

Discourse

LIGN 170, Lecture 9

Gricean Maxims

- Four conversational maxims

1. Quality: Tell the truth

Speakers should tell the truth as they know it, or acknowledge the uncertainty of what they are telling you

2. Manner: Be clear

Speakers should strive to be clear and unambiguous, not verbose and disorganized

Gricean Maxims

- Conversational Maxims

3. Quantity: Give the right amount of information

Say all that is necessary or required, but no more.

4. Relation: Stick to the point

Speakers must confine themselves to what is relevant

Implications

- Assuming these maxims as a comprehender has consequences for how we approach a discourse
- Maxim of Quality:
 - We assume the information we are given is believed to be factual, or is clearly marked as questionable if it is not

Implications

- Maxim of Manner:
 - We assume that every reference has an obvious referent
 - **Reference and coreference**
 - We assume that each piece of information fits in with what has come before
 - **Cohesion; schemas**

Implications

- Maxim of Quantity:
 - We assume any given piece of information is important
 - **(Coreference)**
 - We assume no important information is being left out
 - **Inferences**

Implications

- Maxim of Relation:
 - We assume all information is directly relevant to the purpose of the discourse
 - If such relevance is not readily obvious, we expect it will become so before the end of the discourse

Coherence

Organization of Discourse

- Comprehension of a discourse depends less on the meanings of the individual sentences and more on their arrangement
- Can have a group of sentences that are each comprehensible, yet fail to make sense as a group

Text 1:

Carlos arranged to take golf lessons from the local professional. The dog, a cocker spaniel, was expecting pups again. Andrea had this car washed for the big wedding. She expected Carlos to help her move into the new apartment.

Text 2:

John bought a cake at the bake shop. The cake was chocolate with white frosting, and it read “Happy Birthday, Joan” in red letters. John was particularly pleased with the lettering. He brought it over to Greg’s house, and together they worked on the rest of the details.

Local structure

- So, what's wrong with Text 1?

Text 1:

Carlos arranged to take golf lessons from the local professional. The dog, a cocker spaniel, was expecting pups again. Andrea had this car washed for the big wedding. She expected Carlos to help her move into the new apartment.

Local structure

- So, what's wrong with Text 1?
- Text 2:
 - Definite vs indefinite articles
 - “a” generally gets used for things that have not yet been introduced
 - “the” gets used for already mentioned things – or things that are inferable

Text 2:

John bought a cake at the bake shop. The cake was chocolate with white frosting, and it read “Happy Birthday, Joan” in red letters. John was particularly pleased with the lettering. He brought it over to Greg’s house, and together they worked on the rest of the details of the party.

Local structure

- So, what's wrong with Text 1?
- Things are mentioned as if they have already been introduced, as if we should know them – but we don't.
- (1) and (2) differ in local structure (microstructure) – the relationships between individual sentences in the discourse

Categories of cohesion

Pronominal	The woman lost track of her little boy at the mall. She became very worried.
Demonstrative	That was the worst exam I had all term.
Comparative	It's the same band we heard last week.
Substitution	My computer is too slow. I need to get a faster one .
Ellipsis	I wish I had more talent. My sister has a lot more [] than I do.
Conjunction	Melissa flunked out of school, so she is looking for a job.
Lexical Reiteration	I saw a boy win the spelling bee. The boy was delighted afterward.
Synonymy	I saw a boy with the spelling bee. The lad was delighted afterward.
Hyponymy	I saw a boy with the spelling bee. The child was delighted afterward.

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Global structure

Text 3:

John bought a cake at the bakery. The birthday card was signed by all of the employees. The party went on until after midnight.

Global structure

- Text 1 compared to Text 3
 - Both have new definite NPs, but (3) is fine

Carlos arranged to take golf lessons from the local professional. The dog, a cocker spaniel, was expecting pups again. Andrea had this car washed for the big wedding. She expected Carlos to help her move into the new apartment.

