

3. @ The Clause

While the main body of this text has focused on Functional Features and their involvements within the Phrase--constituting much of our discussion thus far on a narrow scope of morpho-syntactic features at the *Phrase level*, we now turn our attention to broad scope syntax and look to see if traditional notions of *Clause and Sentence levels* might not be captured in an equally stimulating way. Although there may not be much in the way of any functional features at the Clause level, since a clause is ultimately involved with stringing phrases together, and, as we have seen, phrases have already exhausted the inherent roles played by features, there may, however, be other new and interesting ways to think about Clauses. The following section attempts to define and scrutinize the infrastructure of the clause by introducing two new and very important concepts that have come out of Generative Grammar: (i) the **Empty Category** and (ii) **Movement**.

The Clause is traditionally defined as an expression which minimally contains a *Subject* and *Predicate* (viz., DP & VP). Therefore, any environment which strings a DP along side a VP has the potential of forming a clause:

(167) DP + VP → Clause

The distinguishing factor between a clause vs. a basic sentence (since both are defined as sharing the same material, subject + predicate) is that (i) a basic sentence doesn't enter into an arrangement with a dependent clause (forming a complex sentence), and (ii) an independent clause does. Hence, if we are talking at a complex sentence level (with two or more clauses), then an otherwise basic sentence becomes an independent clause. And if we are talking only at a basic sentence level (with only one clause of which to speak), then we maintain the label of simple sentence. Consider the following italicized clauses below:

(168) Token Clauses Clause Type: Complement Clause:

(a) Mary thinks *that John is sick* (a') "That Clause" (a") *John is sick.*

→ (Head Clause-1: *Mary thinks* & Complement Clause-2: *John is sick*)

(b) John studies *because one test remains* (b') "Subordinate" (b") *one test remains*

→ (Head Clause-1: *John studies* & Complement Clause-2: *One test remains*)

What you should note about the two token (complex) sentences is that there are two clauses per each sentence: the Head (or initial) Clause and the Complement (or final) Clause. One nice way to spot such complexity is to see whether or not there are projected functional features having to do with Tense and Agreement regarding two or more verbs in the overall sentence. If so, then you have a

complex sentence with two [+Fin] clauses on your hands. In short, if there are two verbs with T/Agr features, then you have potentially two (basic) sentences (or one complex sentence) made up of two clauses. In sentence (168a), there are two verbs with functional Tense/Agreement features spelled out (*thinks* and *is*)--and hence, there are two clauses. Likewise with sentence (168b), there are two [+Fin] verbs sporting T & Agr: (*studies* and *remains*). So, spotting and counting feature projections within a sentence can actually guide the overall analysis at the clause and sentence levels. However, some clauses may contain no functional features whatsoever on the Verb (and at times may even be Verbless)--such clauses are referred to as **Small Clauses** (=SC). In fact, Small Clauses appear to contain no typical functional predicate/verb material associated with Inflection--that is, a SC may contain no Auxiliary or Infinitive “to” particle.

Consider the Small Clauses below and remember that even though they constitute (as a class) a sort of elliptical or shortened clause (as can be seen via our substitution test below) they are not fully fledged clauses: they maintain no full predicate value in light of the absence of a [+Fin] verb.

Small Clauses Consider the following S(mall) C(lauses) below:

- (169) (a) I believe [The president incapable of telling the truth].
 (b) I want [John off the team].
 (c) Will she find [me a real bore]?

(170) SC Substitution Test for Full Clause status: (showing [+Fin] vs. [-Fin] Clause):

Token Sentence

Constituency Status

- (a') I believe (that)[The president *is incapable of telling the truth*] → [+Fin] Clause
(Case: The President = He) → [+Nom], [+T/Agr]
- (b') I want [John *to stay off the team*] → [-Fin] Clause
(Case: John = him) → [-Nom], [-T/Agr]
- (c') Will she find [me *to be a real bore*]?
→ [-Fin] Clause
→ [-Nom], [-T/Agr]

In the above examples, we see that a Small Clause that shows no verbs can readily be lifted to a full clause status by filling in the required predicate material--in this case, by projecting the relevant verb.

(171) **Empty Category** Having briefly looked at the deficient structure of Small Clauses, there however appear to be times when there may be more to a Clause than first meets the eye. Again, by calling on our substitution test, we quickly find that what first might appear as an Infinitive Phrase (cf., italicized (170b, c) above, might actually have the internal structure of a clause (if not at the surface phonological level, at least on a more abstract covert level--say, at a level in which features reside.

