Word Order Change and Stability in Ancient Greek

Dag Haug

University of Oslo

August, 10 2009
We all know that word order can change in language evolution.
We all know that word order can change in language evolution.

But what exactly is it that changes?
We all know that word order can change in language evolution.

But what exactly is it that changes?

On any theory there should be at least a correlation between ‘surface word order’ and the postulated ‘word order system’ in a language.
We all know that word order can change in language evolution.

But what exactly is it that changes?

On any theory there should be at least a correlation between ‘surface word order’ and the postulated ‘word order system’ in a language.

The correlation will be direct in usage-based theories and less direct, but still present, in other theories.
We all know that word order can change in language evolution. But what exactly is it that changes? On any theory there should be at least a correlation between ‘surface word order’ and the postulated ‘word order system’ in a language. The correlation will be direct in usage-based theories and less direct, but still present, in other theories. But what exactly is surface word order?
Surface word order

- Normally described in terms of grammatical relations
Surface word order

- Normally described in terms of grammatical relations
- Order of head and modifier on the phrasal level
Surface word order

- Normally described in terms of grammatical relations
- order of head and modifier on the phrasal level
- order of major constituents on the sentence level
  - SVO
  - SOV
  - ...
Surface word order

- Normally described in terms of grammatical relations
- order of head and modifier on the phrasal level
- order of major constituents on the sentence level
  - SVO
  - SOV
  - ...

- But if the surface word order is described in terms of grammatical relations, but the word order system works on another basis, the correlation between the two will be less direct.
Ancient Greek word order

- Classical Greek (CG) has most characteristics of ‘non-configurational’ languages
Ancient Greek word order

- Classical Greek (CG) has most characteristics of ‘non-configurational’ languages
  - The order of major constituents varies wildly, but most authors have a slight preference for SOV
Ancient Greek word order

- Classical Greek (CG) has most characteristics of ‘non-configurational’ languages
  - The order of major constituents varies wildly, but most authors have a slight preference for SOV
  - Head-modifier order also varies, and modifiers can be split off from their heads

---

Dag Haug (UiO)

Word Order Change and Stability

August, 10 2009
Ancient Greek word order

- Classical Greek (CG) has most characteristics of ‘non-configurational’ languages
  - The order of major constituents varies wildly, but most authors have a slight preference for SOV
  - Head-modifier order also varies, and modifiers can be split off from their heads
  - There is rampant prodrop

NT Greek is still quite free
- All orders of major constituents allowed, but preference towards SVO
- Nominal modifiers follow their heads about 75% of the time
- Only subjects are pro-dropped (almost)

How can we ‘capture’ this change, and in particular the change in VO/OV-preference
Ancient Greek word order

Classical Greek (CG) has most characteristics of ‘non-configurational’ languages
- The order of major constituents varies wildly, but most authors have a slight preference for SOV
- Head-modifier order also varies, and modifiers can be split off from their heads
- There is rampant prodrop

NT Greek is still quite free
- All orders of major constituents allowed, but preference towards SVO
- Nominal modifiers follow their heads about 75% of the time
- Only subjects are pro-dropped (almost)
Ancient Greek word order

- Classical Greek (CG) has most characteristics of ‘non-configurational’ languages
  - The order of major constituents varies wildly, but most authors have a slight preference for SOV
  - Head-modifier order also varies, and modifiers can be split off from their heads
  - There is rampant prodrop
- NT Greek is still quite free
  - All orders of major constituents allowed, but preference towards SVO
  - Nominal modifiers follow their heads about 75% of the time
  - Only subjects are pro-dropped (almost)
- How can we ‘capture’ this change, and in particular the change in VO/OV-preference
The most influential account of the CG word order (Dik, Matić) claims that it is essentially driven by pragmatic factors.
The most influential account of the CG word order (Dik, Matić) claims that it is essentially driven by pragmatic factors.
The most influential account of the CG word order (Dik, Matić) claims that it is essentially driven by pragmatic factors.

**CG word order**

- TOPIC — FOCUS — VERB — BACKGROUND

There are obvious correlations with surface word order in terms of grammatical relations, though:
The most influential account of the CG word order (Dik, Matić) claims that it is essentially driven by pragmatic factors.

