Semantics (Part II) More on Argument Structure+Pragmatics

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Last Lecture

- Type Theory

- Part of Argument Structure Theories

All these theories are related to how meaning is mapped onto syntactic structures.

This Lecture

- More on Argument Structure Theories (the constructivist approach)

- Pragmatics (meaning derived neither from propositional logic nor from syntactic derivation)

Problems of the Lexicalist Approach to Argument Structure

- Lexicalist Approach to Argument Structure

- Argument structure is part of the lexical information of the verb, stored in the lexicon

Lexicalist Approach: Problems

The argument structure theory in the lexicalist approach involves the following parts:
a. A verb takes a fixed number of theta roles. If one role is missed or an extra role is added, the sentence will be ungrammatical.
    cf. *John hit.
        *John smiled Mary.
        * John put a book.

b. A theta role has its fixed structural position. If a theta role is placed in the wrong position, the sentence will be ungrammatical.
    cf. *John gave a book Mary.
        *A book reads John
        * There ran a boy.
        There broke a vase

So far so good.

But...

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Lexicalist Approach: Problems

The account of linking and argument structure I introduced encounter problems when the following examples are considered:

    a. The factory horns sirened throughout the raid
    b. The police car sirened the Porsche to a stop
    c. The police car sirened up to the accident site. (Borer 2005)

    a. John walks (every day).
    b. John walks his dog (every day).
    c. John walked his way to a slimmer self (this year).
    d. John walked his shoes ragged.   (Marantz 2013)

Now, can you detect what problem about the lexcialist approach is revealed by the above examples?

Lexicalist Approach: Problems

More puzzles from Chinese:
a. 我今天不吃那家饭店了。
b. 我今天走复古风，既不用电脑打字，也不用圆珠笔，偏偏要写毛笔。
c. 张三是个勤劳的出租车司机，既开白天也开晚上。
d. 我不喜欢睡硬板床。

What is the puzzle exhibited by the above examples?

Against the Lexicalist Approach: The Constructivist Approach to Argument Structure

In the history of generative syntax, the lexicalist approach had taken a prominent position. It was (and still is) assumed that argument structure is part of the lexical information, and the syntactic structure is projected from the verb. This approach is problematic when the argument structure alternation cases are considered, as shown by the siren/walk examples

a. If argument structure projects from the lexicon, the distinct syntax of unaccusatives and unergatives means that there are two entries for variable-behaviour verbs, together with lexical mapping rules which modify argument structure configurations.

b. If we wish to reject the systematic existence of two distinct entries for variable-behaviour verbs, then it follows that at least the syntax of variable-behaviour verbs, and by extension, the syntax of argument structure, cannot project from the lexicon.
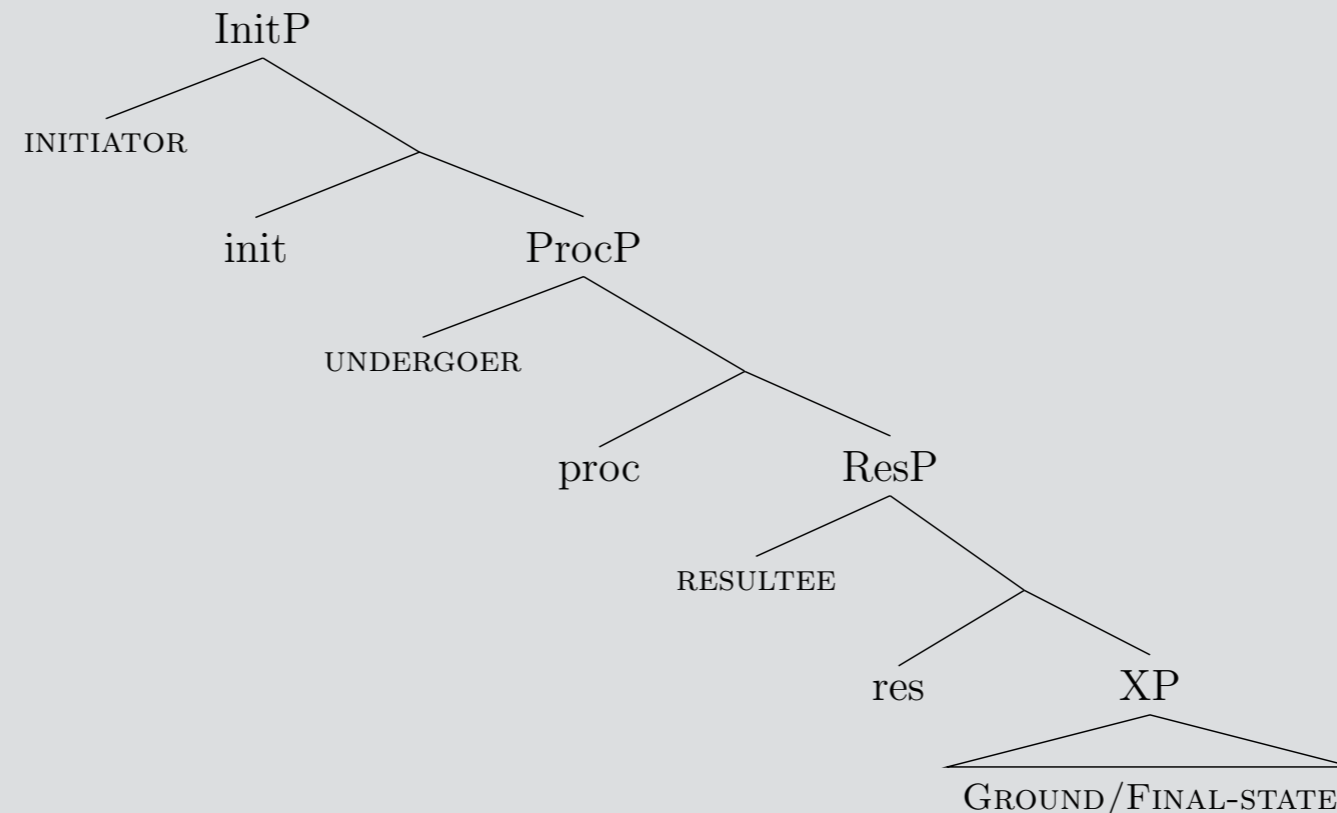
Borer (2005: 45)