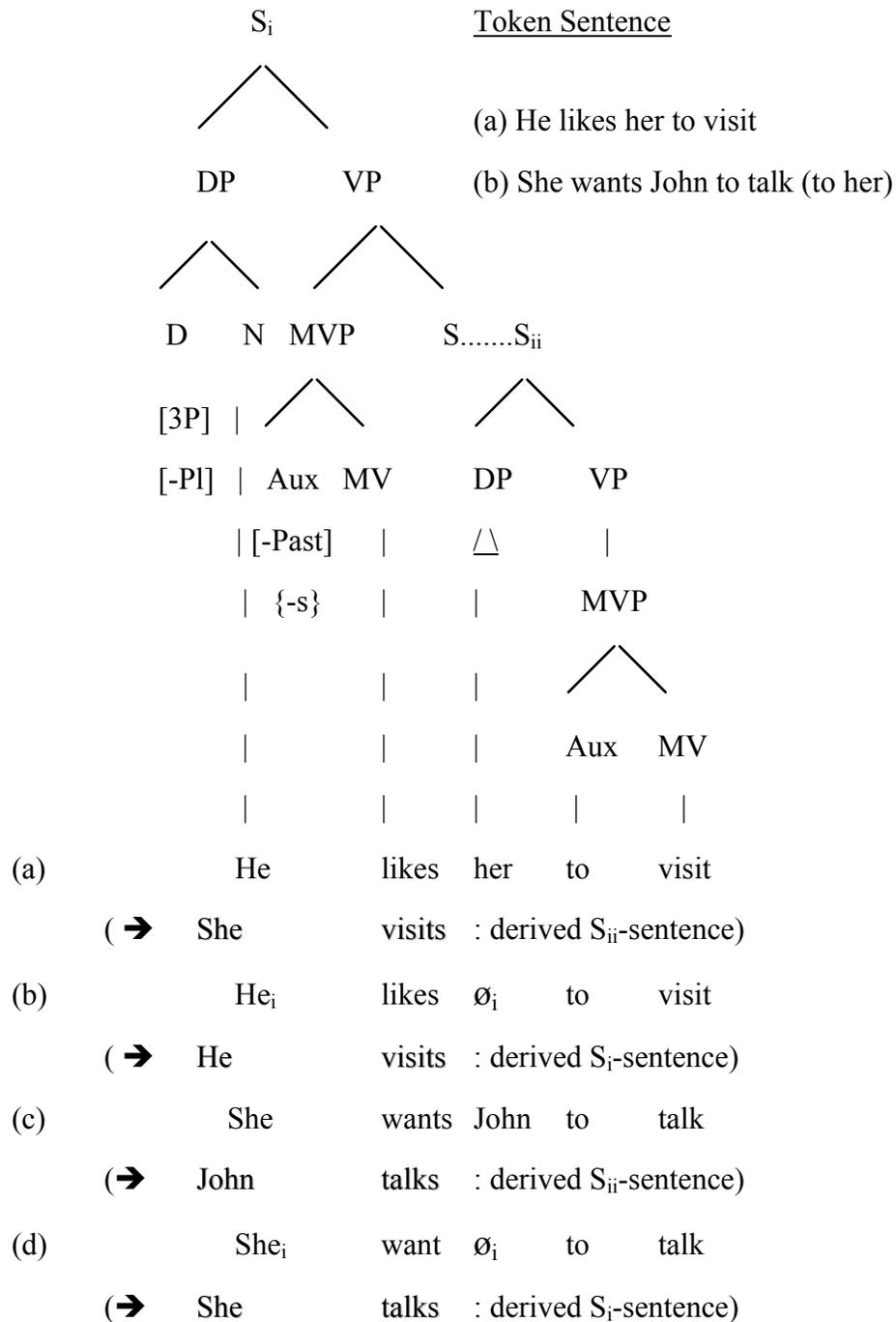
Consider the clauses below:

(172)

- (a) He likes [her to visit] → He likes that She visits
- (b) He likes [∅ to visit] → He_i likes that He_i visits
- (c) She wants [John to talk] (to her) → She_i wants that John talks (to her_i)
- (d) She wants [∅ to talk] (to him) → She_i wants that She_i talks (to him)

What is interesting here is that while each of the subjectless infinitive strings (172b,d) may appear to be of a phrasal classification, their substitution counterparts show a potential subject slot within the constituency--promoting its status from a single constituent phrase to a multi-constituent clause. (Recall, that two phrases create a clause: in this sense below, an empty subject DP (PRO) merges with the VP to form a clause). Hence, much in the same way that zero allomorphs were viewed as projecting features despite the fact that no element in that slot appeared on the surface, we too view (172b,d) as full clauses which happen to take a zero allomorph (of sorts) in the embedded subject position. In other words, we can argue that subjectless infinitive clauses are headed by a **Null Subject** and that even though these slots may be *empty* at the phonological surface level (=empty category), they are (psycho-linguistically) understood as subjects with the same referential and functional feature properties pertaining to all typical Pronouns. The null subjects may either have (i) *binding properties* that relate the PRO back to its controlling subject of the initial clause, or (ii) *free properties* that keep the PRO independent of the matrix clause. Control Binding properties are illustrated in (172b,d) while free pronoun properties are illustrated in (172a,c). Binding properties render the overall sentence as an S_i-derivation since (i) the covert PRO and (ii) overt Subject of the matrix clause are simple extensions of one another. Conversely, free pronouns, sharing no indexing, are independent from one another--hence rendering the overall sentence as an S_{ii}-derivation.

(173) Infinitive Null Subject Clauses:



Using relevant Generative Grammar terminology, the zero allomorph $\{\emptyset\}$ as the subject of an Infinitive clause is referred to as a **PRO-drop** subject since the PRO-noun of the clause is missing. Note that PRO has an antecedent that crosses clausal boundaries--in (173b) and (173d). Also note that the *covert* PRO empty category of the Infinitive [-Fin] clause has its subject features tethered to the *overt* PRONoun of the Finite [+Fin] clause. Hence, these empty PRO subjects are understood as having a co-indexing of features with the overt subject, or in more technical terms, as having an antecedent relationship with the subject of the matrix clause. This otherwise implicit covert subject becomes quite explicit when examining the informal predicate logic of the following (S)entences below (with example (174c) showing antecedent binding):

(174) I/She want [x], where [x] is [something]

(a) I want him to write the paper.

→ (i) *I want* [x], where [x] = [*He writes the paper*]

→ (ii) [S [S_i [I want]] [that [S_{ii} [He writes the paper]]]]

(b) She wanted me to show him my book.

→ (i) *She wants* [x], where [x] = [*I show him my book*]

→ (ii) [S [S_i [She wanted]] [that [S_{ii} [I show him my book]]]]

(c) Mary wants to complete her degree.

→ (i) *Mary_i wants* [x], where [x] = [*Mary_i completes her degree*]

→ (ii) [S [S_i [Mary_i wants]] [that [S_{ii} [Mary_i completes her degree]]]]

Moreover, note in (175) below how the otherwise implicit subject becomes clearly visible when the relevant Infinitive [-Fin] clause is paraphrased by its Finite [+Fin] clause counterpart. Typically, the process behind an overt subject projection forces the infinitive {to} to delete while promoting the matrix verb from having a [-Fin] status to having a [+Fin] status encompassing the full range of T/Agr features.

