The Questions Semanticists Ask

“Cherlon, have you stopped buying necklaces?”
How do we know what words and sentences *mean*?
How do languages morphologically encode meaning?
How do we model meaning using formal tools?
How much information should we attempt to formally model?
How do we interpret conversations?
TO GET US THINKING ABOUT THE COMPLEXITY OF MEANING...
“Cherlon, have you stopped buying necklaces?”

- Presupposes that Cherlon bought (several) necklaces in the recent past.

- Cherlon, haven’t you stopped buying necklaces?
  - Negating the sentence maintains the presupposition that Cherlon bought necklaces.
  - Cherlon can cancel the presupposition” “Well, actually, no I haven’t stopped buying necklaces because I never did. They were all given to me.”
a. Bill Clinton was impeached.
b. Bill Clinton had sexual relations with that woman.

- a presupposes b
- Again, we can negate (a) and still maintain the presupposition or we can cancel the presupposition.
  - Bill Clinton was not impeached, even though we all know he had sexual relations with that woman.
  - Bill Clinton was impeached, even though he didn’t actually have sexual relations with that woman.
a. The anarchist assassinated the emperor.
b. The emperor died.

- a entails b: one can’t truthfully assert a and not also truthfully assert b.
- Not reciprocal: b does not entail a

- When an entailing sentence is negated, the entailment fails
  a. The anarchist didn’t assassinate the emperor.
b. The emperor died.
  - The emperor may have died, but it doesn’t follow from a.

- The entailment can’t be canceled.
  - *The anarchist assassinated the emperor, but the emperor didn’t die.
The Things We “Do” With Language:

- **Locutionary Act**: the act of uttering the actual words
  - “This classroom is hot.”

- **Illocutionary Force**: the force or intention behind the words
  - …might mean that I want some fresh air…

- **Perlocutionary Effect**: the effect of the illocution on the hearer
  - …and some kind student opens the door to the classroom
What We Know

“…language can be viewed as a set of abstract devices, rule systems, and principles that serve to characterize formally various properties of the well-formed sentences of that language.” (C, M–G 1)

“…grammars…constitute accurate models of the (implicit) knowledge that underlies the actual production and interpretation of utterances by native speakers.” (C, M–G1–2)

“The linguistic knowledge we seek to model, speakers’ competence, must be distinguished from their observable linguistic behavior.” (C, M–G1–2)

Familiar concepts from our studies of syntax and phonology. Also applies to the study of meaning. Though, things get murky…
Traditionally, semantics is concerned with determining an abstract meaning for words/sentences that is somewhat generalizable across situations irrespective of context.

- Meaning is abstracted away from the individual conversational participants.

- The formal semantic meaning for the above sentence is independent of the context.
I am ready to leave.

- Pragmatics is concerned with the meaning that sentences have within a particular context.
- Meaning is derived in relation to the individual conversational participants.
- The sentence above has a variety of interpretations.
  - I could be suggesting to a companion that I no longer wish to be present at a really boring dinner party.
  - I could be saying that I’m packed and prepared for my next trip to Reykjavík.
  - If it’s the dead of winter, I’m likely saying that I’m ready to get out of Minnesota.
The Complexity of Pinning Down Meaning

chair

This is yellow.
The door is locked.

a. You should have seen the bull we got from the pope.
b. Competent men and women hold all the good jobs in the firm.
c. Mary claims that John saw her duck.
d. Someone loves everyone.  

(C, M−G, EX57)
What’s a chair???

- The Elbourne (Ch. 1) reading teaches us just how difficult it is to define “chair”.
  - It need not be a 4-legged piece of furniture that is intended to be sat on.

*Chair* encompasses the set of all actual chairs (extension) and the set of possible chairs (intension)
‘This’ is a deictic expression.
Its meaning is fixed by the context.