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John bought a cake at **the bakery**. **The birthday card** was signed by all of the employees. **The party** went on until after midnight.

Global structure

- Texts 1 and 3 differ in global structure (macrostructure) – the structure of the events within a discourse

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Birthday

Global structure

- We use both local and global structure to make discourses cohere
- Cohesion – the range of possibilities that exist for linking something with previous discourse

a. However, nobody had seen one for months.

b. He thought he saw a shape in the bushes.

c. Mark has told him about the foxes.

d. John looked out the window.

e. Could it be a fox?

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b. He thought he saw a shape in the bushes.

e. Could it be a fox?

c. Mark has told him about the foxes.

a. However, nobody had seen one for months.

Reference & Coreference

Anaphora vs. Cataphora

- Anaphor
 - Refers back to something in the previous discourse
- Cataphor
 - Refers forward to something upcoming in the discourse

Anaphora vs. Cataphora

Antecedent

- **John** wanted to go to the store but Mary wouldn't let **him**.

Anaphor

Cataphor
1

Cataphor
2

Anteced.
1

- When **she** first saw **him**, **Mary** couldn't believe it was really **John**.

Antecedent
2

Anaphora vs. Cataphora

- We must hold antecedent in memory in order to refer back to it
- Anaphors may occur in sentences non-adjacent to the antecedents

Pronouns

- He, she, it, they...
- Pronouns carry extremely little information themselves
- Highly dependent on context
- How do we know what their antecedents are?
 - Effortless for humans
 - Extremely difficult for computers

Pronouns

- Generalization:
 - Pronouns refer back to things that are previously given and at the center of attention
 - Given Info – speaker assumes hearer already knows or is inferable
 - New Info – speaker assumes hearer does not know and cannot guess

Information structure

- Topic – what a sentence is about
 - Associated with: grammatical subject / early sentence position
 - previous mention or recoverability – common ground
 - definiteness
 - unstressed intonationally

Information structure

- Focus – predicate – what is being ascribed to the topic
 - Associated with:
 - non-subject
 - new / non-predictable information
 - stressed intonationally

Pronouns

- Generalization:
- Pronouns refer back to things that are previously given and at the center of attention
- Including the topics of the previous sentence

Other anaphors

- If pronouns require additional work to determine the antecedent
 - Why use them?

There is a mocking bird who sits right outside my window every morning. I know this because the mocking bird sings every morning and wakes me up at 4 am. The mocking bird has woken me every morning for the last month. I wish the mocking bird would go somewhere else. Sometimes I think the mocking bird is just there to wake me up, that the mocking bird enjoys watching me get up. I keep thinking I'll go out and try to scare the mocking bird away, but I'm just too tired.

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Other anaphors

- If pronouns require additional work to determine the antecedent
 - Why use them?
 - Reference form (pronoun vs. other forms) helps structure discourse - gives cues about where to look for referent
 - recent context, distant context, knowledge

Reference forms

- Gundel et al's (1993) Givenness Hierarchy

At the center of attention	Activated	Familiar	Uniquely identifiable	Referential	Type identifiable
she	that, this, this N	that N	the N	Indef. This N	a N

Reference form and structure

- Retelling stories from cartoons...
- Pronouns used within a description of one scene or topic
- Fuller reference (“The cat”, “The mouse”, “Tom”, “Jerry”) used at the beginning of a new scene or topic

There is a **mocking bird** who sits right outside my window every morning. I know this because **it** sings every morning and wakes me up at 4 am. **It's** woken me every morning for the last month. I wish **it** would go somewhere else. Sometimes I think **it's** just there to wake me up, that **it** enjoys watching me get up. I keep thinking I'll go out and try to scare **it** away, but I'm just too tired.

There is a **mocking bird** who sits right outside my window every morning. I know this because **the darn thing** sings every morning and wakes me up at 4 am. **This bird** has woken me every morning for the last month. I wish **it** would go somewhere else. Sometimes I think **it's** just there to wake me up, that **it** enjoys watching me get up. I keep thinking I'll go out and try to scare **it** away, but I'm just too tired.

