

AAdv → *very*-[Deg]; *so*-[Deg], *too*-[Deg], ...
 Adv → *always*-[Adv], *often*-[Adv], ...

Pron → *I*-[N; Sg, 1st, Nom], *me*-[N; 1st, Acc], *it*-[N; Sg, 3rd, Nom]...
 ProN' → *one*-[N] ProP' → *there*-[P], *then*-[P]
 ProA' → *so*-[A] ProV' → *do that*-[V]
 Conj → *and*-[Conj], *or*-[Conj], *but*-[Conj]...

ii. Phrase Structure Rules (PS Rules). PS Rules dictate how items from the lexicon are assembled into phrases. The output of the PS Rules is a structure called Deep Structure (D.S.).

Phrases for N, V, A, P, C, T, Neg all conform to the following schema:

XP → (YP) X' X' → X' WP X' → WP X' X' → X (ZP)

English is both head-initial, and specifier-initial. Adjuncts appear on either side.

Remaining rules not covered by the X-bar Schema include:

NP → Pronoun P' → Pro-P' A' → Pro-A' V' → Pro-V'
 XP → XP Conj XP VP → NegP VP

iii. Binding Theory. The Binding Theory holds at DS.

Principle A: A reflexive must be bound in its minimal CP.
 Principle B: A pronoun cannot be bound in its minimal CP.
 Principle C: An r-expression cannot be bound.

Definitions:

A *binds* B iff A c-commands B and A and B are co-referential.
 A node A *c-commands* a node B iff A's sister either is B, or contains B.
 An *R-expression* is an expression that refers to some entity.

iv. Transformations. Transformations take as input the DS representation of a sentence, and output the SS representation of a sentence.

They are (i) are obligatory unless stated otherwise, (ii) apply in the following order, and (iii) apply to embedded clauses before matrix clauses.

That-Deletion (Optional).
 Elide the C *that* when it heads a verb's CP complement.

V-to-T Movement.
 When T dominates only a suffix, raise V to the closest T.
 Condition: Applies only to main verb *be*.

T-to-C Movement.
 Raise T to the closest C.

VP Ellipsis (Optional).
 Elide a VP if identical to a VP in preceding discourse.

Tense Hopping.
 When T dominates only a suffix, lower T to the closest V.
 Condition: T may not cross Neg.

Do-Support.
 When T dominates only a suffix, insert the dummy aux *do*.

A Movement (=NP Movement).
 Move an XP to the Spec of T.

A-bar Movement (=Topicalization, Wh-Movement).
 Move a phrase to the Spec of CP.
 Condition 1: No movement out of islands.
 Condition 2: Subject to the *Doubly Filled Comp Filter*.
 Condition 3: Subject to the *Comp-trace Effect*.

Expletive Insertion.
 When Spec of TP is empty, insert the dummy NP *there* or *it*.

Islands: *The Complex NP Island Constraint*. A CP sister to an N is an island.
The Sentential Subject Island Constraint. A CP subject is an island.
The Wh-Island Constraint. A CP introduced by a *wh*-word is an island.
*The Coordinate Structure Island Constraint**. A single conjunct of a coordinate structure is an island.

**Across-the-board (ATB) Movement*. Movement out of both conjuncts of a coordinate structure is an exception to the Coordinate Structure Island Constraint.

v. Other Principles

The EPP (Extended Projection Principle). The Spec of TP must be occupied.

Projection. The head of a phrase projects its features up to the phrasal level.

Full Interpretation. The structure to which the semantic interface rules apply contains no uninterpretable features.

Checking. Uninterpretable features must be checked; once checked, they delete.

Checking under Sisterhood. An uninterpretable **c-selectional** or **inflectional** feature on a syntactic object Y is checked when Y is sister to another syntactic object Z that bears a **matching** feature.

Stray Affix Filter. An affix must combine with a stem under a common head node before the pronunciation rules apply.

Doubly Filled Comp Filter. A *wh*-phrase may not be sister to a C occupied by an overt complementizer.

Comp-trace Effect. A lexically filled C node cannot immediately precede a trace.

Coreferentiality Hypothesis. For two expressions to be coreferential, they must bear the same PHI-features.

3. Homework Review/Practice.

- (1) They unexpectedly discovered the planet in early March.
- (2) Their unexpected discovery of the planet in early March changed everything.
- (3) discover [V; ... ; uN *uN] Has an external argument!
- (4) There occurred several problems at that point.
- (5) Several problems occurred at that point.

(6) occur [V; ... ; uN] Does not have an external argument!

(7) It is likely [that something will happen].

(8) [That something will happen] is likely.

(9) It is likely [for something to happen].

(10) [For something to happen] is likely.

(11) likely [A; ... ; uCP] Does not have an external argument!

Only predicates that *do not* have external arguments permit Expletive Insertion:

(12) *There several people wept at that point.

(13) Several people wept.

(14) There were squirrels in the bed.

(15) Squirrels were in the bed.

4. More on infinitives.

(16) Something is likely to happen.

(17) a. It seems that Jimmy has left. b. Jimmy seems to have left.

(18) a. Jimmy did not wish to leave.
 b. *It did not wish [for Jimmy to leave]. (Where *it* is an expletive.)
 c. *[For Jimmy to leave] did not wish.
 d. Jimmy did not wish [that you would leave].
 e. Jimmy did not wish [for you to leave].

(19) a. I am excited to leave.
 b. I was excited [that you might leave].
 c. I was excited [for you to leave].
 d. *It was excited for you to leave. (Where *it* is an expletive.)
 e. *[For you to leave] was excited.

5. Other languages.

English:	Head-initial, Specifier-initial. Adjuncts initial or final; V-to-T Movement only for main verb <i>be</i> ; Tense Hopping, <i>Do</i> -Support; T-to-C Movement for interrogatives; A-bar Movement optional in declaratives; A-bar Movement for <i>wh</i> -questions. A-Movement and Expletive Insertion to satisfy EPP.
Irish:	Head-initial; Specifier-initial. V-to-T Movement. C occupied by complementizer for interrogatives.
German:	Head-final VPs & TPs, otherwise head-initial, Specifier-initial; V-to-T Movement; T-to-C Movement for interrogatives and declaratives; Topicalization obligatory in declaratives.
French:	Head-initial, Specifier-initial. V-to-T Movement. T-to-C Movement for interrogatives.
Japanese:	Head-final; Specifier-initial. Tense Hopping, <i>Do</i> -Support C occupied by complementizer for <i>Yes/No</i> -Questions