The constructivist approach: Over the last decade or so, the majority of work on verbal argument structure has endorsed the general approach of Hale & Keyser, DM researchers, Ramchand, Borer and others.

The basic principles relating verbal meanings to syntactic structure transcend the idiosyncrasies of individual lexical items. What we know about the semantics of the root of this verb should help account for the availability of these structures for verbs like ''walk,'' but the verb itself in no way projects these structures or is responsible for the semantic interpretation of the structures themselves.

The Constructivist Approach: The First Phase Syntax (Ramchand 2008)

(16)

```
                    InitP
                   /    \
          INITIATOR      \
                   init    ProcP
                          /    \
                 UNDERGOER      \
                          proc    ResP
                                 /    \
                        RESULTEE      \
                                 res    XP
                                       /\
                              GROUND/FINAL-STATE
```

- initP introduces the causation event and licenses the external argument ('subject' of cause = Initiator)
- procP specifies the nature of the change or process and licenses the entity undergoing change or process ('subject' of process = Undergoer)
- resP gives the 'telos' or 'result state' of the event and licenses the entity that comes to hold the result state ('subject' of result = Resultee) .

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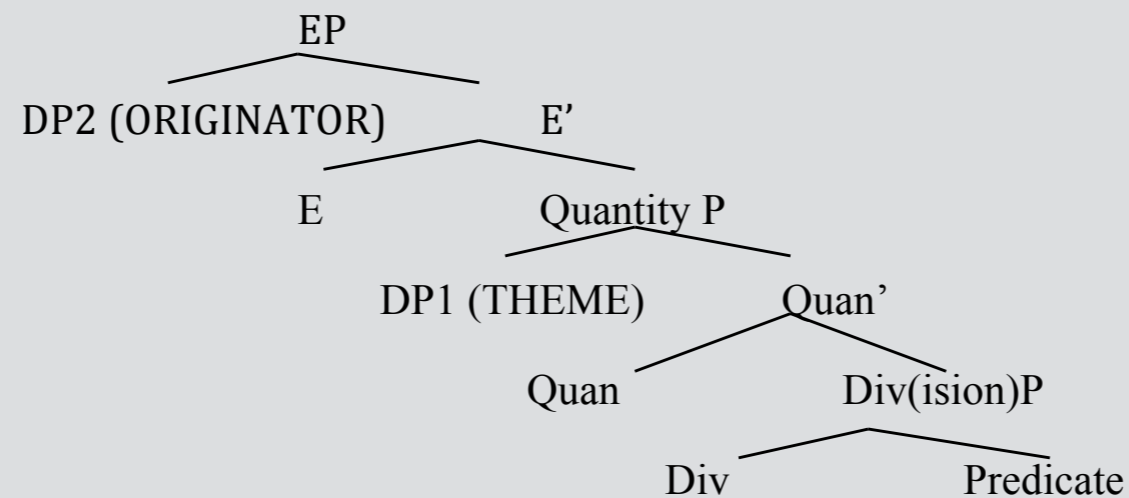
An example: causative alternation