Given/New Strategy

- Hearers use information structure to aid in discourse processing
 - Step 1) identify the given/new info
 - Step 2) find an antecedent in memory for the given information
 - Step 3) attach the new information to this spot in memory

Wrapping up coreference

- Anaphors and cataphors help discourse cohere
- Provide referential connections between sentences
- Form that anaphors take reflects informational status of the referent
 - Given vs. new
 - Episode beginning vs. middle

Remembering discourse

Remembering discourse

- What do people remember when they read a passage?
- What parts stand out in one's memory?
- Are the important parts remembered best?
- Do different people remember the same or different things?

Pyramids

When an Egyptian dies, friends heaped stones on the body. The stones covered the body decently and kept it from being destroyed by desert animals. Kings prepared piles as high as hills for their graves before they died. These piles were the pyramids. They were intended to impress future generations with Egyptian glory, and indeed, the pyramids are still admired today by students of architecture and lovers of antiquities.

RECALL

Quantifying information

- Propositions:
 - Predicate plus its arguments
 - predicates = verb, adjective, conjunctions

Quantifying information

- The Egyptian king prepared an impressive pyramid.

#1: Pred(Egyptian); Arg(King)

- The King was Egyptian

#2: Pred(prepare); Arg(king, pyramid)

- The king prepared a pyramid

#3: Pred(impressive); Arg(pyramid)

- The pyramid was impressive

Quantifying information

- So – do people remember all propositions?
- If not, which propositions do they remember?

#1: Pred(Egyptian); Arg(King)

The King was Egyptian

#2: Pred(prepare); Arg(king, pyramid)

The king prepared a pyramid

#3: Pred(impressive); Arg(pyramid)

The pyramid was impressive

Remembering discourse

- Structuring propositions
- Propositions are connected to each other if they share an argument
- #2 is connected to #1 by *king*
- #2 is connected to #3 by *pyramid*

#1: Pred(Egyptian); Arg(King)

The King was Egyptian

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The pyramid was impressive

Remembering discourse

- Repetition Rule: if a proposition repeats some or all arguments of a previous proposition, then it is subordinate to it.
- Level 1 = #1
- Level 2 = #2
- Level 3 = #3

#1: Pred(Egyptian); Arg(King)

The King was Egyptian

#2: Pred(prepare); Arg(king, pyramid)

