SYNTACTIC RULES

1. Phrase Structure Rules (PS Rules)

1.1/ Definition:

- + PS rules are the rules that determine the basic constituent structures of sentences.
- + PS rules are said to generate structures.

1.2/ Rules:

a/ Rule 1: generate phrasal categories

e.g.: S => NP + VP: root node

NP => Det + N

 $VP \Rightarrow V + NP$

b/ Rule 2: generate **terminal nodes**

(terminal nodes are nodes that do not branch and that immediately dominate the lexical item)

e.g.: Det. Ns V are terminal nodes

I

e.g: (S) The boy kicked the ball

S => NP (the boy) + VP (kicked the ball) : root node; phrasal categ.

NP => Det (the) + Noun (boy): phrasal category

VP => V (kicked) + NP (the ball): phrasal category

Det => the (boy), the (ball): terminal node

Ns => boy, ball: terminal node

V => kicked: terminal node

The structures generated by both sets of rules are called *phrase markers*.

HOW TO DRAW SENTENCE STRUCTURES USING TREE DIAGRAMS

- 1/ Rewrite the given sentence at the bottom of the blank space.
- 2/ Identify the type of the sentence (question, simple, compound, complex...).
- 3/ Break down the sentence into terminal nodes (I.C).

4/ Determine what modifies what.

- 5/ Group the related words into phrases; mainly NP, VP, AP, PP.
- 6/ Go on grouping until there are two main phrases NP, VP left.
- 7/ Draw from bottom to top; from right to left.
- 8/ Note that there are no gaps between the phrases when drawing lines (phrases must be connected closely by the lines).

Analyze the structures the following sentences by drawing tree diagrams:

Simple declarative sentences

- 1/ Nuclear power plants must have strict safety controls.
- 2/ Our children and grandchildren will suffer the consequences.
- 3/ Poorer nations especially will continue this harmful practice.
- 4/ Burning fossil fuel causes serious damage to our planet.
- 5/ Poorer nations especially will continue this harmful practice.
- 6/ They don't have the money to develop "clean" energy sources.
- 7/ The tourists wanted the receptionist to call a taxi.
- 8/ The students work very hard to pass the exam.

Polar/Yes-No questions (Group 4.1)

WH questions (Group 4.6)

Complex sentences (Group 4.11)

SENTENCE ANALYSIS (cont'd)

- 1/ Nuclear accidents can happen.
- 2/ Nuclear power plants must have strict safety controls.
- 3/ Solar heating systems are economical to operate.
- 4/ The cost of installation is very high.
- 5/ Energy needs are not going to decrease.
- 6/ Energy sources are not going to increase.
- 7/ Burning fossil fuel causes serious damage to our planet.
- 8/ We need to develop other sources of energy.
- 9/ Ecologists know that burning fossil fuels causes holes in the ozone layer.
- 10/ People continue to do it.

- 11/ Poorer nations especially will continue this harmful practice.
- 12/ They don't have the money to develop "clean" energy sources.
- 13/ All nations of the world must take action.
- 14/ Our children and grandchildren will suffer the consequences.
- 15/ There will be a special exhibition of photographs in City Halls between Monday and Friday.
- 16/ He has travelled all around the world showing us amazing scenery, animals and different ways of living.
- 17/ People came in large numbers to Jukkasjãrvi to see the Arctic Hall.
- 18/ The temperature inside the hotel changes according to the temperature outside.
- 19/ It is possible to take a train from the airport to the ICEHOTEL.
- 20/ You can make a reservation now for one of next year's tour.

1.3/ " X-bar" theory

PS rules generally recognize only one level of representation above the terminal node, namely the phrasal level.(e.g: NP, VP, AP, PP... etc (XP) in which X represents either Noun or Verb or Adj., Prep. etc.

The phrasal level (XP) is called the <u>maximal projection</u> (of X) in X-bar terminology.

In X-bar terminology, the obligatory constituent of a maximal projection is called the **head**.

2/ Recursive rule:

the category on the left side repeated on the right side

e.g: You mean (that) you didn't know (that) I know that she didn't know that I saw her eat out with her boyfriend in the Indian restaurant.

3. Transformational rules (T-rules) or Transformations

3.1/ Definition: it is a special type of rule that can move an element from one position to another (transformation).