(16) Karena melted the butter.
(17) The butter melted.
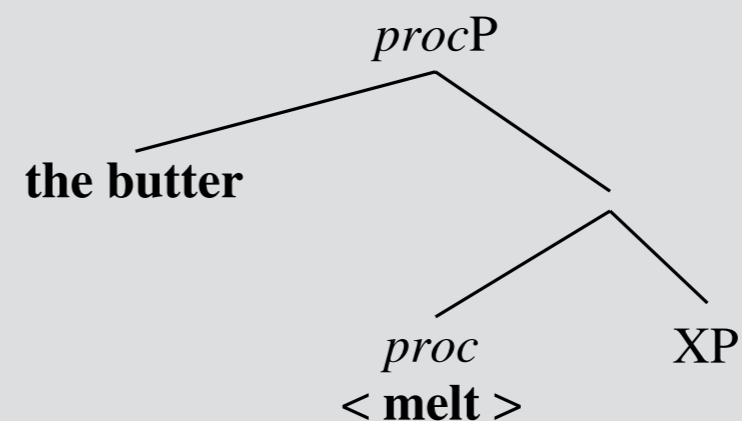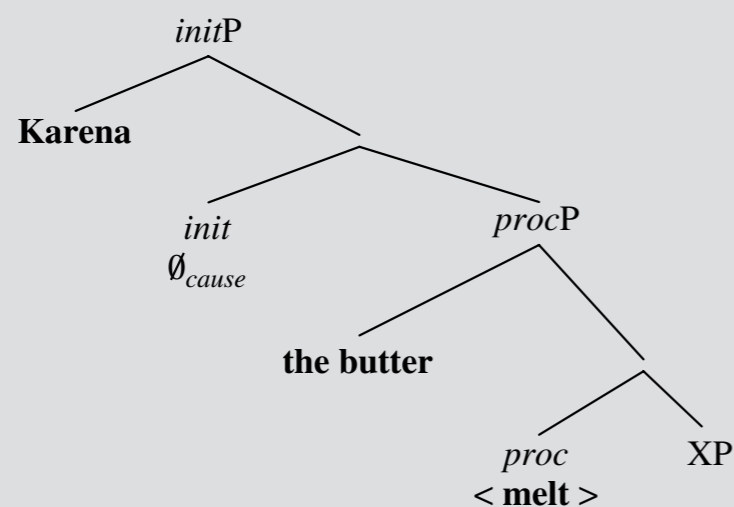
The Syntactic (Functional) Structure of Events in Borer (2015)

The syntactic structure of events is in parallel with the nominal structure (with some modification proposed in Hu 2015, forthcoming):

```
                        EP
              ┌──────────┴──────────┐
        DP2 (ORIGINATOR)            E'
                              ┌─────┴─────┐
                              E       Quantity P
                                   ┌──────┴──────┐
                            DP1 (THEME)         Quan'
                                          ┌──────┴──────┐
                                        Quan        Div(ision)P
                                                 ┌──────┴──────┐
                                                Div         Predicate
```

Pragmatics: Motivation

Saying p, meaning q

(1) A: I'm out of petrol.
    B: There is a garage round the corner.

(2) A: Smith doesn't seem to have a girlfriend these days.
    B: He has been paying a lot of visits to New York recently.

Questions:
What is the nature of meaning q which is beyond the semantic meaning (truth conditional meaning)?

How can meaning q be derived?

Saying and Implicating

What is said: The linguistic (semantic) meaning.

What is implicated (Implicature): The meaning conveyed/intended by the speaker, but not linguistically encoded, i.e. not part of what is said/ semantic meaning.

Question: where does implicature come from?
This is the central issue to be addressed by Grice's Cooperative Principle and the specific maxims.

Grice's Cooperative Principle

Communication is a cooperative, rational activity.

Cooperative Principle (CP): Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged. (Grice 1989: 29)

Rationality: Both sides of a communication activity assumes that the communication engaging them is a cooperative enterprise. Both sides observe the general cooperative principle. Both sides assume that the other side observes the cooperative principle.

Cooperative Principle

The maxims falling under the general Cooperative Principle

Maxim of Quantity:
1. Make your contribution as informative as is required (for the current purposes of the exchange).
2 Do not make it more informative than is required.

Maxim of Quality. Try to make your contribution one that is true:
1. Do not say what you believe to be false; and
2. Do not say that for which you lack adequate evidence.

Maxim of Relation: Be relevant.

Maxim of Manner: Be perspicuous:
1. Avoid obscurity of expression;
2. Avoid ambiguity;
3. Be brief; and
4. Be orderly.

