn to divine entities in Greek tragedies?***

According to our ontology, each action starts as a plan. In this case, Prometheus has human characteristics for the most part and his plan allows us to underline one of the feature that he shares with humans, since generic actions like Invocation, under the class of ritual actions, are prerogative of human entity. Therefore we can also answer to “***Which feature allows us to consider a divine entity similar to a human?***”.

```
PREFIX TheOn: <http://www.TheOn.org>
PREFIX drammar: <http://www.purl.org/drammar#>
PREFIX http: <http://www.w3.org/2011/http#>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>
```

```
SELECT ?plan ?goal ?trueorfalse
WHERE{
  <http://www.TheOn.org#Prometheus> <http://www.purl.org/drammar#intends> ?plan.
  ?plan <http://www.purl.org/drammar#achieves> ?goal.
  ?goal <http://www.TheOn.org#goal_achievement> ?trueorfalse.
}
LIMIT 25
```

plan	goal	trueorfalse
1 TheOn:#Invocation_plan	TheOn:#Freeing_of_Prometheus_goal	""False""

Showing 1 to 1 of 1 entries

4

- ***In which cases human will and subsequent actions conflict with those of divine entities?***

The result of this query allows us to understand how Medea represents an anomalous case in Greek tragedy. In fact, in this case, it is Jason's plan to be in conflict with that of Medea, who can therefore be considered a divine entity thanks to this and other characteristics that emerge from the subsequent queries.

PREFIX TheOn: <http://www.TheOn.org>

PREFIX drammar: <http://www.purl.org/drammar#>

PREFIX http: <http://www.w3.org/2011/http#>

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX owl: <http://www.w3.org/2002/07/owl#>

SELECT ?agent ?process ?anotherprocess ?god

WHERE {

?agent <http://www.purl.org/drammar#intends> ?process.

?process <http://www.purl.org/drammar#inConflictWith> ?anotherprocess.

?anotherprocess <http://www.purl.org/drammar#isIntendedBy> ?god

}

LIMIT 25

	agent	process	anotherprocess	god
1	TheOn:#Agamemnon	TheOn:#Agamemnon_goes_to_Troy_plan	TheOn:#Punishment_of_Agamemnon_plan	TheOn:#Artemis
2	TheOn:#Prometheus	TheOn:#Stealing_fire_plan	TheOn:#men_without_fire	TheOn:#Zeus
3	TheOn:#Medea	TheOn:#Killing_children_plan	TheOn:#Saving_children_plan	TheOn:#Jason

The result of this following query allows us to highlight the difference between the figure of Medea and that of Agamemnon as conceived by, respectively, Euripides and Aeschylus. Agamemnon cannot achieve his goal because it is in conflict with another plan intended by Artemis. On the other hand, Medea intends a plan and achieves her goal and this is a characteristic that she shares with gods.

PREFIX TheOn: <http://www.TheOn.org>

PREFIX drammar: <http://www.purl.org/drammar#>

PREFIX : <undefined>

PREFIX http: <http://www.w3.org/2011/http#>

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX owl: <http://www.w3.org/2002/07/owl#>

```

SELECT  ?agent ?plan ?goal ?trueorfalse ?anotherplan

WHERE {
  ?agent <http://www.purl.org/drammar#intends> ?plan.
  ?plan <http://www.purl.org/drammar#achieves> ?goal.
  ?goal <http://www.TheOn.org#goal_achievement> ?trueorfalse.
  ?plan <http://www.purl.org/drammar#inConflictWith> ?anotherplan.

}

LIMIT 25

```

	agent	plan	goal	trueorfalse	anotherplan
1	TheOn:#Agamemnon	TheOn:#Agamemnon_goes_to_Troy_plan	TheOn:#Agamemnon_goes_to_Troy_goal	""False""	TheOn:#Punishment_of_Agamemnon_plan
2	TheOn:#Medea	TheOn:#Killing_children_plan	TheOn:#killing_children_goal	""True""	TheOn:#Saving_children_plan

5

- ***Which features allow us to consider a human entity similar to a god?***

Another feature that allows us to consider a human entity similar to a god is certainly how they are formally represented through dramatic mechanisms typical of that period. In this case, we noticed Medea was actively involved in the Deus ex machina, which appears in the tragedy of Prometheus too. Only divine entities can have this formal feature.

```

PREFIX TheOn: <http://www.TheOn.org>
PREFIX drammar: <http://www.purl.org/drammar#>
PREFIX : <undefined>
PREFIX http: <http://www.w3.org/2011/http#>
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX owl: <http://www.w3.org/2002/07/owl#>

```

```

SELECT ?agent ?mechanism ?class
WHERE{

```

```

?agent <http://www.TheOn.org#appears_on_the_skenè_as> ?mechanism.
?agent a ?class.
}
LIMIT 25

```

	agent	mechanism	class
1	TheOn:#Medea	TheOn:#Deus_ex_machina_Medea	owl:NamedIndividual
2	TheOn:#Medea	TheOn:#Deus_ex_machina_Medea	TheOn:#Human_Entity
3	TheOn:#Ocean	TheOn:#Deus_ex_machina_Prometheus_Bound	owl:NamedIndividual
4	TheOn:#Ocean	TheOn:#Deus_ex_machina_Prometheus_Bound	TheOn:#Divine_Entity

Further development

Starting from the richness of possible interpretations that Greek tragedies still offer us today, the purpose of this ontology is to create a model applicable to any kind of literary text involving some kind of divine and human entities. Our main aim is to provide an innovative tool that serves as a starting point for new critical interpretations of literary texts. Indeed, a formal model allows a scientific approach to the study of the text to be adopted, providing greater objectivity to an interpretative theory.

Our ontology also wants to work alongside other works that aim to provide an even deeper understanding of Greek literature and culture, such as the ontology for the study of the ritual in ancient Greek tragedy developed for the project *Euporia, Rituals in ancient Greek tragedy*, carried on by the Laboratorio di Antropologia del Mondo Antico (University of Pisa) and the CoPhiLab of the Institute of Computational Linguistics at the CNR in Pisa, and the ontology for the heroes of the ancient Greek mythology and religion.

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