(175) PRO subjects and Paraphrasing an Infinitive Clause to a Finite Clause:

- (a) He is sorry [\emptyset to have spoken too softly].
- (a') He is sorry [*he has spoken too softly*].
- (b) I am hoping [\emptyset to have a stipend this year].
- (b') I am hoping [*I have a stipend this year*].
- (c) She has been claiming [\emptyset to be divorced for years].
- (c') She has been claiming [*she is divorced for years*].

The fact that the bracketed {to} infinitive clause seems to map nicely onto its italic clause counterpart adds further support to the notion that a PRO empty subject is always at least syntactically present in all Infinitive Clauses. The fact that it may not be sounded simply speaks to concerns at the phonological level and needn't concern us at the morpho-syntactic level.

One additional argument that we can factor into all of this concerns the syntax of reflexive pronouns. Recall that co-indexing has become a hot topic for us regarding feature relationships and exchanges between two pronouns. Consider how such reflexive co-indexing might necessitate a PRO subject:

(176) **PRO subject Infinitives with Reflexives**

- (a) Mary likes [PRO_i to test herself_i]

(Mary controls PRO) & (PRO is the antecedent of herself)

- (b) John needs [PRO_i to watch himself_i]

(John controls PRO) & (PRO is the antecedent of himself)

In the above examples, PRO is controlled by the overt subjects (*Mary/John*) while *herself/himself* must have their antecedents within their own bracketed clause (for reasons having to do with a general principle that says binding requires a local adjacency condition). Without a local PRO in the bracketed Infinitive clause, the binding operation would not be sufficiently close to carry and project the relevant co-referential features.

There are other examples of [-Fin] V(erb) clauses worth discussing. These clauses tend to go without the Infinitive {to} particle thus making it hard sometimes to evaluate the status of the clause. Recall in our discussions above regarding [-Fin] verbs, that there were two other forms of Infinitives in addition to the {to} form: (i) the ‘Bare V’ form, and the (ii) ‘ing V’ form. Consider the two additional [-Fin] forms making up their respective clauses below:

(177) <u>Infinitive Clauses without {to}</u>	<u>Form of Clause & Features</u>
(a) Is his teacher making [<i>him write the paper</i>]?	[-Fin] Bare V [-Nom, -T/Agr]
(b) Is his teacher giving him the paper?	Non-Clause: Phrase Status
(c) Did you see [<i>him walking with her on campus</i>]?	[-Fin] ing-V [-Nom, -T/Agr]
(d) Did you show him to the principle?	Non-Clause: Phrase Status

First of all, let’s recognize that only the bracketed constituents in (177a,c) instantiate a clause by the mere fact that they project at DP and a VP (as stipulated in (167) above). Note that examples (177b,d) fail to provide us with the stipulated DP & VP rule. Therefore, examples (177b,d) are simple interrogative sentences which either encode a Double DP indirect and direct object (respectively) as in (177b), or a PP projection as in (177d). In either case, examples (177b,d) don’t constitute a double clause projection. Sentences (177a,c) however do constitute a double clause projection since both required elements (DP and VP) are present:

- (178) (a) [[DP him] [VP write the paper]]
 (b) [[DP him] [VP walking with her] [PP on campus]]

It’s not difficult to see that for such clauses all relevant functional features having to do with Case and T/Agr are set to a [-] specification. Case is set to a default (automatic setting) [-Nom] Accusative Case (*him*) while the T/Agr features on the verb go missing (*write/walking*).

(179) [-Fin] features on Clause vs. [+Fin] Features on Clause

(a) [DP [-Nom] *Him*] [VP [-T/Agr] *write*] (a') [DP [+Nom] *He*] [MVP [+T/Agr] *write-s*]

(b) [DP *him*] [VP *walking*] (b') [DP [+Nom] *He*] [MVP [+T/Agr] *is walking*]

Consider the paraphrase clauses below showing promotion of features--elevating the reduced [-Fin] clause to a unreduced [+Fin] clause now showing its full range of feature specification [+Nom, +T/Agr]:

(180) Reduced [-Fin] Clause Paraphrased [+Fin] Clause

(a) Did you watch *him present the book*? (a') Did you watch *while he presented*...

(b) Did you watch *him walking with her*? (b') Did you watch *while he walked*

...

(181) **Summary of [-Fin] Clauses**

Infinitive/Participle Structure

Token Phrase/Clause (*italicized*)

(a) with subject:

We would like *you to stay*.

(b) without subject:

We would like *to stay*.

(c) preceded by “for”:*

They are waiting *for him to play*.

(d) Bare Verb form (without “to”):

Is the teacher making *him write the paper*?

(e) “ing” Verb form:

Did you see *him walking with her*?

(f) “ing” Adjective form:

The cat *sleeping on the mat* is gray-white.

→ (*The cat sleeping* is gray & white) (=‘The sleeping cat’)

* Note that the “for” in Example (181c) has an entirely different syntactic function than the commonly understood preposition “for”. Above, *for* functions as a Complementizer in that it serves to introduce the subsequent clause: the complement of *for* is the clause. Consider the different functions between Prepositional and Complementizer *for* below noting that one nice way to tell the distinction is by invoking a movement operation (see movement in §4 below) by forming a wh-question among the two lexical items. The Prep(ositional) Phrase (PP) headed by preposition *for* can undergo movement (fronting) and be positioned at the beginning of the sentence whereas the Comp(lement) *for* may not. More specifically, an interrogative expression like *who/what/which one?* can

be pre-posed in the front of a sentence (with or without *for*) only if *for* functions as a preposition. Consider the distributional fall out of the two functions of *for* under such movement:

(182) Preposition “for”

- (a) Base order: I will study *for the class at night*
- (b) Wh-question: Which class will you study *for at night*?
- (c) Movement: *For which class* will you study at night?
(*For this class*, I will study at night)

(183) Complement “for”

- (a) Base order: I am looking *for the Prof. teaching the class*.
- (b) *Wh-question: *Which Prof. are you looking *for teaching the class*?
- (c) *Movement: **For which Prof* are you looking teaching the class?
*(*For the Prof.*, I am looking teaching the class)

Similarly, only a Comp *for* can be substituted by a that-clause (though note the feature change regarding the [+/-Finite] feature of the selected matrix clause):

(184)

- (a) Is it right *for there to be a fight about it*? → [-Fin] [-T] “to” infinitive
- (b) Was it right *for him/*he to do that*? → [-Fin] [-Nom] Case (*him*)
- (c) Is it right *that he/*him should be awarded*? → [+Fin] [+Nom] modal (*he*)
- (d) *Is it right *that there to be a fight about it*? Crash: [+Fin] requires [+T]

Noting the so called “Feature Crash” in (184d) above where the Comp *that* must select a [+Fin] clause with Nom case and Tense, we quickly discover that different Comps may select for different formal grammatical features--even though both *That* and *For* (among others) are to be classified as Complementizers, they partake in inherently different feature selections: e.g., *That* is [+Fin] and *For* is [-Fin].