3.2/ Rules:

a/ Inversion Transformation/ Subject-Auxiliary Inversion (SAI):

It is used in Yes/No questions. The auxiliary is moved from its position within the VP to a position to the left of the subject to signal a question.

e.g: Will the boy leave?

Can the cat climb this tree?

b/ General Transformation rule/ Move-Alpha rule:

It is used in WH-questions. Both the auxiliary and the WH word are moved to the left of the subject to signal a question.

e.g: The boy will find what?

What will the boy find?

c/ Other common T-rules:

c1/ Deletion rule:

- + The conjunction (complementizer) deletion
- e.g: You mean (that) you didn't know (that) I knew.....
 - + Verb phrase deletion:
- e.g: You can cook, and I can, too.
 - c.2/ Insertion rule;
 - + *There* insertion: e.g: There is a book on the table.
 - + -ING insertion: e.g. She walk upstairs crying silently.
 - c.3/ Passive transformation:
- e.g.: He was bitten by the dog.

4. Deep structure:

generated by the PS rules in accordance with the head's sub categorization properties (i.e. the first underlying structure to which a transformation applies)

5. Surface structure:

is the result of applying transformations to an underlying structure (when no further transformations apply)

Phrase Structure Rules -----→ DEEP STRUCTURE -----→ Transformations ------→ SURFACE STRUCTURE

6. Properties of Kernel clause:

- * A Kernel clause/ Independent clause forms a sentence on its own.
- * A Kernel clause is structural complete, not reduced by ellipsis.
- * A Kernel clause is declarative, not imperative, interrogative or exclamative.
- * A Kernel clause is positive, not negative.
- * A Kernel clause is unmarked with respect to all the thematic system of the clause.
- e.g.: My father wrote the letter (Kernel)

The letter was written by my father (Non-Kernel)

They invited John (Kernel)

It was John that they invited (Non-Kernel)

(see p.65, Intro. To English Syntax, HCE 2003 for more examples)



1. Traditional points of view: described the English sentences consisting of two parts

S = Subject - Predicate

S = S V O C A

2. Modern points of view: the structure of English sentences is described under a system of PS rules (IC Grammar)

S = NP + VP

- 3. The roles of NP in a sentence:
 - 3.1/Thematic Role Agent: The agent is a mind-possessor who acts, usually intentionally.
 - e.g: *Huong* has been teaching English for twelve years.
 - 3.2/ Thematic Role Instrument: The instrument is a thing with which the action is done.

The instrument is <u>typically either the object of with or the clause subject.</u>

e.g: They opened the safe with an electronic device.

Penicillin killed the gram-positive bacteria.

- 3.3/ Thematic Role Theme: covers three different classes of theme
- + the first is the role of the often inert entity, which is in a certain state or position or is changing its state or position or unable to move or act.
- e.g: *The girders* were rusting

The ball rolled down the slope.

The news would have shocked the community.

- + the second is the role assigned to clauses
- e.g: For Charlotte to outdo Branwell would shocked the community.

Patrick believed that Emily had the greatest talent.

- + the third class is that of affected mind-possessing entities
- e.g: A wealthy hunter killed the Bengal tiger

The Bengal tiger died.

In an active voice sentence, the theme is typically the subject of the

verb or the direct object of a verb.

3.4/ Thematic Role Experiencer: The experiencer is the one who experiences a mental state or process such as thinking, knowing, believing, understanding, seeing, hearing, fearing, hoping, being surprised etc.

e.g: *The trooper* hoped for a promotion.

Montaigne's words inspired the young poet.

They will see a huge bronze gates between two pillars.

3.5/ Thematic Roles Source and Goal:

a/Source: refers to the location from which someone or something originates

b/Goal: refers to the location that serves or should serve as the destination.

e.g: The delegates left <u>Mexico City</u> (source) for <u>Buenos Aires</u> (goal).

The government (agent) took over <u>a billion dollars</u> (theme) from the poor (source)

- 3.6/ Thematic Role Benefactive: The role of the individual for whose benefit some action is undertaken.
- e.g: The chef baked <u>Jessica</u> a cherry pie.

 The chef baked a cherry cake <u>for Jessica</u>.
- 3.7/ Thematic Roles for Nonargument Noun Phrases (location and time)
- e.g: Dangers waited for them on the mountain.

They have been waiting for us *for an hour*.

Last year the programme supported the poor farmers.