

# Subject Prominence in English Middles

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## Introduction

This paper explores the nature of surface subjects (s-subjects) in two common English constructions, the middle and ergative. It presents evidence that these s-subjects behave differently in a number of environments and suggests a possible explanation for this behavior by making a distinction between the lexical entries of verbs and the VP-structures they project to the syntax.

## 1. Background data

Two derived intransitives in English:

- (1) a. Bureaucrats bribe easily (middle)
- b. Ships sink (ergative)

Two assumptions:

- A. S-subjects *bureaucrat* and *ship* are both internal arguments of verbs.
  - B. Constructions in (1a,b) should be related to their transitive counterparts in (2a,b).
- (2) a. Someone bribed the bureaucrat.
  - b. Someone sank the ship.

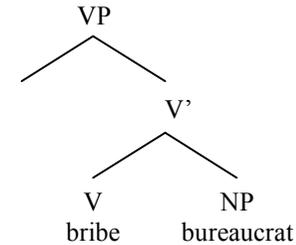
## 2. The question

Are the internal arguments appearing as s-subjects of middle verbs like *bribe* and ergative verbs like *sink* necessarily related to their respective verbs in the same way? I suggest that they are not.

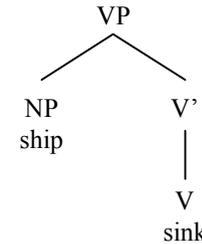
## 3. The proposal

The transitive and intransitive alternations of middles and ergatives are each derived from lexical representations that project different VP-structures:

- (4) a. Middle-forming verbs like *bribe*:



- b. Ergative verbs like *sink*:



These structures assume that an unergative verb like *laugh* would not project an external argument within VP, but that such external arguments would be derived in another manner.

## 4. Two consequences of this proposal

- A. The ergative s-subject is always in an intransitive and predicative relation to its verb.
- B. The transitive alternation of an ergative pair is derived, not basic.

## 5. Some diagnostics

### 5.1 Testing for embedded subjects

Middles are less acceptable than ergatives in embedded causative complements (5,6).

- (5) Embedded middles with *cause*:
- ?John caused the bureaucrat to bribe easily.
  - ?John caused the bread to cut easily.
  - ?John caused the books to shelve easily.
- (6) Embedded ergatives with *cause*:
- John caused the ship to sink.
  - John caused the basketball to bounce.
  - John caused the snow to melt.

Note also the entailments following from (5,6) are different: (5a) does not entail *John bribed the bureaucrat* while (6a) entails *John sank the ship*.

The same variation in acceptability is present in the bare infinitive clauses in (7,8).

- (7) Bare infinitive middles:
- ?John saw the bureaucrat bribe easily.
  - ?John saw the bread cut easily.
- (8) Bare infinitive ergatives
- John saw the ship sink.
  - John saw the basketball bounce.

A few apparent counterexamples:

- (9) Embedded middles that seem to work:
- The financial pressure caused the bureaucrat to bribe easily.
  - The new additive caused the bread to cut easily.
  - The slick surface caused the books to shelve easily.

These might be explained by the fact that matrix subjects in (9a-c) are not the understood subjects of the embedded clauses, as shown in (9')

- (9') a. \*The financial pressures bribed the bureaucrat.  
b. \*The new additive cut the bread.  
c. \*The slick surface shelved the books.

Because the matrix clauses involving *cause* or taking bare infinitive complements distinguish between middles and ergatives we should consider them reasonable diagnostics for the status of middle and ergative s-subjects.

### 5.2 Testing for intransitivity

Keyser and Roeper's (1984) tests for lexical intransitivity:

- First-sister argument of compounding
- Repetitive *away*
- Out*-prefixation

Middle and ergative performance on Keyser & Roeper's tests:

- (10) Compounding:
- \*Fast-bribing bureaucrat
  - Fast-sinking ship
- (11) Repetitive *away*:
- \*The bread cut away.
  - The basketball bounced away.
- (12) *Out*-prefixation:
- \*The books out-shelved the magazines.
  - The basketball out-bounced the baseball.

