

LING2006 Semantics

Tutorial: Thematic relations I

Yige Chen

The Chinese University of Hong Kong

Based on tutorial handouts by Dr. Zhuo Chen

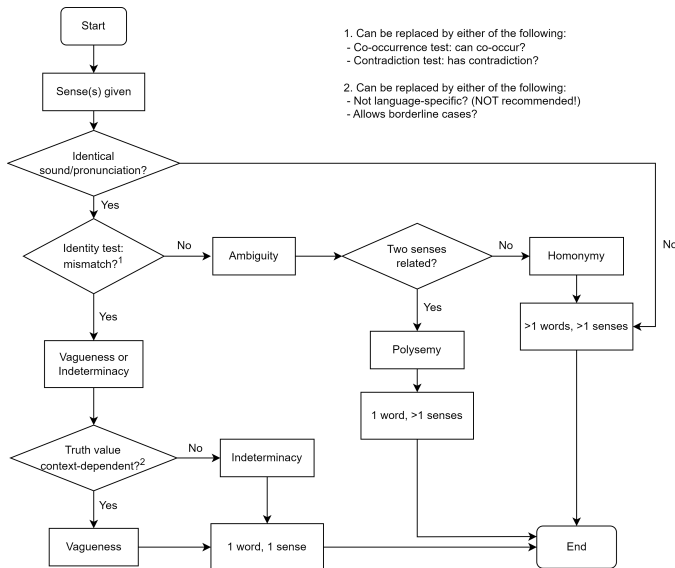
February 28, 2024





- I tend to use the term 'semantic role' instead of 'thematic role', as the former is widely used in NLP
- You are recommended to stick to 'thematic role' while I do believe you have the right to choose whichever you prefer.

Flowchart (in case you didn't check this out)





Please select all answers that apply

- Regarding thematic roles and grammatical positions,
 - Ⓐ There is a correlation between thematic roles and grammatical relations. For instance, only Agent and Experiencer can be in the subject position in English.
 - Ⓑ One grammatical position may be occupied by nominal phrases with different kinds of thematic roles.
 - Ⓒ A Beneficiary can be realized either as the direct object or as the object of a preposition in English.
 - Ⓓ A Location always occurs in the form of a PP in English.



Please select all answers that apply

- Regarding thematic roles and grammatical positions,
 - Ⓐ There is a correlation between thematic roles and grammatical relations. For instance, only Agent and Experiencer can be in the subject position in English.
 - Ⓑ One grammatical position may be occupied by nominal phrases with different kinds of thematic roles.
 - Ⓒ A Beneficiary can be realized either as the direct object or as the object of a preposition in English.
 - Ⓓ A Location always occurs in the form of a PP in English.



Please select all answers that apply

- Regarding types of thematic roles,
 - ☐ A An Experiencer has full control of the situation.
 - ☐ B An Agent is typically intentional.
 - ☐ C A Beneficiary may be negatively affected by the event.
 - ☐ D A Theme is usually affected by the Experiencer.



Please select all answers that apply

- Regarding types of thematic roles,
 - ☐ A An Experiencer has full control of the situation.
 - ☐ B An Agent is typically intentional.
 - ☐ C A Beneficiary may be negatively affected by the event.
 - ☐ D A Theme is usually affected by the Experiencer.



Please select all answers that apply

- Regarding theta grids,
 - Ⓐ Theta grids include information about the grammatical positions occupied by all the participants of a verb.
 - Ⓑ Since some participants might be optional or occur in different grammatical positions, a verb's theta grid might vary.
 - Ⓒ Theta grids do not contain any information about the grammatical positions of any of the participants of a verb.
 - Ⓓ Theta grids include information about how many participants a verb takes.



Please select all answers that apply

- Regarding theta grids,
 - Ⓐ Theta grids include information about the grammatical positions occupied by all the participants of a verb.
 - Ⓑ Since some participants might be optional or occur in different grammatical positions, a verb's theta grid might vary.
 - Ⓒ Theta grids do not contain any information about the grammatical positions of any of the participants of a verb.
 - Ⓓ Theta grids include information about how many participants a verb takes.



Please determine which thematic role the underlined participant is playing.

- The car was crashed into the University Station.
- His friends from CUHK were missed by Batman.
- Philadelphia is always sunny.
- Philadelphia is over 13000km away from Hong Kong.
- This classroom is on the 2nd floor of Lee Shau Kee Building.
- This classroom can fit forty students.



Please determine which thematic role the underlined participant is playing.

- The car was crashed into the University Station.
- Affected:
Someone (deliberately) crashed the car into the University Station.
The car was (deliberately) crashed into the University Station.



Please determine which thematic role the underlined participant is playing.

