## Introduction

As Bolinger (1967) observed, certain adjectives that are ambiguous in prenominal position, are disambiguated when they appear in postnominal position:

1. Suppose that Capella is usually visible, but tonight is obscured by clouds:
   - a. The stars visible include Capella ⇒ False (Postnominal: Temporal)
   - b. The visible stars include Capella ⇒ True (Prenominal: Ambiguous)

Let us call these adjectives **Domain Adjectives** (DAs).

## Research questions

**Q1:** What restrictions are there on DAs in English?
- a. Which adjectives define the class of DAs, and why?
- b. What determiners can co-occur with prenominal and postnominal DAs, and why?

**Q2:** How can we provide an explicit compositional semantics for DAs in prenominal and postnominal positions that captures the restrictions in Q1?

## Reduced relative clause analysis

The RRC is an elegant and intuitive approach to the Bolinger contrast (Larson 1998; Larson & Marusick 2004; Larson & Takahasi 2007; Cinque, 2010)

Syntactically, DAs merged postnominally as elided RRCs:

1. John met every candidate possible.
2. John met every candidate that was possible for him to meet.

Stipulate that prenominal DAs are derived by movement above NP, committed to a non-standard analysis of RCs.

**Semantics:** DP vs. NP modification

(4) \[ \text{DP} \alpha \Rightarrow \text{NP } \Gamma \text{ Fe. } B' N \text{ \& } \alpha \text{, where } \alpha = \text{DP modifier and } \beta = \text{NP modifier} \]

While NP modifiers are interpreted as **individual-level** via the Generative operator \( \Gamma \), DP modifiers escape \( \Gamma \) and are interpreted as **stage level**. DAs are claimed to be DP modifiers.

**Issues:** Not only are the questions in Q1 and Q2 still open, but the RRC makes several predictions, some of which may be falsified.

## Adjectival restrictions

### Fact 1: Restriction. The class of DAs is highly restricted.

John bought every book.

1. \( \{ \text{possible, visible, conceivable, imaginable, accessible} \} \)
2. \( \{ \text{suggestible, believable, possible, believable, imaginable} \} \)

**Pilot study:** 8 items; 24 subjects on Amazon’s Mechanical Turk (AMT); 7-point acceptability (7 = highest).

(5) Carla went on the worst . . .

- a. date possible 6.19 (19)
- b. possible date 6.62 (11) \( \left\lfloor \begin{array}{c} d = 43 \\ d = 1.02 \end{array} \right. \)
- c. date comprehensible 4.88 (30)
- d. comprehensible date 5.90 (19)

**Crucial interaction:** Effect of position weaker for items from Class I (42) than Class II (1.02), \( t = 2.72, p < 0.05 \); while this difference between \( a/b \) conditions is not significant, \( c \) was rated worse than every other condition.

**Issue:** DAs cannot be uniformly paraphrased as elided RRCs, cf. B. Schwarz (2003); Blöhdorn (2009).

(6) The captain sailed every possible navigable . . .

- a. it was possible for him to sail if
- b. that was possible | that was navigable

**Fact 2: Complexity.** Prenominal DAs are intolerant to morphological complexity beyond the apparent -able affixation without additional clausal material.

(7) The astronomer noted every

- a. invisible star possible
- b. visible star invisible (without a telescope)

### Determiner restrictions

**Fact 3: Strong determiners.** DAs only licensed by strong determiners.

**Pilot study:** 66 subjects on AMT; task as before.

(8) The committee interviewed

- a. every possible (few) 1.71 (.42)
- b. * every possible (a few) 2.33 (.53)
- c. * every possible (a) 2.57 (.78)
- d. * every possible (many) 2.62 (.46)
- e. * every possible (candidate) possible 2.78 (.64) \( \text{candidate possible} \)

(9) DAs are banned from existential-there contexts:

- a. * There was (each | every | the best | the only) (possible) candidate(s) (possible) . . .
- b. * There was a (the | some | few) (possible) candidate(s) (‘possible’) . . .

## Lexical semantics

### Exhaustification.** DAs exhaustify the domain of objects for all accessible situations to the domain that is given by the resource situation \( s \), DAs non-compositional and listed separately in lexicon (Aronoff, 1976; Dowty, 1979)

\[ \text{Let} \text{acc}^\alpha(s)(s’) \text{be an accessibility relation of type } a \text{ between situations } s \text{ and } s’. \]

\[ \text{EXH}(P)(s) = \alpha \Gamma(P(x)(s’) \land \neg P(y)(s’)) \]

**Fact:** \( \text{EXH_book}(s) \) means that every situation \( s’ \) accessible from the resource situation \( s \) has same book-objects as \( s \).

**Different:** Adjectives specify different accessibility relations \( a \) on acc e.g., visibility, imaginability, etc.

## Syntactic licensing

DAs are licensed by determiners with a resource situation pronoun in the sense of F. Schwarz (2009; a.o.)

- Akin to particles like up as in Keyser & Roeger’s (1992) treatment of particle verb constructions.
- Adjunct directly to D
- Bare, acategorical elements
- Presumed to lack the phrase structure for morphological or clausal complexity
- Congruent with B. Schwarz’s (2005) proposal for modal superlatives

## Compositional semantics

**Step 1:** Generalize Chung & Ladusaw’s mode of composition and intensionalize the first argument to \( \text{EXH} \).

(10) Restrict(\( \lambda y.\lambda x.\lambda e.\left[ \text{find}(y)(x)(s’), \text{dog} \right] \))

\[ \text{EXH}(P)(s) \neq \text{EXH}(P)(s’), \text{EXH}(P)(s’) \neq \text{EXH}(P)(s), \text{EXH}(P)(s’), \text{EXH}(P)(s) \neq \text{EXH}(P)(s’). \]

### Step 2: Combine the strong determiner with the DA possible.

Let types \( a = \beta = \gamma = ( , s, t) \)

\[ \forall \text{every possible } \alpha \Gamma(P_{\beta_e}(\lambda x.\lambda e.\left[ \text{find}(y)(x)(s’), \text{dog} \right])) \]

\[ \text{EXH}(P)(s) \land \text{EXH}(P)(s’), \text{EXH}(P)(s), \text{EXH}(P)(s’), \text{EXH}(P)(s) \]

### Step 3: Feed the resource situation \( s \) to the complex D.

\[ \forall \text{every possible } s’ \Gamma(P_{\beta_e}(\lambda x.\lambda e.\left[ \text{find}(y)(x)(s’), \text{dog} \right])) \]

### Step 4: Saturate the repressor with the NP book.

\[ \forall \text{every possible } \beta \Gamma(P_{\beta_e}(\lambda x.\lambda e.\left[ \text{find}(y)(x)(s’), \text{dog} \right])) \]

\[ \text{EXH}(P)(s), \text{EXH}(P)(s’), \text{EXH}(P)(s’), \text{EXH}(P)(s) \]

\[ \text{EXH}(P’)(s’), \text{EXH}(P’)(s), \text{EXH}(P’)(s), \text{EXH}(P’)(s) \]

## Linear order


- Merge DAs as adjuncts to NP, but must adjoin to D for composition
- Movement may be
  - Covert movement: postnominal
  - Overt movement: prenominal


- Merge DAs as adjuncts to D
- Acategorical elements may exploit gap in linearization algorithm
  - Immediate linearization: prenominal
  - Postponed linearization: postnominal – at end of DP phase boundary.

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