Features on Comp Since Complementizers are classed as functional categories, their internal make-up must also include some amount of feature specificity. For instance, the Complementizers (*that*) encodes a [+Fin] (Finite) Feature by virtue of the fact that they exclusively select a Finite Clause containing both a [+Nom] case on the (pro)noun as well as [+T/Agr] features on the verb. By contrast, the Comp (*for*) encodes the specific feature of [-Fin] (non-finite) since it selects an Infinitive clause. Consider the feature distributions of the clause types below:

(185) <u>That-clause: [+Fin] Comp</u>	<u>Clause Feature specification</u>
(a) I think that <i>she is</i> a brave student.	[+Nom], [+T present]
(b) *I think that <i>she to be</i> a brave student.	[+Nom], *[-T] → feature crash
(c) *I think that <i>her is</i> a brave student	*[-Nom], [+T] → feature crash

In order for the Complementizer *That* to serve its role as a [+Fin] Comp, it is required to select both a (i) [+Nom] subject along with (ii) a [+Tense] Finite Verb. In contrast, consider the for-clause feature selection below:

(186) <u>For-Clause: [-Fin] Comp</u>	<u>Clause Feature specification</u>
(a) I want for <i>him to do</i> well	[-Nom], [-T]
(b) *I want for him <i>does</i> well	[-Nom], *[+T] → feature crash
(c) *I want for <i>he to do</i> well	*[+Nom], [-T]

In addition to the specific feature of Tense, the Agreement feature also enters into a [+Fin] Clause Projection--recalling, the [+Fin] requires both +T/+Agr as well as [+Nom] case. Returning our attention to the empty category (PRO) presented above, we quickly see that Agreement must be preserved between the overt subject and the empty PRO of the matrix clause--the Agreement features have to do with Number & Person. Consider the Agr relation in following clauses below:

(187) Agreement in Clauses

Agr Feature Matrix

(a) John and Mary_i want [*PRO_i to become students /* a student*] They = [3P, +Pl]

(a') They are students/* a student)

(b) John_i wants [*PRO_i to become a student/*students*] He = [3P, -Pl]

(b') He is a student/*students)

(188) **Summary of [+Fin] Clause**

Finite Clause Structure

Token Clause

(a) Independent Clause

He needs to review for the upcoming exam.

(b) Dependent Clause

(because) *new material will be presented.*

(c) Independent Clause

The students like to drink beer in the pub.

(d) Dependent

(while) *they study for final exams.*

(e) That-Clause

I think that *he likes you.*

(189) **Movement** As we have seen above, movement operations also can help define the Clause level of sentence structure. On a basic level, conditions placed on *constituency* require the whole clause to stay together in the event of some form of movement. **Constituency** here is defined as a (self-contained) structural unit or expression out of which a sentence is built up: e.g., Phrase-level constituency (as in PP, VP, DP) as well as Clause-level constituency (as in Dependent vs. Independent Clause). Consider how the following clause constituents maintain their cohesive structure even though they appear to have been scrambled within a sentence:

(190) Clause Movement

(a) I decided to wait till Friday to buy my supplies [*since the book store was so crowded*].

(b) *Since the book store was so crowded*, I decided to wait till Friday to buy my supplies

Notice below that one cannot move just a part of the clause and break the constituency:

(191) **Clause-level Constituency Violations**

- (a) I decided to wait till Friday to buy my supplies *since the book store was (so crowded)*.
- (b) **So crowded*, I decided to wait till Friday to buy my supplies *since the book store was*.
- (c) I decided to wait till Friday to buy my supplies *since the book store (was so crowded)*.
- (d) **Was so crowded*, I decided to wait till Friday to buy my supplies *since the book store*.
- (e) He must have worked late into the night *for him to be so tired*.
- (f) *For him to be so tired*, he must have worked late into the night
- (g) *The night *For him to be so tired*, he must have worked late into.
- (h) * Late into the night *for him to be so tired* he must have worked.

Note that this same constituency condition is placed on the Phrase-level as well:

(192) **Phrase-level Constituency Violations**

- (a) She does like to see [DP *which films*]?
- (b) *Which films* does She like to see?
- (c) **Films* does She like to see *which*?
- (d) There are many good research journals [PP *on the second floor of the library*].
- (e) *On the second floor of the library*, there are many good research journals.
- (f) **Of the library*, there are many good research journals *on the second floor*.
- (g) The soldiers stood at attention [VP *hoping to get praise from their sergeant*]
- (h) *Hoping to get praise from their sergeant*, the soldiers stood at attention.

(i) *Stood at attention *Hoping to get praise from their sergeant* the soldiers.

The actual VP here is elliptical and could be more correctly referred to as a dependent progressive clause--e.g.,

(j) The soldiers stood at attention (*while they were*) *hoping for praise*.

Coming on the heels of example (192j) above, what the various substitution tests show is that very often what might seem to be less than a clause is actually a clause once you consider the possibility that an ellipsis has occurred. Consider such elliptical clauses which appear at first glance to be of a fragmented phrase (without a subject):

(193) (a) I saw the accident *while driving home*.