There are obvious correlations with surface word order in terms of grammatical relations, though:

- subjects tend to be topics and vice versa.
The most influential account of the CG word order (Dik, Matić) claims that it is essentially driven by pragmatic factors.

There are obvious correlations with surface word order in terms of grammatical relations, though:

- subjects tend to be topics and vice versa
- CG tends to leave out complements that are retrievable from the context (‘prodrop’), so the ones that actually do occur are less likely to be background material
Pragmatic word order

The most influential account of the CG word order (Dik, Matić) claims that it is essentially driven by pragmatic factors.

**CG word order**

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>FOCUS</th>
<th>VERB</th>
<th>BACKGROUND</th>
</tr>
</thead>
</table>

There are obvious correlations with surface word order in terms of grammatical relations, though:

- subjects tend to be topics and vice versa
- CG tends to leave out complements that are retrievable from the context (‘prodrop’), so the ones that actually do occur are less likely to be background material
- all in all this favours SOV word order
Surface word order in CG

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>44.5%</td>
</tr>
<tr>
<td>SVO</td>
<td>20.8%</td>
</tr>
<tr>
<td>OSV</td>
<td>15.0%</td>
</tr>
<tr>
<td>VOS</td>
<td>7.1%</td>
</tr>
<tr>
<td>VSO</td>
<td>6.7%</td>
</tr>
<tr>
<td>OVS</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Table: Word orders in classical Attic according to Ebeling, FS Gildersleeve
Surface word order in CG

SOV is the most frequent word order, as we would expect.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>44.5%</td>
</tr>
<tr>
<td>SVO</td>
<td>20.8%</td>
</tr>
<tr>
<td>OSV</td>
<td>15.0%</td>
</tr>
<tr>
<td>VOS</td>
<td>7.1%</td>
</tr>
<tr>
<td>VSO</td>
<td>6.7%</td>
</tr>
<tr>
<td>OVS</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Table: Word orders in classical Attic according to Ebeling, FS Gildersleeve
Surface word order in CG

- SOV is the most frequent word order, as we would expect.
- V1-sentences are problematic for this theory, as they are clearly not ‘all background’ sentences.

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>44.5%</td>
</tr>
<tr>
<td>SVO</td>
<td>20.8%</td>
</tr>
<tr>
<td>OSV</td>
<td>15.0%</td>
</tr>
<tr>
<td>VOS</td>
<td>7.1%</td>
</tr>
<tr>
<td>VSO</td>
<td>6.7%</td>
</tr>
<tr>
<td>OVS</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

**Table:** *Word orders in classical Attic according to Ebeling, FS Gildersleeve*
Table: Word orders in classical Attic according to Ebeling, FS Gildersleeve

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>44.5%</td>
</tr>
<tr>
<td>SVO</td>
<td>20.8%</td>
</tr>
<tr>
<td>OSV</td>
<td>15.0%</td>
</tr>
<tr>
<td>VOS</td>
<td>7.1%</td>
</tr>
<tr>
<td>VSO</td>
<td>6.7%</td>
</tr>
<tr>
<td>OVS</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

- SOV is the most frequent word order, as we would expect.
- V1-sentences are problematic for this theory, as they are clearly not ‘all background’ sentences.
- I will not discuss the application attempt to justify the pragmatic approach to CG word order here.
Surface word order in CG

SOV 44.5%
SVO 20.8%
OSV 15.0%
VOS  7.1%
VSO  6.7%
OVS  5.8%

Table: Word orders in classical Attic according to Ebeling, FS Gildersleeve

- SOV is the most frequent word order, as we would expect
- V1-sentences are problematic for this theory, as they are clearly not ‘all background’ sentences
- I will not discuss the application attempt to justify the pragmatic approach to CG word order here
- rather we will see whether a pragmatic approach can also apply to NT Greek and what the differences are
Combining pragmatics and syntax

Some constraints in a generally free system

The focus domain sometimes continue after the verb, but narrow foci precede CP-adjunction as well?
Combining pragmatics and syntax

Some constraints in a generally free system
Some constraints in a generally free system

The focus domain sometimes continue after the verb, but narrow foci precede
Combining pragmatics and syntax

Some constraints in a generally free system

The focus domain sometimes continue after the verb, but narrow foci precede

CP-adjunction as well?
What’s going on in the ‘background field’?