Implicatures Derived via Three Ways

According to Grice, conversational implicatures are derived in three ways.

Group One: No maxim is violated, i.e. implicature is generative with the supposition that the speaker sticks to a certain maxim.

(1) A is standing by an obviously immobilised car and is approached by B; the following exchange takes place:

A: I am out of petrol.
B: There is a garage round the corner.

Implicature: the garage is, or at least may be open.
B would violate the maxim 'Be relevant' unless he takes the above assumption.

(2) A: Smith doesn't seem to have a girlfriend these days.
    B: He has been paying a lot of visits to New York recently.
Implicature: Smith has, or may have, a girlfriend in New York.

Group Two: A maxim is violated, but its violation is to be explained by the supposition of a clash with another maxim.

(3) A is planning with B a schedule for a holiday in France. Both know that A wants to see his friend C, if to do so would not take too much time of the journey.

A: Where does C live?
B: Somewhere in the south of France.

There is no reason to suppose that B is to opt out from the conversation. B's answer is less informative than is required to meet B's needs. This flouting of the first maxim of Quantity can be explained only by the supposition that B is aware that to be more informative would be to say something that infringed the second maxim of Quality: 'Don't say what you lack adequate evidence for.' So, B's implicates that he does not know in which town C lives.

Group C: A maxim is violated/flouted for the purpose of getting a conversational implicature. Flouting a maxim indicates a speaker's intention: the speaker intends the hearer to retrieve an implicature which brings the full interpretation of the utterance (i.e. what is said plus what is implicated) as close as possible to satisfying the Cooperative Principle and maxims.

(a) Flouting the Maxim of Quantity

(4) A is writing a reference letter   about a student who is a candidate for a philosophy job. His letter reads as follows:

Dear Sir, Mr. X's command of English is excellent, and his attendance at tutorials has been regular. Yours, XX.

Implicature: X is not a qualified candidate for the job.
But how is this generated?

A does not intend to opt out
A should be able to say more about Mr X.
A knows more information than that provided in his letter

Therefore, he must be wishing to provide some information that he is reluctant to write down. This supposition is possible only if A thinks that Mr X is no good at philosophy. This is what A is implicating.

(b) Flouting the Maxim of Quality

(5) Irony: X once had been a close friend of A until recently when X betrayed a secret of A's to a business rival. Both A and the hearer knows this.

A: X is a fine friend. (flouting the first maxim of Quality)
Implicature: X is a terrible friend.

How is this implicature derived?

Both A and the hearer know that A has said something that he does not believe. If A's utterance is not pointless, A must be trying to convey some other proposition than the one he purports to put forward. This must be a related proposition.

(c) Flouting the Maxim of Relation

(6) At a party involving many of the department members, A has a communication with B as follows:

A: I just can't imagine why Dr. Smith is promoted to be the Chair Professor.

B (after a moment of silence): The weather today is delightful, isn't it?

Implicature of B: A's remark should not be discussed in the party.

(c) Flouting the Maxim of Manner

(7) A and B are husband and wife.

A: Let's get the kids something.
B: OK, but I veto I-C-E C-R-E-A-M.

Implicature of B: let's not mention ice-cream directly in case they are promoted to demand some.

Particularised Implicature VS Generalised Implicature

Particularised (Conversational) Implicature: an implicature is carried by saying that p on a particular occasion.

Generalised (Conversational) Implicature: The use of a certain form of words in an utterance always carry a certain implicature; no special context is required.

John met a woman this evening.
Implicature: This woman is not John's wife.

John entered a house.
Implicature: John does not own this house.

Scalar Implicature

John has two books.
Lower bound: John has at least two books. (what is said)
Upper bound: John has at most two books. (implicature)

Some of John's friends went to Cambridge last summer.
Lower bound: at least some of John's friends went to Cambridge last summer. (what is said)
Upper bound: some but not all of of John's friends went to Cambridge last summer. (implicature)

The above implicatures are termed 'scalar implicature' or Q-implicature.

Horn Scale: <s, w>, s entails w (s stands for stronger expression while w for weaker expression)

<all, some>, <excellent, good> are typical Horn scales.

Question:
How are these implicatures derived?

Scalar Implicature

Following Grice's Quantity Maxim, we should say as much as we can to make our contribution sufficient.

If a weaker expression is said, it means that the stronger expression is not true: if the stronger is really true, it should have been said so as to obey the Quantity Maxim.

Mores example:
<good, outstanding>
John is a good student.
Scalar implicature: John is not an outstanding student.

<like, love>
Oh, I do like you.
Scalar implicature: I don't love you.

The scalar implicature is one of the central topics in theoretical pragmatics, and many theories have proposed, among which, Horn's is perhaps the most famous.