(b) *While driving home*, I saw the accident. → Elliptical [-Fin] Phrase:

- Subject omission
- Aux omission

(c) I saw the accident *while I was driving home*. → Full [+Fin] Clause:

- Subject [+Nom]
 - Aux [+T/+Agr]
- progressive

3.1 Independent & Dependent Clause

In this section, let's review those defining aspects that separate an Independent Clause from a Dependent Clause. First of all, the grammatical term Independent means precisely that "Independent": its full meaning is not bound to some outside intra/inter-sentential source. In simple terms, an Independent clause is a clause that can stand on its own (as a possible sentence). A Dependent Clause (containing a subject and main verb) on the other hand must however link-up with some additional outside clause information in order to maintain its full and potential meaning. An Independent Clause in this sense then is tantamount to being a reduced simple sentence (albeit a simple sentence which is complicated by the fact that it serves in proximity to another (dependent) clause). Perhaps the best way to understand the workings of this tag-team dual structure is simply by looking at various examples of the two clauses at work. Consider the following Independent vs. Dependent Clauses below:

(194) He walked to the meeting because the bus drivers went on strike.

(a) He walked to the meeting. (Independent Clause)

(b) because the bus drivers went on strike. (Dependent Clause)

(195) After we spoke about the syntax project, we all met at the pub for a beer.

→ We all met at the pub for a beer after we spoke about the syntax project.

(b) We all met at the pub for a beer. (Independent Clause)

(c) after we spoke about the syntax project. (Dependent Clause)

(196) I saw an accident while I was driving home.

(a) I saw an accident (Independent Clause)

(b) while I was driving home. (Dependent Clause)

The (Independent) clauses--*He walked to the meeting, We all met at the pub for a beer, I saw an accident*--can stand alone as potential basic sentences; however, their matrix (Dependent) clauses--*because the bus drivers went on strike, after we spoke about the syntax project, while I was driving home*--cannot. There is no complete or fully cohesive subject/predicate meaning behind the following fragmented sentences and when spoken or written down (punctuated as a sentence), they are referred to as **Sentence Fragment** errors:

(197) **Sentence Fragments: (S/F)**

- (a) *Because* the bus drivers went on strike. → [Dep Clause: no Indep meaning]
- (b) *After* we spoke about the syntax project. → [Dep Clause: no Indep meaning]
- (c) *While* I was driving home. → [Dep Clause: no Indep meaning]

Given a closer look, one notices that what in fact makes the fragments above Dependent is the insertion of a sole Sub(ordinate) Conj(unction), and the feature conditions with which they put on the complement clause. In other words, it is possible to drop the Sub Conj here and attain a completely perfect Indep(endent). clause/basic sentence: e.g., *The bus drivers went on strike. We spoke about the syntax project. I was driving home.* In a funny sort of way, it is by “adding” something onto an otherwise Independent clause that we render the clause Dep(endent). Typically, one imagines the converse--that sentence fragments are formed due to something incomplete or missing--here, quite the opposite is the case. The insertion of the Sub Conj renders an otherwise good sentence incomplete.

In addition to serving as a conjunctive particle, unifying two separate but related clauses, the conjunction also carries with it certain functional features. Below, we examine the roles of such functional features associated with both Sub Conjunctions as well Relatives.

(198) **Feature Selection of Complement Clause**

Starting with the fragment in (197a) above, the Subordinate Conjunction “*because*” (maintaining the semantics/logic proposition of *cause and effect*) could be said to carry a formal feature within its lexical entry (as part of its sub-categorization) which requires it to introduce only a dependent clause as its complement. In other words, owing to this lexical feature specification, by definition, there is no way that the lexical class of words which make-up

subordinate conjunctions could ever be a Head of an Independent clause. Consider the full range of feature specification for the list of Subordinate Conjunctions below showing both the fact that they must introduce a Dep clause (notated as +Dep Comp(lement) as well as their semantic/adverbial scope [time, cause/effect, manner etc.):

(199) **Summary of Subordinate Conjunctions**

Feature Spell-out	Token Conjunctions
[+ Dep clause Comp] [+Time]	after, as soon as, before,
[+ Dep clause Comp] [+Manner]	as, as if, as though, like
[+Dep clause Comp] [+ Contrast]	although, though, whereas, while, except
[+Dep clause Comp] [+ Cause & Effect]	because, in that, now that, since, so that
[+Dep clause Comp] [+ Condition]	if, in case, provided (that), unless,
[+Dep clause Comp] [+ Purpose]	so that, in order that
[+Dep clause Comp] [+ Comparison]	as...as, more/less than, than

What is important to understand here is that each of the Sub Conj listed above (i) shares a common feature that requires the conjunction to introduce a Dependent Clause, as well as (ii) holds a specific lexical (idiosyncratic) feature which helps to project a specific meaning. The former common feature (serving to introduce a Dep Clause) is notated above as [+Dep clause Comp], while the latter individual feature is notated as e.g., [+Time], [+Manner], etc. Take the [+Time] feature for instance, clearly the Conj. *after* introduces a concept of “time” into the proposition--e.g.,

- (200) (a) I saw him *after* he took the test. → after [+Past]
 (b) I saw him *before* he took the test. → before [-Past]
 (c) I saw him *while* he took the test → while [-Past/+Present]

(See Appendix-2 for definitions/contrasts between Sub. Conjunctions and Conjunctive Adverbs.)

(201) **Difference between Subordinate Conjunction & Preposition**

There is often a considerable amount of confusion in deciding whether or not a word such as *before* or *after* is a Conj(unction) or a Prep(osition). For starters, recall that as part of the common feature specification (as outlined in (199) above), there is the stipulation that Sub. Conjunctions must be [+Dep Clause Comp]--that is, a Dependent Clause must ensue. So, to this extent, feature specificity may in fact help us determine an appropriate (fine-grained) grammatical status of an otherwise homophonic lexical item. Consider the paired Sentences (=S) below showing both Dependent Clauses (=D.C.) and Independent Clause (=I.C.):

(202) *Before & After: Conjunction or Preposition?*

(a) I saw him *before he took the test*.