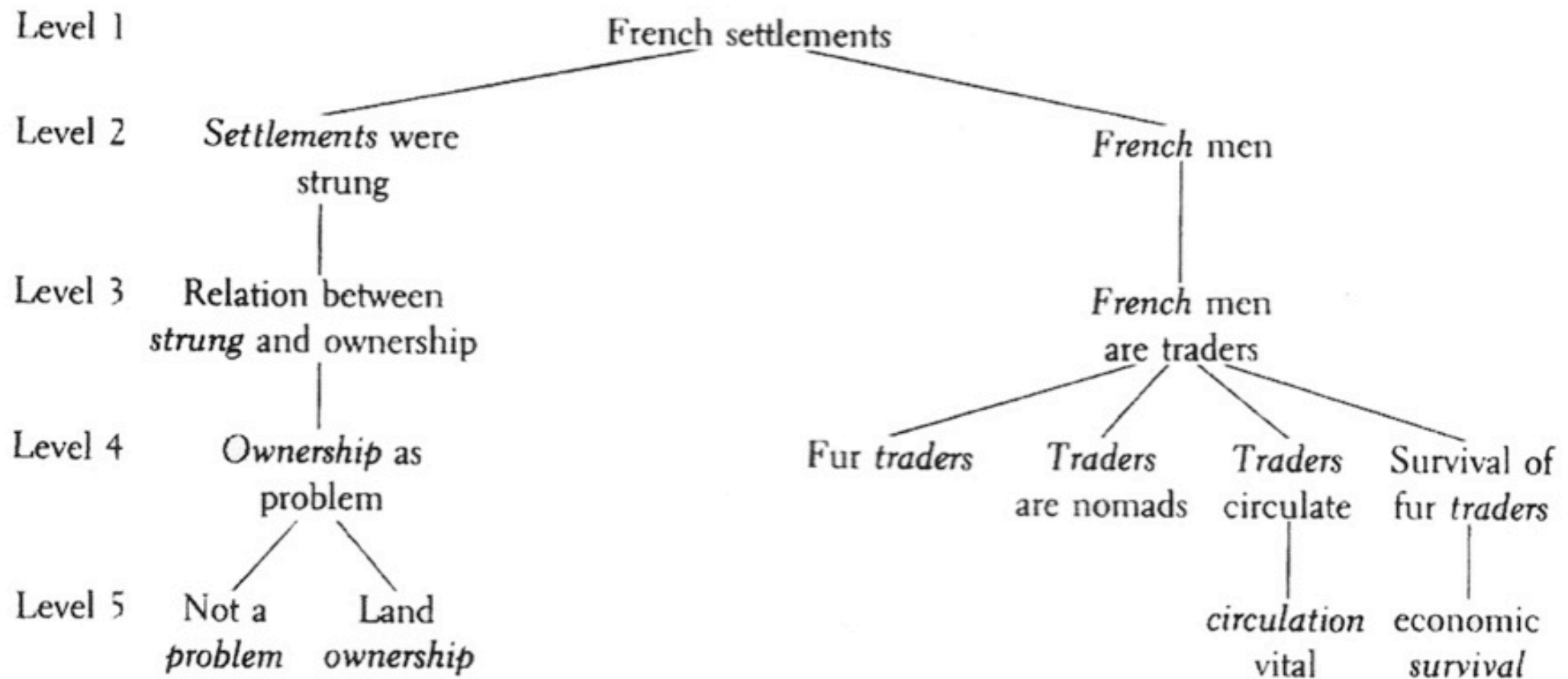
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#3: Pred(impressive); Arg(pyramid)

The pyramid was impressive

Discourse Level

(28) Early French settlements in North America were strung so thinly along the major waterways that land ownership was not a problem. The Frenchmen were fur traders, and, by necessity, the fur traders were nomads. Towns were few, forts and trading posts were many. Little wonder that the successful fur trader learned to live, act, and think like an Indian. Circulation among the Indians was vital to the economic survival of the traders.



Reading times

- Number of propositions influences time required to read a passage when preparing to recall it:
- Cleopatra's downfall lay in her foolish trust in the fickle political figures of the Roman world.
- Romulus, the legendary founder of Rome, took the women of the Sabine by force.
- Word count roughly equal
 - 8 propositions vs. 4 propositions

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Remembering discourse

- Readers organize discourse into propositions
 - Hierarchical structure
- Better at remembering macro-propositions
 - Top level propositions

Inferences

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Filling in the blanks

- Common - Not simply recall errors
- Not random, spurious contributions by the hearer or reader
- **Inference:** Proposition in the underlying discourse structure that is intended but not explicitly expressed by the speaker

Filling in the blanks

- Inferences are drawn because they are necessary for comprehension
- Implicit propositions are both a part of the structure of explicit propositions and their own separate store

Filling in the blanks

- Explicit:
 - A carelessly discarded burning cigarette started a fire. The fire destroyed many acres of virgin forest.
- Implicit:
 - A burning cigarette was carelessly discarded. The fire destroyed many acres of virgin forest.

Filling in the blanks

- Ask subjects: Is this true?
 - “A discarded cigarette started a fire.”
- Results:
 - If you ask immediately, the explicit condition is faster than the implicit
 - If you wait 15 minutes before asking, there is no difference

Filling in the blanks

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- Implicit:
 - A burning cigarette was carelessly discarded. The fire destroyed many acres of virgin forest.