<table>
<thead>
<tr>
<th></th>
<th>Shortest</th>
<th>Longest</th>
<th>Equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>19</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Object</td>
<td>51</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Table: Gospels

<table>
<thead>
<tr>
<th></th>
<th>Shortest</th>
<th>Longest</th>
<th>Equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Object</td>
<td>13</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Table: Paul
Background field and preverbal field compared

<table>
<thead>
<tr>
<th></th>
<th>Shortest</th>
<th>Longest</th>
<th>Equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>194</td>
<td>41</td>
<td>39</td>
</tr>
<tr>
<td>Oblique</td>
<td>132</td>
<td>26</td>
<td>39</td>
</tr>
</tbody>
</table>

Table: Objects and obliques in the background

<table>
<thead>
<tr>
<th></th>
<th>Shortest</th>
<th>Longest</th>
<th>Equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>4</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Oblique</td>
<td>3</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

Table: Objects and obliques in the preverbal field
**Surface word order in diachrony**

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Classical Attic</th>
<th>NT Main Clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>44.5%</td>
<td>SVO</td>
</tr>
<tr>
<td>SVO</td>
<td>20.8%</td>
<td>SOV</td>
</tr>
<tr>
<td>OSV</td>
<td>15.0%</td>
<td>VOS</td>
</tr>
<tr>
<td>VOS</td>
<td>7.1%</td>
<td>VSO</td>
</tr>
<tr>
<td>VSO</td>
<td>6.7%</td>
<td>OVS</td>
</tr>
<tr>
<td>OVS</td>
<td>5.8%</td>
<td>OSV</td>
</tr>
</tbody>
</table>

Table: *Word orders in classical Attic*  
Table: *Word orders in NT main clauses*
Possible interpretations

- On one interpretation, this is a change in headedness from an OV to a VO language.
Possible interpretations

- On one interpretation, this is a change in headedness from an OV to a VO language.
- It should be noted, though, that the same kind of variation is also found among classical authors (Dover).

Table: OV:VO ratio in classical authors according to Dover.

<table>
<thead>
<tr>
<th>Author</th>
<th>OV:VO Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herodotus</td>
<td>0.59</td>
</tr>
<tr>
<td>Lysias</td>
<td>4</td>
</tr>
<tr>
<td>Plato</td>
<td>1.07</td>
</tr>
</tbody>
</table>

If the underlying word order system is not (completely) describeable in terms of grammatical relations at all, it is possible that the system is the same and the variation in the order of grammatical relations is due to other changing parts of the system.
Possible interpretations

- On one interpretation, this is a change in headedness from an OV to a VO language.

- It should be noted, though, that the same kind of variation is also found among classical authors (Dover).

\[
\begin{array}{|l|c|}
\hline
\text{author} & \text{OV:VO} \\
\hline
\text{Herodotus} & .59 \\
\text{Lysias} & 4 \\
\text{Plato} & 1.07 \\
\hline
\end{array}
\]

**Table:** OV:VO ratio in classical authors according to Dover
Possible interpretations

- On one interpretation, this is a change in headedness from an OV to a VO language.
- It should be noted, though, that the same kind of variation is also found among classical authors (Dover).

<table>
<thead>
<tr>
<th>author</th>
<th>OV:VO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herodotus</td>
<td>0.59</td>
</tr>
<tr>
<td>Lysias</td>
<td>4</td>
</tr>
<tr>
<td>Plato</td>
<td>1.07</td>
</tr>
</tbody>
</table>

Table: OV:VO ratio in classical authors according to Dover

- If the underlying word order system is not (completely) describeable in terms of grammatical relations at all, it is possible that the system is the same and the variation in the order of grammatical relations is due to other changing parts of the system.
## Comparing the authors