He took the test = clause/basic sentence: *before* = [+Conj]

[S [I.C. I saw him] [D.C. (before) He took the test]]

(b) I saw him *before the test*.

The test = Determiner Phrase (DP): *before* = [+Prep]
since Prepositions, as a default, introduce DPs.

[bS I saw him before the test] (bS= basic Sentence).

(c) I telephoned him *after he spoke to his professor*.

He spoke to his professor = clause/basic sentence: *after* = [+Conj]

[S [I.C. I telephoned him] [D.C. (after) He spoke to his professor]]

(d) I telephoned *him after the meeting*.

The meeting = Determiner Phrase (DP): *after* = [+Prep]

[bS I telephoned him after the meeting]

(203) **Relative Pronouns and their features:** (*who, whom, whose, which, that*)

Feature specificity can likewise help in determining precisely how a relative Pronoun works in conjunction with in referential DP. Since both Subordinate Conjunctions and Relatives work to connect an I.C. to a D.C./relative clause, a certain amount of feature specificity applies. First of all, let's consider the range of lexico-semantic features for the following Relative Pronouns:

(204) Table: Relative Pronouns and Features

Relatives	Features
Who	[+Per(son)] [+Subj(ect)]
Whom	[+Per] [+Obj(ect)]
Whose	[+Per] [+Poss(essive)] [+Subj] [+Obj]
Which	[-Per] [+Inanim(ate) / thing] [+Subj] [+Obj]
That*	[+/-Per] [+Subj] [+ Obj]

That is now accepted in standard English (along with *who/m*) as a modifier of a [+Person] DP. In this sense, the relative *that* may be denoted as holding two distinct feature values [+/-Pers].

Clauses introduced by such Relative Pronouns are called **relative clauses**. These pronouns have the flavor of acting like an adjective to the extent that they modify their referential DP. Consider the relative clauses below along with their specific feature projections:

(205) (a) [The woman [SVO *who kissed John*] is an IBM executive.

↙ _____] Who: Features: [+Per] [+ Subj]

(a') [Subj Who = (The woman)] [V kissed] [Obj John]

→ SVO embedded clause,

The relative *who* in (205a) above--taking on its subjecthood status via the referential DP *The woman*--becomes a derived active subject embedded in an SVO sentence with appropriate [+Person] and [+Subject] features. In one sense, what we have here are two SVO structures: (i) the larger SVO giving us *The woman is an IBM executive*, and (ii) the smaller embedded svo giving us *Who/(She) kissed John*. However, consider how the relative functional/grammatical feature changes in the sentence below:

(206) (a) [The woman] [OSV *whom John kissed*] is an IBM executive.

↙ _____] Whom: Features: [+Per] [+ Obj]

(a') [Subj John] [V kissed] [Obj whom (=the woman/her)]

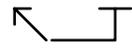
In (206) above, *The woman* now becomes a passive derived object when examining its role within the embedded clause--e.g., *John kissed her (the woman)*.

(NB. To a certain degree, syntactically speaking, the DP positioning of *The woman* is commonly referred to as **Topicalization** (i.e., fronted), and is therefore removed from being a straightforward [+Nom] DP-subject: viz., the co-indexing of *whom* in the embedded clause plays this out).

Consider the various examples of “Correct Feature Spell-outs” and “Feature Crashes” for the following Relative Clauses below:

(207) Correct Relative Feature spell-outs: No Feature Crash

(a) I saw the boy *who* has been hanging around break the window with a baseball.



Who: Features: [+Per] [+ Subj]

(a') *The boy/ He has been hanging around...*

He → Subject, correct relative feature spell-out of [+Nom] case *who*.

→ **No feature Crash**

(b) The player *whose* cleat fell off kept playing.



Whose: Features: [+Per] [+ Poss]

(b') *His cleat fell off*. Both *His* & *whose* are correctly spelled-out with a corresponding [+Poss] feature: *His* forming a [+Poss] DP and *whose* forming a [+Poss] Relative.

→ **No Feature Crash**

(c) The dog *which* bit the post-man has been put to sleep.



Which: Features: [-Per] [+ Subj]

(c') *The dog* is an inanimate subject thus takes the relative *which*.

→ **No Feature Crash**

(208) Examples of Feature Crash

(a) I saw the boy **whom* has been hanging around...

↖ Whom: Features: [+Per] [+ Obj]

(a') *The boy/ *Him has been hanging around...Him* is incorrectly placed in the subject slot: improper relative feature spell-out of [-Nom] case *whom*.

→ **Feature Crash.**

(b) The player **who* cleat fell off kept playing.

↖ Who: Features: [+Per] [- Poss]

(b') *His cleat fell off.* The relative must be correctly spelled-out with a corresponding [+Poss] feature: **Who cleat is that?* (= *Whose cleat is that?*)

→ **Feature Crash**

(c) The boy **which* has been hanging around...

↖ Which: Features: [-Per] [+Inanim]

The boy is [+Person] so should be marked with either a *Who* or *That* relative.

(i) The boy that...

(ii) The boy who...

In addition to the relatives that take on the role of DP modifier, there is a class of relatives that serve in an Adjectival capacity--such relatives are called **Relative Adverbs**.

(209) Table: Relative Adverbs and their Features

Relative Adverb	Feature
where	[+Place]
when	[+Time]
why	[+Reason]

Note that such relatives don't take on modifier status in the sense that they can neither substitute nor correspond with a referential DP:

(210) (a) The boy [*who/that/ *where/*when/*why...*]

↙└┘

(b) The dog [*that/which/ *where/*when/*why...*]

↙└┘

In other words, adverbial relatives don't necessitate an antecedent in an adjacent clause but rather can function within their own clause. We can see this when we rephrase a relative clause as a Independent clause: while such adverbial are indeed relatives, since they have an antecedent DP, they seem to be unlike adjectives to the extent they can be rephrased as an Independent clause whereas Adjectival Relatives cannot.