- Person deixis: me/you
- Spatial deixis: here/there
- Temporal deixis: now/then
- “This” can be spatial or temporal –
  - this book vs that book
  - this weekend vs next weekend
“So, he was like ‘I’m gonna call you tomorrow,’ and now I feel bad because I didn’t pick up the phone.”

- I’m speaking but “I” refers to some cute guy and “you” refers to me in the first conjunct but “I” reverts back to me in the second conjunct.

We switch the reference for deictic expressions all the time within the same conversation and within the same utterance.
This statement maps to many different situations and responses to those situations.

The door could be in a state of having been locked for some indeterminate amount of time.
- A property of the door

“Locked” could be the resultant state of someone just having pushed on it.
- A property of the door that is closely connected to a property of the immediate larger event

The truth of the situation holds independent of who observes the state of the door and their reaction to that state.
- A person could happen to try the door and discover that it’s locked and keep going. There’s no emotion attached to the situation.
- Another person could approach the door expecting to walk through it. There’s some level of surprise or frustration attached to the situation.

An opportunity that once existed no longer does.
- Metaphoric/idiomatic meaning
a. You should have seen the bull we got from the pope.

b. [Competent [men and women]] hold all the good jobs in the firm. [Competent men] and [women] hold all the good jobs in the firm.

structural ambiguity

c. Mary claims that John saw [DP/small clause her duck]. lexical and structural ambiguity

her=possessive
duck=noun

her=subject pronoun (and her has ambiguous reference)
duck=verb

d. Someone loves everyone.

(i) There is some person and that person loves everyone
(ii) For every person, someone loves that person
–(ii) is a possible interpretation under (i), but it could also be that there are different pairings between the lover and the lovee

scope ambiguity
The Relationships that Lexical Items have to Each Other

**Homophones/homonyms**: Words that sound the same, but have different meanings.
(1) a. horse, hoarse  
    b. bare, bear  
    c. that (determiner), that (complementizer)

**Polysemy**: Polysemous words also sound the same, and their meanings are closely related.
(2) a. *Saw* (noun): a jagged-edged instrument used for cutting  
    b. *Saw* (verb): to use a jagged-edged instrument for cutting

(3) a. It takes a good ruler to keep things straight.  
    b. You should see her shop.

- We’ll get to both philosophical discussions and neuroscientific research on homophony and polysemy. (Elbourne 2011, Chapter 3)
**Synonyms**: Almost identical meanings.

(4)  a. couch – sofa  b. sick – ill  c. serene – calm – peaceful

**Antonyms**: Opposites. Different types of antonyms.

**Complementary pairs**: one member of the pair means not the other member.

(5)  a. alive – dead  b. present – absent  c. fake – genuine

**Gradable pairs**: the meaning is determined by the context or what the adjective is describing. The meanings are not absolute.

(6)  a. big – small  A small elephant is larger than a big mouse.
  b. hot – cold  A cold cup of coffee might be warmer than a hot soda.
  c. fast – slow  A slow airplane moves more quickly than a fast car.

(7)  a. This is yellow.  b. This is a fountain pen.  c. This is a yellow fountain pen.
  --a & b entail c

(8)  a. This is big.  b. This is a sperm whale.  c. This is a big sperm whale.
  --a & b do not entail c: entailment doesn’t apply with gradable adjectives

**Relational Opposites**: display symmetry in relation to each other; one usually requires the other.

(9)  a. give – receive  b. buy – sell  c. teacher – pupil
“Natural Language Semantics is a peculiar discipline in that it is carried out under the aegis of three larger subjects: linguistics, psychology, and philosophy.” (Elbourne 2011:vii)

“...the precise form that ...semantic information takes...is deeply mysterious.” Elbourne 2011:23)
The Meaning of One Tiny, Very Complicated Word: The Copula

How Many “Be”s exist?

a. Emily is a carpenter.
b. What Harvey did next was wash himself thoroughly.
c. Electronically is usually fastest.
d. That’s my brother.
e. Red is my favorite color.
f. My favorite color is red.
g. The only thing we couldn’t agree on was whether we should go to France first. (Mikkelsen 2011:1805)
Predicational: The subject is usually a referential and the post-verbal phrase describes a property of the subject.

a. The hat is big.
b. The hat/present/thing I bought for Harvey is big.
c. What I bought for Harvey is big.
d. Sylvia is from Seattle/an architect/the architect on that project/my friend/mayor of Seattle.