It seems questionable that identical syntactic processes of Move  $\alpha$ , whether applied in lexical or syntactic domains, should achieve such differences in s-subject behavior.

## 6. Semantic contrasts vs. transitivity contrasts

Theories involving lexical processes to derive both middles and ergatives involve externalization of the internal argument in both constructions (Fagan 1988). Without a differentiation of internal arguments, we would need to explain the behavior of middle and ergatives in the diagnostics above via semantic distinctions such as stative/eventive contrasts, following Fagan.

It may not be the case that the generic (stative) aspectual nature of the middle precludes its acceptability in the constructions mentioned above.

The lexical entries for verbs like *sink* and *bribe* do not seem to denote different aspectual classes. If aspectual shift occurs in the derivation of the middle, we should allow for further aspectual shifting due to other non-lexical factors. Note the aspectual shift from activity to accomplishment in (11a,b), taken from Pustejovsky 1995.

- (11)a. Mary walked yesterday.  
b. Mary walked to her house yesterday.

It appears eventive and stative readings on both middles and ergatives may be forced.

- (12)a. On Tuesday, Smith bribed quickly, but today I'm having a much harder time.  
b. At the moment, the mayor's bribing pretty easily.  
c. This bread is cutting better today, now that it's stale.
- (13)a. Ships sink.  
b. Basketballs bounce.  
c. Snow melts.

If Keyser and Roeper's transitivity tests evaluate purely aspectual contrasts of verbs, we would expect the "eventive" middles and "stative" ergatives to perform equivalently, but they do not.

- (14)a. \*At the moment, the mayor's bribing away pretty easily.  
b. \*This stale bread is out-cutting the fresh loaf.

- (15)a. Ships sink away when they get hit by cannonballs.  
b. Basketballs out-bounce baseballs.

Contra Fagan, Keyser and Roeper's tests appear not to measure aspectual differences, but something else, namely the ability (or inability) of an internal argument to act as the subject of a true intransitive.

## 7. Why assume different lexical descriptions?

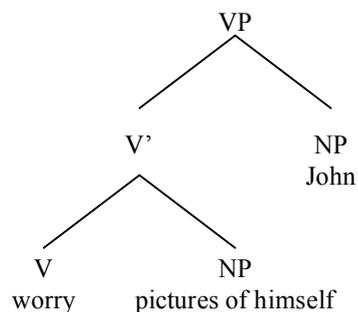
The questions put forward in Section 2 and the issues pointed out above can all be condensed:

Theories that derive middle and ergative surface subjects from identical object positions, either by lexical movement or theme-externalization, seem inadequate to account for the fact that ergative s-subjects function like subjects while middle s-subjects don't.

A few additional observations found in related literature:

- A. Hale and Keyser (1999) discuss ergatives as de-adjectival where the internal arguments are subjects of an inner V and objects of an outer V.
- B. Basilico (1998) uses syntactic scope differences to highlight different positions of objects (inner and outer) within VP, which correspond to different forms of predication. We may be able to extend this argument to middles and ergatives, as Roeper and van Hout (1999) note different readings arise from adverbial placement in the following:
- (16)a. These suitcases open up easily (middle reading)  
b. These suitcases easily open up (ergative reading)
- C. Belletti and Rizzi's (1988) analysis of psych-verbs entails varying thematic prominence within VP (17). Ergative s-subjects seem to pattern with experiencer objects of *worry*-class psych-verbs.

(17) Belletti and Rizzi's representation of *Pictures of himself worry John*



### Concluding remarks

It is possible the difference in middle and ergative s-subject prominence may be explained by a crucial distinction between the two constructions' internal arguments that bears further exploration: middle S-subjects originate as VP-internal objects; ergative S-subjects are, in a sense, subjects at every level.

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### Acknowledgements

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