# **Chapter 3 PROPOSITIONS AND PROPOSITIONAL CONTENT**

# **Same or different?**

## I bought a radio in Singapore

## It was a radio that I bought in Singapore

## It was in Singapore that I bought this radio

# => different expressions

=> same proposition

# **1. PROPOSITION**

## The object of a psychological state (N.Hoa, P189)

## An object of thought (H&H, P23)

## Independent of any particular language (N.Hoa, P190)

## An abstraction grasped by the mind of an individual person

# **\* Distinguishing:**

# Though: mental process

Proposition: abstract semantic entities

Sentence: linguistic entities

Utterance: action, realization of sentence

(Hurford & Hearsley, p23)

# **2. PROPOSITION CONTENT**

## Predicate: events

## Argument: entities

## Role of each argument

# **(1) Predicate**

## One-place predicate

## The kangaroo jumped up

## Two-place predicate

## X. kicked the semantics book

## Three-place predicate

## He gave her a sweet rose

## => The DEGREE of a predicate indicates the number of arguments in simple sentences

# **(2) Argument**

## Arguments: realized by referring expressions

## Argument vs. predicate:

## John is a bachelor

## Argument Predicate

## A bachelor is John => unacceptable

## Participant arguments

## Non-participant arguments: He hit the dog with a ruler

# **(3) Role of argument**

## Semantic roles = means to represent sentence meaning in logical terms, assigned to nouns and noun phrases according to the relation they hold with the predicate

## Doer/agent

## Affected

## Effected

## Locative

## Instruments/means

## Recipient

## Goal

## Experiencer

## Carrier

## Identified

## Identifier

#### The man bit the dog

#### The dog bit the man

## Same predicate: BITE

## Same arguments: MAN, DOG

## Different semantic roles of arguments: doer, affected => different meanings

# **3. NOTATIONAL REPRESENTATION OF PROPOSITIONS**

## Argument: single lower-case letters

## Predicate: capital letters

## She is nice => sNICE

## Mary is smiling => mSMILE

## Joe was in New York last month => jINn

## My brother is the best manager bX (mBEST)

## Embedded propositions as arguments

## She has said that she will wait for me

## sSAYx

## x = sWAITm

# **\* More practice:**

## John and Marry are married

## Arthur dreamt

## Phil introduced Mary to Jack

## Margaret is looking at Billy

## Elen is envious of Jame

## I want you to post this letter

## She is a beautiful girl

## Working hard is a good start

**Answer keys:**

## \* j MARRY m

## \* (j MARRY x ) (m MARRY y)

## a DREAM

## p INTRODUCE m j

## m LOOK b

## e ENVIOUS j

## i WANT x(y POST l)

## s X (g BEAUTIFUL)

## x (w HARD) X(s GOOD)

#### (x = argument, X = predicate)

# Chapter 4 truth functionality

## 

# 1. Simple and composite sentence

## He is very generous.

## He is very generous and he is rich

## Although he is rich, he is not generous.

# 2. Truth functionality

## “ The truth value of a composite proposition is a function of the truth values of its component propositions” *(Nguyen Hoa, P209)*

# 2.1 conjunction p & q

# 2.2. Disjunction p v q

## (1) She either overslept or forgot the time table.

## p q

## (2) Either she or he is the monitor.

## p q

# 2.3 Implication p->q

## If she set the alarm clock, she would be on time for every semantics lesson.

# 2.4. Negation ~ p ~ q

## (p) I love semantics

## (~p) I don’t love semantics

# \* Summary

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **p** | **q** | **p & q** | **p v q**  **(inclusive)** | **p w q**  **(exclusive)** | **p->q** |
| **T**  **T**  **F**  **F** | **T**  **F**  **T**  **F** | **T**  **F**  **F**  **F** | **T**  **T**  **T**  **F** | **F**  **T**  **T**  **F** | **T**  **F**  **T**  **T** |

|  |  |
| --- | --- |
| **Negation** | |
| **p** | **~p** |
| **T**  **F** | **F**  **T** |

# 3. Thematic meaning

## I have seen that lady before

## This lady I have seen before

## It was last month that I saw this lady

# 4. Sentence types and their meaning

## Sentence types ? Mood ?

## Interrogative vs. declarative sentences?

## Imperatives and exclaimatives?

## Mood:

###### indicative?

###### Imperative?

###### Subjunctive?

## 

## => Modality: revised

# practice

## Find out the truth-value of the following composite propositions in the following cases

## For the main course you may have meat or fish

## If I have money I will buy a car

## Elizabeth was born in England and emigrated to New York city

## Nobody answered the number he called

## Either John or his wife makes breakfast each morning.