There are other proposed taxonomies: 3–be, 2–be, and 1–be
**Specificational**: The post-verbal phrase “specifies” who/what someone/something is.

a. The director of Anatomy of a Murder is Otto Preminger.
b. The only director/person/one I met was Otto Preminger.
c. Who I met was Otto Preminger.
**Identificational:** The subject contains a demonstrative and the post-verbal phrase refers to the “content” of the demonstrative.

a. That (woman) is Sylvia.
b. That (stuff) is DDT.
**Equative/Identity:** The pre and post- verbal items are of the same type (nouns, clauses) and the reference of one is identical to the reference of the other.

a. Sylvia Obernauer is HER.
b. Cicero is Tully.
c. Your attitude toward Jones is my attitude toward Davies.
Sentence Meaning

Review of some concepts from syntax that relate to interpretation.
C–Selection and S–Selection

- Heads require that their arguments have particular syntactic and semantic properties.
- Having the right category gives us syntactically grammatical structures.
  - C–selection

- Having the right semantic properties gives us sentences that “make sense.”
  - These properties are generally referred to as theta/thematic roles.
  - S–selection
Some verbs c–select either a clause or an NP and both the clause and the NP have the same semantic properties.

John asked me what the time is/the time.  
I’ll assume (that) he’s intelligent/his intelligence.  
Bill couldn’t believe how hot it is/the heat.

Other verbs s–select for the same thematic types, but c–select only clauses.

John wondered what the time was/*the time.  
I’ll pretend that he’s intelligent/*his intelligence.  
Bill complained how hot it was/*the heat.

(Johnson 2011, Ch2, EX 139)

And plenty of verbs c–select for only NPs (e.g. – cook, buy, build, read)
Deny, say, and wonder all C(ategory)–select for an embedded clause.

But the S(ematic)–selection requirements are different.

- Deny takes a propositional complement.
- Wonder takes a question complement.
- Say takes either a proposition or a question.

a. Martha denied that John has left.
   a.’ *Martha denied whether John has left.

b. Martha said that John has left.
   b.’ Martha said whether John has left.

c. *Martha wonders that John has left.
   c.’ Martha wonders whether John has left.

(Johnson 2011 Ch2, EX 143–144)
Tense, Meaning, and Infinitival Complements

...the tense of a to-infinitive is that of a possible future [Stowell 1982:562]

- Tensed complements, infinitives, and gerunds have different interpretations.
- (1): the finite complements have their own tense specification
- (2): the tense of the non-finite (control) clause is unrealized w.r.t. to the tense of the matrix clause
- (3): gerunds don’t have their own unrealized tense.
  - In 8(b), the remembering and the bringing happened in the past.

The Proposal: Finite clauses and control contain a C position and they contain a tense operator which resides in/has a relationship with the C position.
Theta roles can interact with morphology.

The case of a noun can depend on factors such as agentivity or volitionality.

Here, the datives are experiencers.

**Hindi–Urdu**

Tusaar क्षुश्च huaa.
Tushar.nom happy.nom become
‘Tushar became happy.’

Tusaar-ko क्षुश्च ii huiii.
Tushar-dat happiness.nom happen
‘Happiness happened to Tushar.’

**Japanese**

Mary-ga eigo-ga yoku dekiru.
Mary-nom English-nom well do.can.pres
‘Mary can speak English well.’

Sensei-ni eigo-ga wakaru.
teacher-dat English-nom understands
‘The teacher understands English.’

**Icelandic**

Þið lásuð bókina.
you.nom read the book.acc
‘You read the book.’