In addition, Adverbial Relatives seem to contain a sufficient amount of proposition material so that they may very well stand on their own without any antecedent referential DP. Unlike Adjective Relatives that seem to require a DP antecedent in which to modify, Adverbial Relatives can seemingly carry on a grammatical function without a DP referential--suggesting that the adverbial relative in such elliptical structures may take on some of the functional features of the omitted DP:

(213) (a) I need to stay at [a place] *where* I can write.

↙_] Features: [+Place]

(a') I need to stay \emptyset where I can write.

(i) I can write *here/there*. (=at a place)

(b) I recall [the time] *when* John took a strange class about the history of furniture.

↙_] Features: [+Time]

(b') I recall \emptyset when John took a strange class about the history of furniture.

(i) John took a strange class *then*. (= at a time)

(c) I never knew [the reason] *why* he took that class.

↙_] Features: [+Reason]

(c') I never knew \emptyset why he took that class.

(i) He took the class *for some reason*. (=for a reason)

This apparent cross between a relative and a DP brings us to the Interrogative--where “wh-words” can (i) either merge in conjunction with an (obligatory) overt Noun as its complement forming a D+N (DP) (Prenominal), or (ii) function in isolation with a zero allomorph as its complement forming a D+ \emptyset (DP) (Pronominal). Recall that this cross between a relative (with an antecedent) and a subject/object DP was evident in our “IBM executive” example found in (205) above where *who* served both as (i) a relative with an antecedent in the adjacent clause (= *The woman*) and (ii) a subject-DP on its own right (playing the role of a subject in an embedded clause) (= *Who kissed John*).

(214) Table: Interrogatives (Features/Status)

Wh-words	Question Features	DP Status:
Who	[+Person] [+Subject]	[+DP] [+Pron(ominal)]
Whom	[+Person] [-Subject]	[+DP] [+Pronominal]
Whose	[+Person] [+Possessive] [+/-Subject]	[+DP] [+/-Pronominal]
What	[-Person/+Thing] [+/-Subject]	[+DP] [+/-Pronominal]
Which	[-Person/+Selection] [+/-Subject]	[+DP] [+/-Pronominal]
Where	[-Person/+Place] [-Subject/+Adverb]	[-DP] [-Pronominal]
When	[-Person/+Time] [-Subject/+Adverb]	[-DP] [-Pronominal]
How	[-Person/+Manner] [-Subject/+Adverb]	[-DP] [-Pronominal]
Why	[-Person/+Reason] [-Subject/+Adverbial]	[-DP] [-Pronominal]

What is interesting about the feature distinctions above is that “Wh-word” with a [-Pron] status cannot stand alone and project a DP, say without a Noun complement (to its left). In other words, we could say that such [-Pron] Wh-words contain an abstract complement feature that requires them to project with an overt Noun complement [D+N]--as opposed to [+Pron] Wh-words which contain no such complement feature (requirement), thus allowing the Wh-word to stand alone within a DP. (NB. “Wh-word” here refers to the fact that all Question words in English (save *how*, *poor chap*, which has undergone a sort of ‘w-h’ inversion) begins with the letter/sound “Wh”). Consider below how the [+/-DP] Feature Status affects the grammaticality of the following sentences. In addition to this Pronominal Feature, apparently there are some wh-words which cannot form DP expressions at all, but rather express Adverbial/predicate information (about a subject): such wh-words could be said to hold a [-DP] feature status. Consider the range of wh-word distributions below showing feature projections along with apparent Feature Crashes. (*Feature Crashes* are nothing more than instances of a grammatical “mismatch” between inherent features of particular words.)

(215) **Wh-word status: Features [+DP] [+Pron]**

(a) *Who* wants to go with me?

(i) [S [DP [+Nom] *Who*] wants to go with me]?

(ii) [S [DP [+Nom] *He*] wants to go with me].

(iii) **Who child* want to go with me? → Feature Crash

(b) *Whom* should I hire for the position?

(i) [S [DP [-Nom] *Whom*] should [DP [+Nom] I] hire for the position]?

(ii) I should hire [DP [-Nom] *her*] for the position.

(iii) **Whom person* should I hire for the position? → Feature Crash

(c) *What* is in the box?

(i) [S [DP [+Nom] *What*] is in the box]?

[DP [D *What*] [∅]]

[+Pron/+Nom]

→ [DP [+Nom] *My lap-top computer*] is in the box. [+Pron]

(ii) [S [DP [D *What*] [N *box*] do you want me to carry? [-Pron]

(d) What did he say?

[S [DP [-Nom] *What*] did [DP [+Nom] *he*] say]? [+Pron]

→ He said [DP [-Nom] *what*]? [+Pron/-Nom]

(216) **Wh-word status: Features [+DP] [+/-Pron]**

- | | | |
|--------------------------------------|---------|--|
| (a) <i>Whose book</i> do you prefer? | [-Pron] | [[DP [D <i>Whose</i>] [N <i>book</i>]] |
| (a') <i>Whose</i> do you prefer? | [+Pron] | [[DP [D <i>Whose</i>] [N ∅]] |
| (b) <i>Which class</i> did you take? | [-Pron] | [[DP [D <i>Which</i>] [N <i>class</i>]]... |
| (b') <i>Which</i> did you take? | [+Pron] | [[DP [D <i>Which</i>] [N ∅]]... |

(217) **Wh-word status: Features [-DP] [-Pron]**

(a) *Where* did you study? [-Pron] [Adv *Where*] did you study?

(a') **Where school* did you study? → Feature Crash

(b) *How* do you write? [-Pron] [Adv *How*] do you write?

(b') **How book* do you write? → Feature Crash

(c) *Why* did you present the paper? [-Pron] [Adv *Why*] did you present...?

(c') **Why paper* did you present? → Feature Crash

(Since Wh-words *Where/Which/How* take on a strict [+Adverbial/-DP] status, we needn't fret over their DP status--the status of [-DP] can be given in the paradigm as a way to reflect their distributional qualities over their [+DP] counterparts).

In summary, we can classify the two aforementioned types of wh-words as either projecting a (i) [+/-Pronominal] feature, or (ii) a [+/-DP] feature. This way of classifying similar word types falls out naturally from a Feature-Checking Theory of language.