<table>
<thead>
<tr>
<th>order</th>
<th>all</th>
<th>Matt</th>
<th>Mark</th>
<th>Luke</th>
<th>John</th>
<th>John2</th>
<th>Paul</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVO</td>
<td>52.9%</td>
<td>72.3%</td>
<td>61.9%</td>
<td>58.6%</td>
<td>46.9%</td>
<td>30.6%</td>
<td>33.2%</td>
</tr>
<tr>
<td>SOV</td>
<td>20.2%</td>
<td>12.9%</td>
<td>16.5%</td>
<td>14.2%</td>
<td>25.4%</td>
<td>5.6%</td>
<td>34.1%</td>
</tr>
<tr>
<td>VOS</td>
<td>9.3%</td>
<td>5.5%</td>
<td>8.3%</td>
<td>8.8%</td>
<td>10.9%</td>
<td>11.1%</td>
<td>11.8%</td>
</tr>
<tr>
<td>VSO</td>
<td>8.5%</td>
<td>5.0%</td>
<td>10.3%</td>
<td>9.7%</td>
<td>7.5%</td>
<td>33.3%</td>
<td>6.1%</td>
</tr>
<tr>
<td>OVS</td>
<td>4.6%</td>
<td>2.5%</td>
<td>1.0%</td>
<td>3.6%</td>
<td>3.5%</td>
<td>19.4%</td>
<td>8.3%</td>
</tr>
<tr>
<td>OSV</td>
<td>4.5%</td>
<td>2.0%</td>
<td>2.1%</td>
<td>5.1%</td>
<td>5.7%</td>
<td>0.0%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

| n     | 1123  | 202  | 97   | 331  | 228  | 36    | 229  |

| clauses | 11404 | 2160 | 1385 | 3671 | 2000 | 396   | 1792 |
| %       | 9.8%  | 9.4% | 7.0% | 9.0% | 11.4%| 9.1%  | 12.8%|
The authors compared

- Paul, and to some extent John, patterns closely with CG
The authors compared

- Paul, and to some extent John, patterns closely with CG
- As we will see, Paul patterns with CG in other respects too
The authors compared

- Paul, and to some extent John, patterns closely with CG
- As we will see, Paul patterns with CG in other respects too
- The other evangelists clearly put the object after the verb much more often, and are also different from CG in other respects
The authors compared

- Paul, and to some extent John, patterns closely with CG
- As we will see, Paul patterns with CG in other respects too
- The other evangelists clearly put the object after the verb much more often, and are also different from CG in other respects
- So I will use Paul and the Gospels as representatives of the old and the new system respectively
The freedom of AG word order is a challenge to all theories.
Explaining word order

- The freedom of AG word order is a challenge to all theories
- So is the extreme variation between contemporary authors and even between works of the same author
The freedom of AG word order is a challenge to all theories.

So is the extreme variation between contemporary authors and even between works of the same author.

If we believe that word order patterns have meanings, at least we would predict that different genres and texts use the word order patterns differently.

Still, much will remain unclear until we have better research tools (i.e., bigger, parsed corpora).

In the following I focus first on the (relatively concrete) notion of contrast, how this influences the position of the direct object. Then we will look at where weak, backgrounded objects (3rd personal pronoun) appear, and how this influences the position of the direct object.
Explaining word order

- The freedom of AG word order is a challenge to all theories.
- So is the extreme variation between contemporary authors and even between works of the same author.
- If we believe that word order patterns have meanings, at least we would predict that different genres and texts use the word order patterns differently.
- Still, much will remain unclear until we have better research tools (i.e., bigger, parsed corpora.)
Explaining word order

- The freedom of AG word order is a challenge to all theories
- So is the extreme variation between contemporary authors and even between works of the same author
- If we believe that word order patterns have meanings, at least we would predict that different genres and texts use the word order patterns differently
- Still, much will remain unclear until we have better research tools (i.e., bigger, parsed corpora)
- In the following I focus first on the (relatively concrete) notion of contrast, how this influences the position of the direct object
Explaining word order

- The freedom of AG word order is a challenge to all theories
- So is the extreme variation between contemporary authors and even between works of the same author
- If we believe that word order patterns have meanings, at least we would predict that different genres and texts use the word order patterns differently
- Still, much will remain unclear until we have better research tools (i.e., bigger, parsed corpora)
- In the following I focus first on the (relatively concrete) notion of contrast, how this influences the position of the direct object
- Then we will look at where weak, backgrounded objects (3. personal pronoun) appear, and how this influences the position of the direct object
In the absence of contrast annotation we can approximate this using the syntactic annotation.
In the absence of contrast annotation we can approximate this using the syntactic annotation.

We look at the clustering of NPs that contain an intensifying *kai* 'even, too' or constituent negation.
In the absence of contrast annotation we can approximate this using the syntactic annotation.