Mörgum prófessorum líkuðu dýrir skór.
many professors.dat liked expensive shoes.nom
‘Many professors liked expensive shoes.’
But, Icelandic teaches us that things aren’t always crystal clear…

(a) Við teljum frambjóðendurna vera frambærilega we.nom believe candidates.the.acc be pretty good.acc ‘We believe the candidates to be pretty good.’

(b) Einum dómara síndist þessar athugasemdir vera óréttlátar. one judge.dat understood these comments.nom be unfair ‘One judge understood these comments to be unfair.’
In Hindi–Urdu, the case of the subject depends on whether the activity is necessarily completed – e.g., perfective aspect.

(i) Nominative subject: Not perfective. We don’t know if the action was completed.

Rahul kitaab parh–taa thaa
Rahul.masc.nom book.fem read–hab.masc.sg be.past.masc.sg
‘Rahul used to read (a/the) book.’

(ii) Ergative subject: Perfective. The action has been completed.

Rahul–ne kitaab parh–ii thii
‘Rahul had read the book.’ *(Butt, Chapter 6, Ex 12)*
In Finnish, the case of the object depends on the completion or resulting state of the activity.

- Direct objects have partitive case if the VP is “unbounded” but accusative case if the VP is “bounded.”

(Kratzer 2002)
S-selection and c-selection don’t always pattern together.

The meaning of some infinitival complements includes tense information, but not others.

Sometimes meaning maps to morphology, sometimes not.
Modeling the Mystery of Meaning

<e,t> \lambda
Type Theory is a tool that is grounded in the truth-conditional approach to semantics.

The basic idea is that there are entities and truth values.
   - Words and phrases are functions that represent the relationship between entities and truth values.

A nice simplistic model that captures argument structure, but it doesn’t capture nuances.
- Entities are of type e (people, objects, ideas, etc.)
  - The NPs are of type e
  - Different components of the NP have to combine
    - E.g. the determiner and the noun have different types

- The verb is a function. Transitive verbs have two arguments, each represented by e.
  - The direct object combines with the verb and eliminates the first e.
  - That e has a value, so it disappears

- The VP is also a function.
  - The subject combines with the VP and eliminates the remaining e slot.
  - The sentence can now be assigned a truth value.
    - The sentence doesn’t have to be true in order to have a truth value.
    - It could be 1 (true) or 0 (false)
Events and vP: An Overview

- Marantz (1984): The entire predicate (not just the verb) assigns a θ-role to the subject. The meaning/properties of the object influence the meaning of the verb, which, in turn, determines the semantic properties of the subject.

1. a. throw support behind a candidate  
   b. throw a baseball  
   c. throw a boxing match (take a dive)  
   d. throw a party  
   e. throw a fit  
   (Kratzer 1996, EX 6)

2. a. kill a cockroach  
   b. kill a conversation  
   c. kill an evening watching TV  
   d. kill a bottle (empty it)  
   e. kill an audience (wow them)  
   (Kratzer 1996, EX 8)

- Kratzer argues that we need another syntactic position for the subject.

- From a semantic perspective, verbs refer to events and in order to derive the meaning of a verb, the event that the verb refers to is part of the verb’s meaning.

- The semantic function of v is to “introduce” the external argument.
1. \( \text{buy} = \lambda x \lambda e \ [\text{buy}(x)(e)] \) (Kratzer 1996, Figure 3)

- ‘Buy’ has two arguments, a Theme \( x \) and an Event \( e \).
- **NOTE**: In semantics, the term “argument” is used differently than in syntax.
  - Arguments are used to encode the elements/items that give a particular word/phrase meaning.

- The Agent argument is not part of the meaning of the verb.

2. a. I bought a new set of fancy dishes. = I volitionally engaged in the activity of paying for new dishes.

   b. I bought his alibi. = I, perhaps passively, accepted the story. I didn’t actually do anything.

- The subject is “external” to the verb meaning of the verb.
What does the event argument actually do?