Inference: started a fire

Filling in the blanks

- Explicit:
 - A carelessly discarded burning cigarette started a fire. The fire destroyed many acres of virgin forest.
 - Implicit: **What is ultimately held in memory**
 - A burning cigarette was carelessly discarded. The fire destroyed many acres of virgin forest.
- Inference: started a fire

Schemas

- Schema: Structure in semantic memory that specifies the general or expected arrangement of a body of information
- Basic Idea – when we encounter a discourse, we activate the appropriate schema to help comprehend it

Genres

- Discourse with characteristic structure
 - Lectures, sermons, opinion articles, comedy monologues ...
- Provide us with expectations regarding the way information will be organized

Genres

- Example: News article
 - Inverted pyramid
 - Most important points in headline and beginning of article
 - Less important details brought in later
- Related to editing considerations – if space is short, can drop end of story without losing most important information

- Underpants Fail to Mask Robber's Identity (Fri, Oct 05 8:30 AM EDT)
- OSLO (Reuters) - A drunken Norwegian who pulled a pair of underpants over his face and robbed a post office was awakened by police two days later to find he had tipped them off about his identity.
- The 47-year-old drunk charged into the post office and handed over a note saying "This is a robbery," the local newspaper Bergensavisen said on Friday.
- But his wife's name and personal details were on the back of the demand note, the newspaper said.
- The man told a court he did not remember the robbery, but admitted he had a suspicion of having been up to no good when he woke up and saw a picture of the be-knickered robber in the newspaper and found a large wad of money in his living room.

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Genres

- Academic Articles in Psychology
 - Abstract
 - Introduction & Background
 - Methods: Subjects, Stimuli, Procedure
 - Results
 - Discussion
 - Conclusion

Genres

- Narrative stories
 - intro of characters / setting
 - main char sets out toward goal
 - runs into obstacles
 - resolves dilemma

- Mystery novels:
- Agatha Christie vs. Isaac Asimov
 - A skilled author will include enough clues for the reader to anticipate some (but not all!) of the ending
 - At beginning – lots of endings possible
 - At end – only one ending possible (gets narrowed down over story)

Lack of schema

- Present Eskimo folk tales to British university students, ask them to retell the story – they shift the details in order to fit into a narrative more like a traditional English folk tale.
- Folk tales from a culture that is divergent from your own can appear strange
- Apparent Romanian folktale ‘obsession’ with three old men in on a mountain/ in a wood.

Lack of schema

- Title-less paragraphs
 - Christopher Columbus example in book
 - Paragraph about cars, televisions, etc.

Lack of schema

- Activated schema serves as a retrieval plan:
- Same passage – different titles:
 - Subjects remember different details depending on title
- Subjects asked to read passage of burglary, recalled different details when asked to recall from thief perspective and victim perspective

Speech Acts

Uses of speech

Inform

Apologize

Question

Congratulate

Command

Promise

Thank

Offer

Name things

Marry

Direct speech acts

- Use specific form for speech act function
 - Commands / Imperatives
 - Questions
 - Declaratives
 - “I’ll call you Bubba.”
 - “I claim this land in the name of Mars!”

Indirect speech acts

- Disconnect between literal and intended meaning
 - “I’m sorry?” --> I didn’t understand you.
 - BritE “Sorry” --> Excuse me.
 - Western US (?) “That’s okay” --> I don’t want any
 - Southern US (?) “That’s okay” --> I do want some

Indirectness as politeness

- “The litter box needs cleaning” -->
I want you to cleaning out the litter box.
- NOT a random observation about the state of the universe
- “Could you turn up the heat?” -->
I want you to turn up the heat.
- NOT asking if you are physically capable of going to the thermostat and turning the dial in the correct direction

Summary

- Language in the real world
- Understanding discourse
 - Gricean maxims
- Putting meaning from sentences together
 - Anaphors - referring the same thing more than once
 - Inferences - filling in the blanks

Summary

- Language in the real world
 - Schemas
 - Global organization expectations
- Speech Acts
 - Doing more than just inform
 - Indirectness and being polite