We look at the clustering of NPs that:
- contain an intensifying *kai* ‘even, too’ or constituent negation
- contain a demonstrative pronoun
In the absence of contrast annotation we can approximate this using the syntactic annotation.

We look at the clustering of NPs that:

- contain an intensifying *kai* ’even, too’ or constituent negation
- contain a demonstrative pronoun
- are headed by a demonstrative pronoun
In the absence of contrast annotation we can approximate this using the syntactic annotation.

We look at the clustering of NPs that:
- contain an intensifying *kai* 'even, too' or constituent negation
- contain a demonstrative pronoun
- are headed by a demonstrative pronoun

For simplicity, I will refer to these here as ‘contrastive NPs’
The data

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Paul</th>
<th>Gospels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subject</td>
<td>Object</td>
</tr>
<tr>
<td>OSV</td>
<td>17.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>OV</td>
<td>16.5%</td>
<td></td>
</tr>
<tr>
<td>OVS</td>
<td>15.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>SOV</td>
<td>2.8%</td>
<td>5.6%</td>
</tr>
<tr>
<td>SVO</td>
<td>13.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>VO</td>
<td></td>
<td>7.2%</td>
</tr>
<tr>
<td>VOS</td>
<td>0.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>all</td>
<td>7.8%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

**Table:** Distribution of ‘contrastive’ NPs
The data

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Paul</th>
<th>Gospels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subject</td>
<td>Object</td>
</tr>
<tr>
<td>OSV</td>
<td>17.6%</td>
<td>5.9%</td>
</tr>
<tr>
<td>OV</td>
<td></td>
<td>16.5%</td>
</tr>
<tr>
<td>OVS</td>
<td>15.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>SOV</td>
<td>2.8%</td>
<td>5.6%</td>
</tr>
<tr>
<td>SVO</td>
<td>13.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>VO</td>
<td></td>
<td>7.2%</td>
</tr>
<tr>
<td>VOS</td>
<td>0.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>all</td>
<td>7.8%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

Table: Distribution of ‘contrastive’ NPs

- Essentially, ‘contrastive’ NPs cluster in preverbal position in Paul;
### The data

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Subject</th>
<th>Object</th>
<th>Subject</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSV</td>
<td>17.6%</td>
<td>5.9%</td>
<td>2.6%</td>
<td>28.9%</td>
</tr>
<tr>
<td>OV</td>
<td>16.5%</td>
<td></td>
<td></td>
<td>14.1%</td>
</tr>
<tr>
<td>OVS</td>
<td>15.0%</td>
<td>10.0%</td>
<td>5.9%</td>
<td>32.4%</td>
</tr>
<tr>
<td>SOV</td>
<td>2.8%</td>
<td>5.6%</td>
<td>10.3%</td>
<td>6.5%</td>
</tr>
<tr>
<td>SVO</td>
<td>13.1%</td>
<td>3.0%</td>
<td>5.6%</td>
<td>2.8%</td>
</tr>
<tr>
<td>VO</td>
<td>7.2%</td>
<td></td>
<td></td>
<td>14.1%</td>
</tr>
<tr>
<td>VOS</td>
<td>0.0%</td>
<td>3.5%</td>
<td>2.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>all</td>
<td>7.8%</td>
<td>9.1%</td>
<td>5.8%</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

**Table:** Distribution of ‘contrastive’ NPs

- Essentially, ‘contrastive’ NPs cluster in preverbal position in Paul;
- and in the initial position in the Gospels
Visualizing the distribution of ‘contrastive’ NPs

Paul

Gospels

Position relative to sentence

Position relative to sentence

Position relative to verb

Position relative to verb

Dag Haug (UiO)

Word Order Change and Stability

August, 10 2009
Focus on the subject in the gospels

(1) kai  ὁσὶν ἀμαρτῶλοι τοὺς ἀγαπῶντας αὐτοὺς ἀγαπῆσιν
and for the sinners the loving them love
Even the sinners love the ones who love them
Focus on the subject in the gospels

(3) \textit{kai gar hoi amart\text滔i tous agap\text滔tas autous agap\text滔sin}
and for the sinners the loving them love
Even the sinners love the ones who love them

In Paulus the contrast, if any, is on the object

(4) \textit{ho de theos kai ton kurion \textgeiren}
the \texttt{PTCP} god even the lord wake up
God even woke up the lord
'Contrastive NPs' are overrepresented as subjects in Paul

(5) kai ekeinos arnêsetai êmas
   even he will deny us
   Even he will deny us
These are the most interesting for us, since the clustering of contrastive NPs is clearly different.
These are the most interesting for us, since the clustering of contrastive NPs is clearly different.