It helps us model situations.

Three architects designed four buildings.
Three architects designed four buildings.

- **Collective**: Four buildings total. All three of the architects collaboratively design each building.

- **Cumulative**: Four buildings total. It is underspecified as to how many architects design each building.
  - Perhaps one architect designed three buildings and the other two designed one building or all three architects collaborated on one building and each of them individually designed the remaining three buildings.

- **Distributive**: Twelve buildings total. Each architect designs four buildings.
The events that the different interpretations map to are independent of the meaning delivered by the combination of the verb and the object and independent of the meaning of the external argument.

- **Collective**: one event in which all three architects design four buildings.

- **Distributive**: three events in which each architect designs four buildings.

- **Cumulative**: We don’t know just how many events there are. We just know that some subset of architects designed some subset of buildings.

See Kratzer’s chapters *The Event Argument and the Semantics of Verbs* posted on the Semantics Archive for much more detailed discussion of quantifying over events. [http://semanticsarchive.net/Archive/GU1NWM4Z/](http://semanticsarchive.net/Archive/GU1NWM4Z/)
In type theory, events are of type $s$. Entities are $e$ and truth values are $t$.

In this simplified lambda abstraction, events are $e$ and entities are $x$.

1. $\lambda x.\text{wine}(x)$. The meaning of wine is a function because it is a common noun. Some entity has the property of being wine iff it has the requisite characteristics.

2. $\lambda x\lambda e.\text{bought}(x)(e)$. bought is a two-place predicate. $\lambda x$ is its internal argument and $\lambda e$ is the event.

3. $\lambda e.\text{bought}(\text{wine})(e)$. When bought and wine combine, wine saturates the internal argument slot. $\lambda x$ disappears because it now has a meaning.

4. $\lambda x\lambda e.\text{agent}(x)(e)$. $\nu$ is also a two-place predicate. $\lambda x$ is the agent and $\lambda e$ is the event.

5. $\lambda x\lambda e.\text{bought}(\text{wine})(e) \& (\text{agent})(x)(e)$. The event argument unifies the event encoded in the VP and the agent of the event.
   - The $\nu'$ is a conjunction in which both conjuncts have an event argument. “There was an event of buying wine and there is some agent of that event.”

6. Unlike wine, Cherlon is not a function. I simply am. I saturate the $\lambda x$ argument slot and we get: $\lambda e.\text{bought}(\text{wine})(e) \& (\text{agent})(\text{Cherlon})(e)$

Cherlon bought wine
‘Extra’ Arguments: Applicatives

The complicated case of *melt*
English and Venda (a Bantu language) both allow *melt* in the same argument structure configurations.

(1) *English*
   a. The ice melted.
   b. John melted the ice.
   c. John melted *me* some ice.

(2) *Venda*
      snow  3SG.PAST-melt-FV
   ‘The snow melted.’
   b. Mukasa o-nok-is-a mahađa.
      Mukasa 3SG.PAST-melt-CAUSE-FV snow
   ‘Mukasa melted the snow.’
   c. Mukasa o-nok-is-el-a Katonga mahađa.
      Mukasa 3SG.PAST-melt-CAUSE-APPL-FV Katonga snow
   ‘Mukasa melted Katonga the snow.’

Data from Pylkkänen 2008, Ch. 1
But, Venda allows some intransitives (unergatives) such as *laugh*/*speak* to take applicatives, while English does not.

Pylkkänen (2002/2008): There is an **applicative head** which introduces the applicative argument.
- Builds on little *v* introducing external argument

**High applicatives** (HA): the applicative head attaches above the verb.
- There is a relation between an individual/entity and an event.

**Low applicatives** (LA), the applicative head attaches below the verb
- There is a relation between two individuals/entities. The applicative is either the recipient or the source.
- LA requires a direct object because the relationship is between the direct object and the applicative argument.