- His friends from CUHK were missed by Batman.
- Theme:
Batman (*deliberately) missed his friends from CUHK.
His friends from CUHK were (*deliberately) missed by Batman.



Please determine which thematic role the underlined participant is playing.

- Philadelphia is always sunny.
- Location:
It is always sunny [in Philadelphia].



Please determine which thematic role the underlined participant is playing.

- Philadelphia is over 13000km away from Hong Kong.
- Theme



Please determine which thematic role the underlined participant is playing.

- This classroom is on the 2nd floor of Lee Shau Kee Building.
- Theme



Please determine which thematic role the underlined participant is playing.

- This classroom can fit forty students.
- Location:
Forty students can fit [into this classroom].



Please provide theta grids for the highlighted verbs in the following sentences.

- Batman **noticed** a strange smell.
- Superman didn't **give** any gift to his TA.
- Hong Kong Island **lies** to the south of Kowloon.
- Superman **bought** Batman a Tesla.
- The shadow of the tree **scared** Thor.



Please provide theta grids for the highlighted verbs in the following sentences.

- Batman **noticed** a strange smell.
- *notice* V: <Experiencer, Theme>



Please provide theta grids for the highlighted verbs in the following sentences.

- Superman didn't **give** any gift to his TA.
- *give* V: <Agent, Affected/Patient, Beneficiary>



Please provide theta grids for the highlighted verbs in the following sentences.

- Hong Kong Island **lies** to the south of Kowloon.
- *lie* V: <Theme, Location>



Please provide theta grids for the highlighted verbs in the following sentences.

- Superman **bought** Batman a Tesla.
- *buy* V: <Agent, Beneficiary, Affected/Patient>



Please provide theta grids for the highlighted verbs in the following sentences.

- The shadow of the tree **scared** Thor.
- *scare* V: <Theme, Experiencer>



The Kichaga language

- Kichaga is a noun-class language, with 16 noun classes in total
- What are noun classes?
 - Just like genders in languages such as Spanish (e.g. *libro* vs. *agua*)
 - But not limited to 'gender' – may be related to animacy, shape, or even arbitrary classifications with no obvious and explicit reason



The Kichaga language

- Kichaga is a language with subject agreement, i.e., the verb agrees with its subject in noun class
- What is agreement?
 - English also has such subject agreements, though in a different way
 - *I like mathematics* vs. *He likes* mathematics



The Kichaga language

- Kichaga is a pro-drop language
 - A pro-drop language is a language in which certain classes of pronouns may be omitted when they can be pragmatically or grammatically inferable.
 - Chinese is a pro-drop language
 - A: 他看見老師了嗎? (*ta kanjian laoshi le ma?*, 'Did he see the teacher?')
B: 看見了。 (*kanjian le.*, '(He) saw (the teacher).')
i.e., '(他) 看見 (老師) 了。 ((*ta*) *kanjian* (*laoshi*) *le.*)'
ta: he; *laoshi*: the teacher

Practice question (very hard and super important!)



The following data are from Kichaga, a noun-class language with subject agreement, i.e., the verb agrees with its subject in noun class. Please determine theta grids for the highlighted verbs in (1) and (2). Given the grammaticality of (1-3), would you predict (4) to be grammatical or not?

- (1) N-a-i-ly-a k-elya
FOC-1S-PR-eat-FV 7-food
'He is eating food.'
- (2) N-a-i-lyi-i-a m-ka ka-elya
FOC-1S-PR-eat-AP-FV 1-wife 7-food
'He is eating food for his wife.'
- (3) k-elya k-i-lyi-i-o m-ka
7-food 7s-PR-eat-AP-FV 1-wife
'The food is being eaten for the wife.'
- (4) M-ka n-a-i-lyi-i-o k-elya
1-wife FOC-1S-PR-eat-AP-FV 7-food
'The wife is being benefited by someone eating the food.'



Please determine theta grids for the highlighted verbs in (1) and (2).

- *ly* V: <Agent, Affected/Patient>
- *lyi* V: <Agent, Beneficiary, Affected/Patient>



Given the grammaticality of (1-3), would you predict (4) to be grammatical or not?

- (4) is predicted to be grammatical. In particular, (3) shows that the Affected/Patient can be in the subject position, as shown in the noun-class agreement marker on the verb. Since Kichaga allows the Affected/Patient to be a subject, the Beneficiary, which is higher than the Affected/Patient on the Universal Subject Hierarchy, is also predicted to occupy the subject position.
- Agent > Beneficiary > Affected/Patient/Theme > Instrument > Location



- **Midterm: Mar 1 (this Friday), in class**
- Please scan the QR code and complete the attendance form