In Paul, the subject tends to be contrastive, and in the Gospels the object tends to be contrastive in these constellations.
Subject focus in Paul

(6) *to de auto kai umeis khairete kai sunkhairete moi*  
the ptcp same too you rejoice and rejoice with me  
You too should rejoice and rejoice with me over this
Subject focus in Paul

(8) *to de auto kai umeis khairete kai sunkhairete moi*
the ptcp same too you rejoice and rejoice with me
You too should rejoice and rejoice with me over this

Object focus in the Gospels

(9) *touton ho theos arkhēgon kai sôtēra upsôsei*
this one God leader and saviour made
God made this one the leader and saviour
(10) *tauta panta elalēsan ho lêsous en parabolais tois okhlois, kai*
this all said Jesus in parables to the crowds, and
*khôris parabolêsouden elalei autois*
without parables he said nothing to them

Jesus told all this in parables, and without parables he said nothing
The Spec, CP position is no longer just for operators, but also for (narrow) foci
The Spec, CP position is no longer just for operators, but also for (narrow) foci

The preverbal position no longer expresses narrow focus
Changes in the pronominal system

- We will now look at changes in the pronominal system
Changes in the pronominal system

- We will now look at changes in the pronominal system
- Prodropping of arguments become much less common

<table>
<thead>
<tr>
<th>Text(date)</th>
<th>Atts./Words</th>
<th>Freq. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herodotus(5 BC)</td>
<td>631/189489</td>
<td>3.33</td>
</tr>
<tr>
<td>Xenophon(5-4 BC)</td>
<td>733/321305</td>
<td>2.28</td>
</tr>
<tr>
<td>New Testament(1 AD)</td>
<td>867/107232</td>
<td>8.09</td>
</tr>
</tbody>
</table>
The rise of *autos* and the post-verbal object

![Graph showing the correlation between % postverbal objects and % autos as object for various books in the New Testament.](image-url)
So there is a correlation between the loss of prodrop/use of *autos* and the rise of the post-verbal position of objects in general.
More on *autos*

- So there is a correlation between the loss of prodrop/use of *autos* and the rise of the post-verbal position of objects in general.
- It could be the case that normal objects analogically follow the pattern *autos*.
More on *autos*

- So there is a correlation between the loss of prodrop/use of *autos* and the rise of the post-verbal position of objects in general.
- It could be the case that normal objects analogically follow the pattern *autos*.
- But where does *autos* occur?
The position of *autos*

### Paul

Position relative to sentence

-6 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13

Position relative to verb

### Gospels

Position relative to sentence

-6 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13

Position relative to verb
The position of *autos*

- *autos* moves away from the pre-verbal position in the Gospel authors
The position of *autos*

- *autos* moves away from the pre-verbal position in the Gospel authors.
- This could be due to the general loss of second position phenomena in later Greek.
The position of *autos*

- *autos* moves away from the pre-verbal position in the Gospel authors.
- This could be due to the general loss of second position phenomena in later Greek.
- Perhaps also the loss of the preverbal focus position influenced the position of *autos* by no longer providing a strong word to attach to.
Conclusions

- Firm evidence for two changes:

  - 3. person pronouns start to appear (almost) exclusively post-verbally
Conclusions

Firm evidence for two changes:
- Contrastive elements start to appear in clause-initial position instead of preverbally
- 3rd person pronouns start to appear (almost) exclusively post-verbally

Both these changes may have conspired in favour of the VO surface word order, the first one by leading to more verb-initial focus domains and the second by more general analogy.
Conclusions

- Firm evidence for two changes:
  - Contrastive elements start to appear in clause-initial position instead of preverbally
  - 3. person pronouns start to appear (almost) exclusively post-verbally
- Both these changes may have conspired in favour of the VO surface word order, the first one by leading to more verb-initial focus domains and the second by more general analogy
Slides available at
http://www.hf.uio.no/ifikk/proiel

Data from the PROIEL corpus
http://foni.uio.no:3000