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(3) **Venda**

a. Mukasa o-se-is-a Katonga.
Mukasa 3SG.PAST-laugh-CAUSE-FV Katonga
‘Mukasa made Katonga laugh.’
b. Mukasa o-amb-el-a Katonga.
Mukasa 3SG.PAST-speak-APPL-FV Katonga
‘Mukasa spoke for Katonga.’

(4) **English**

a. *Mary laughed Sue.
(Intended meaning: ‘Mary made Sue laugh.’)
b. *Mary spoke Sue.
(Intended meaning: ‘Mary spoke for Sue.’)

Data from Pylkkänen 2008, Ch. 1
Mary bought John a book.

- The applicative, John, has a relation with the direct object.
- John is the intended recipient of the book.

(2a): Wife has a benefactive relation to the event of eating but no relation to the object of eating, food.

(2b): Friend benefits from the event of running.

“A high applicative head is very much like the external-argument-introducing head: it simply adds another participant to the event described by the verb.” (Pylkkänen 2008:14)
The Complexities of Ditransitives

a. The baby–sitter gave the child an apple. DP–DP
b. The baby–sitter gave an apple to the child. DP–PP

c. The quarterback threw the wide–receiver the ball. DP–DP
d. The quarterback threw the ball to the wide–receiver. DP–PP

e. The announcer handed the wrong actor the Oscar. DP–DP
f. The announcer handed the Oscar to the wrong actor. DP–PP

g. The landlord rented the visiting professor a nice apartment. DP–DP
h. The landlord rented a nice apartment to the visiting professor. DP–PP

Alternating Ditransitives

Many constructions alternate between the double object frame and the prepositional frame.

The DP–DP versions are all low applicatives on Pylkkänen’s analysis.
Non–Alternating Ditransitives

Only DP–DP allowed

a. The boss denied George a promotion.
b. *The boss denied a promotion to George. (based on Bruening 2010b, ex 4)
c. Smith envied Jones his good fortune.
d. *Smith envied his good fortune to Jones. (Rappaport Hovav & Levin 2008, ex 30)
e. The judge fined the company one million dollars.
f. *The judge fined one million dollars to the company.

Only DP–PP allowed

a. The contractors restored the building to the original state.
b. *The contractors restored the original state the building.
c. The yoga instructor explained the basic principles of the practice to the students.
d. *The yoga instructor explained the students the basic principles of the practice.
e. The supplier donated materials to the art school.
f. *The supplier donated the art school materials.
Previously observed restrictions on the DP–PP variant vanish when the goal is phonologically heavy.

There is tremendous debate about the meanings of ditransitives and the degree to which the meaning maps onto the syntactic structure.
Issues With Formal Models of Meaning

- Sometimes they’re too simplistic – type theory

- Other times, they’re so nuanced that the intuitions that are being captured are not very transparent

The woman who every Englishman loves is his mother.

(Mikkelsen 2011, EX 75)
SCOPE

...and...Logical Form
My friend David just made partner at his law firm. I meet David at his office for lunch. As I’m pulling into the parking lot, I notice all of the partners’ names on their respective parking spaces. I see that Thomas and Beth drive Porsches, Andrew drives a BMW, William drives a Lexus, and Sandra drives a Jaguar. David currently drives a Honda Civic, but he’s considering upgrading since he just made partner.

I advise David that he should get a nicer car since “Every partner at the firm drives an expensive car.”
a. Our set of partners: Thomas, Sandra, Andrew, Beth, William  
Our set of expensive cars: BMW, Porsche, Lexus, Jaguar, Audi

Scenario 1: Every partner drives a different expensive car. – surface scope

<table>
<thead>
<tr>
<th>Partner</th>
<th>The car s/he drives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas</td>
<td>Porsche</td>
</tr>
<tr>
<td>Sandra</td>
<td>Jaguar</td>
</tr>
<tr>
<td>Andrew</td>
<td>BMW</td>
</tr>
<tr>
<td>Beth</td>
<td>Mercedes</td>
</tr>
<tr>
<td>William</td>
<td>Lexus</td>
</tr>
</tbody>
</table>

Scenario 2: Some partners drive the same expensive car. – surface scope

In Scenario 2, no partner drives a Mercedes or a BMW, but it is still true that every partner drives an expensive car.

<table>
<thead>
<tr>
<th>Partner</th>
<th>The car s/he drives</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
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<td>Jaguar</td>
</tr>
<tr>
<td>Andrew</td>
<td>Jaguar</td>
</tr>
<tr>
<td>Beth</td>
<td>Porsche</td>
</tr>
<tr>
<td>William</td>
<td>Lexus</td>
</tr>
</tbody>
</table>

Scenario 3: Every partner drives the same expensive car. – inverse scope

<table>
<thead>
<tr>
<th>Partner</th>
<th>The car s/he drives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas</td>
<td>BMW</td>
</tr>
<tr>
<td>Sandra</td>
<td>BMW</td>
</tr>
<tr>
<td>Andrew</td>
<td>BMW</td>
</tr>
<tr>
<td>Beth</td>
<td>BMW</td>
</tr>
<tr>
<td>William</td>
<td>BMW</td>
</tr>
</tbody>
</table>

b. The sentence is false under this scenario

<table>
<thead>
<tr>
<th>Partner</th>
<th>The car s/he drives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas</td>
<td>Audi</td>
</tr>
<tr>
<td>Sandra</td>
<td>Porsche</td>
</tr>
<tr>
<td>Andrew</td>
<td>Kia</td>
</tr>
<tr>
<td>Beth</td>
<td>BMW</td>
</tr>
<tr>
<td>William</td>
<td>Jaguar</td>
</tr>
</tbody>
</table>
• ‘every partner’ moves to a position higher than where it was in the syntactic tree
  • a variable, x, is inserted into the position that the NP moved from.
  • x represents the individuals in the set of partners.
  • In order for the sentence Every partner at the firm drives an expensive car to be true, we have to be able to plug any of the partners into the spot where we placed the variable and get a true sentence.

Surface scope: interpretation matches the actual order of the sentence
• For every partner at the firm, that person drives an expensive car.
• Every scopes over an.
• Same syntactic structure and the subject still moves.
• The object NP is moved to a position higher than the subject NP. Hence, inverse scope:

   There is a particular expensive car and every partner at the firm drives that car. 
   \( A(n) \) scopes over every.

• We plug some particular expensive car into the spot where we moved the object from and we plug the partners into the spot that we moved the subject from.
• If each individual sentence comes out true, then the sentence *Every partner at the firm drives an expensive car* is true.
A climber scaled every cliff.

Inverse scope interpretations take longer to process, suggesting that surface scope is the “default/easier” interpretation.
Issues with Modeling Scope

Covert movement – and sometimes there is a *lot* of it proposed – complicates our structures and it isn’t always clear that this is the best way to model meaning.
Pragmatics and the Rules of Conversation

How do we build context into thinking about meaning?
Conversational Implicatures (H. Paul Grice, *Logic and Conversation* 1975)

- In everyday conversation, we subconsciously follow rules (or maxims).

- When we don’t follow the maxims of conversation, we either send unspoken messages or we really annoy our interlocutor.

- We have to know the backdrop in order to arrive at a meaning.

  - “I’d like a glass of wine.”
    - Said to a server at a restaurant means something different than when said to a colleague after a really long day in the office or when said at the start of Ling 340. 😊
The Maxim of Relation

- Make your contribution relevant to the conversation.
- Susan is a second-year student thinking of majoring in history. She has taken a class with Professor Michaels. The department’s new major advisor asks Professor Michaels how Susan did in her course. Professor Michaels says, “Well, she always said ‘hello’ to me.”
  - The professor has violated the Maxim of Relation. The unspoken message is that Susan was polite but not a good student.
Maxim of Quality

- Make your contribution as true as possible. Do not say things that are false or for which you lack adequate evidence.

- My friend Gary is planning a trip to Papua New Guinea. I have never heard of Papua New Guinea; I have no clue where it is or what it’s like. Gary is telling me about his upcoming travels and I say, “Why would you go there? It’s dirty and the food is awful.”
  
  - I have violated the Maxim of Quality. If Gary finds out that I actually know nothing about Papua New Guinea, then he’ll deduce that I’m an unreliable source of information and will discard my future comments.
Maxim of Quantity

- Do not make your contribution more or less informative than is required.

- It’s Monday morning and I’m chatting with a colleague about the weekend. She asks me what I did on Saturday.

- Answer 1: “Random things.” My colleague will assume that I don’t want to discuss what I did on Saturday.
Answer 2: “I got up at 10:00 and then I took a shower. I made a cup of coffee and watched CNN for an hour. I got ready and then I met friends for brunch. I ordered a mimosa, buttermilk pecan waffles, and Canadian bacon. I figured that since I drank a mimosa and had to drive, I should order a cup of coffee. I drank my coffee, then the check came. I paid my portion and then walked to my car. I decided to go to Macy’s, since there was a sale. Let’s see, I think I tried on some Nine West shoes and some Ralph Lauren boots. I didn’t like either of those. Then I tried on some Anne Klein boots and some BCBG shoes. The boots weren’t on sale, but I really liked them. I walked around the store for 30 minutes looking for less expensive boots that I liked. I didn’t find any, so I bought the Anne Klein ones. Then I decided to go to a café and get some work done before I went out that night. It took me 7 minutes to drive to the cafe…”

- Clearly, I have violated the Maxim of Quantity. My colleague, nor one who overhears that response, will ever ask me what I did over the weekend!
Maxim of Manner

- Avoid ambiguity. Be brief and orderly.
- I’m grocery shopping one evening and I run into some friends I haven’t seen in a while – James, and his wife Christina. Later that night, I say to my boyfriend. “Oh, guess who I saw at Whole Foods, James and the woman he lives with.”
  - I have violated the Maxim of Manner because I chose to use to describe Christina in a way that did not make it clear that she is James’ wife. I am communicating that I don’t care for Christina.
J.L. Austin – *How to do Things with Words* (1962)
- Philosopher at Oxford University in the 1940s and 1950s
- Growing frustration with truth conditional semantics as the basis for semantic inquiry.
  - Some assumptions about language that were being challenged:
    - The basic sentence type is declarative (statement/assertion).
    - The principal use of language is to describe states of affairs.
    - The meaning of utterances can be described in terms of truth/falsity. [e.g. type theory]

Grice was Austin’s student. They and some others at Oxford came to be known as “ordinary language philosophers.”

(Saeed 2003:219–240)
1. I (hereby) apologize for saying that I hope you get run over by a bus.
2. I (hereby) name this boat the Cheral.
3. I (hereby) bet you $5 that Cherlon will wear a different outfit to class every day this term.
4. I (*hereby) drive a silver car.
5. I (*hereby) plan to go out for Vietnamese food tonight.
6. I (*hereby) own 50 pairs of shoes.
1. I say that John is a liar.
2. John is a liar.
3. I plead not guilty.
4. I am innocent.
5. I move that fox–hunting be abolished.
6. I believe that fox–hunting should be abolished.
7. I object to the licensing hours being extended.
8. I do not want the licensing hours to be extended.
9. I apologize for deceiving the auditors.
10. I am sorry I deceived the auditors.

(Thomas 1995:34)

- Each even-numbered sentence can be negated while still preserving the truth conditions of the preceding sentence.
  - E.g.: I move that fox–hunting be abolished even though I do not actually believe that fox–hunting should be abolished.
Gricean maxim–based theory has a difficult time accounting for sarcasm, which is an incredibly productive aspect of “ordinary” language.

But, we’ll read Camp’s (2012) model based on inversion of a normative scale.
References