(218) **Prenominal “wh-words” forming Constituents**

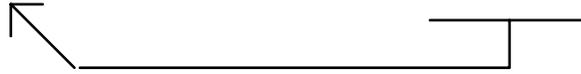
Having now looked at the Prenominal [-Pron] DPs above, one other interesting grammatical phenomenon comes to light. When we consider a prenominal DP expression such as *Which film* in the sentence below, we instantly see that the wh-word (*which*) must remain adjacent to its complement Noun (*films*). In other words, whenever a prenominal wh-word is fronted (via movement) to the front of the sentence, the Noun complement must follow suit. This requirement of (D)-(N) Head-Complement Adjacency is viewed as being initially necessitated by the need to check-off the formal grammatical features pertaining to the [-Pron] DP. The fact that the phrase must remain whole, say even after the checking-off of features, has to do with *Chain Integrity*. Consider the Wh-phrase (DP) fronting below:

(219) (a) Mary wishes to see *which film*?

(b) *Which film* does Mary wish to see?

(a') Mary wishes to see [DP [D *which*] [N *film*]]?

(b') [*Which film*] does Mary wish to see [DP [D *which*] [N *film*]]?



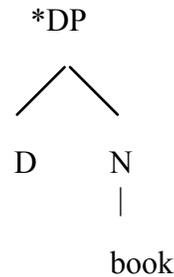
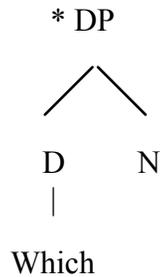
(c) * *Which* does Mary wish to see *film*? Feature Crash (DP break-up)

(c') *[*Which*] does Mary wish to see [DP [D *t*] [N *film*]]?



What is happening above is that the Determiner Phrase (DP) must maintain its integrity as a unified phrase--that means holding the components that make up the phrase together. The idea behind this kind of self-adhesive stringing of words in a phrase is referred to as forming a “Chain” (being that certain words are inextricably linked to other words in forming a constituent, and that these whole constituents somehow are critical in conveying the essential meaning of the phrase: ‘*only entire chains enter into human computation*’). In addition, the role the features play within the internal configuration of the phrase may also contribute to this “chaining” effect--if we conclude that in order to properly match-up features (and proceed to check them) the words must be adjacent to one another. So in a strict sense, the adjacency condition (on checking) is seen as continuing even after the actual checking has taken place (before movement) for reasons having to do with *Human Computational (Interpretability) of Language* (C_{HL}). Consider below how a break in the DP Chain would violate C_{HL} Interpretability:

(220)



While reflecting on the ill-formed split DP structure as represented in (220) above on one hand, consider how the full range of such sentence types might violate this “Chain Principle” on the other:

(221) Phrase Constituency break-up

DP

- (a) **Which* do you want to read *book*? → [DP Which book] ...
- (b) **Whose* did you drive *car*? → [DP Whose car]...
- (c) **What* did she take *class*? → [DP What class]...

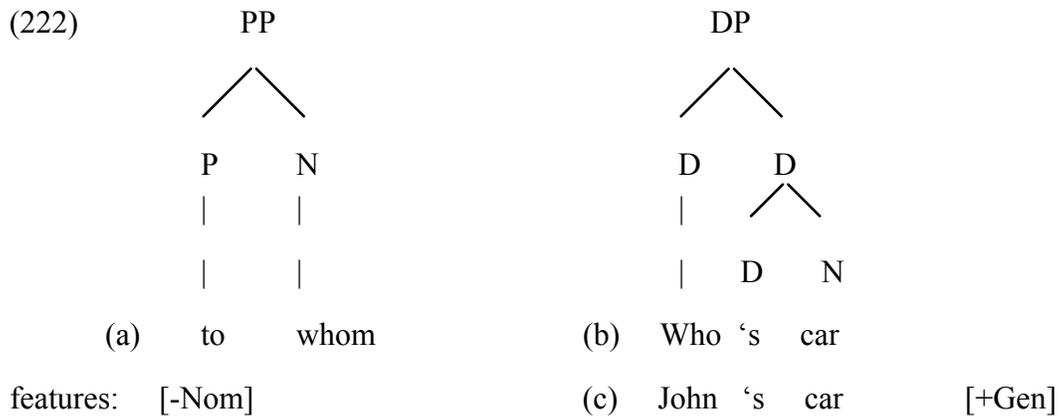
In similar terms, we can extend the analogy here and account for the (non-standard) ungrammaticality of the preposition standing structure with a [-Nom] Case Wh-feature {-m} below:

- (d) **Whom* did you write the letter *to* → [PP to whom] [-Nom] case
- (i) *To whom* did you write the letter? (Standard)
- or
- (ii) *Who* did you write the letter *to*? (Colloquial: no case feature
(Prep standing is mandatory))
- (iii) **To who* did you write the letter? (Nonstandard)

NB. The reason for the colloquial (standard) acceptance of (ii) but not (iii) above may be due to the fact that no Case marking surfaces on the *wh*-word (*who*) in (ii): (this form of *who* seems to function as a “default status” Object apparently without the otherwise required [-Nom] case inflection of {m} and may be thought of as having a default by which no functional features are projected--hence, given that there are no functional Case features in which to check, the Prep ‘*to*’ is “allowed” to remain *stranded* (a structure called *Preposition Stranding*). In (iii), the [-Nom] case inflection does not surface on *who* yet the Preposition *To* (acting as the adjacent functional word involved with the case checking) has been moved and positioned as part of the PP chain specifically for the reason of feature/case checking. Interestingly, it seems that Prep Stranding may flourish in environments where the functional feature of case is ignored, but not otherwise.

- (e) **Who* did you borrow ‘s car → [DP *Who*’s car] [+Gen] case
 (f) **Who* ‘s did you borrow *car*?
 (g) *Whose* did you borrow? → [DP *Whose*] [+Pron/ +Gen]

The example in (220d) shows us that the Determiner *whom* must remain adjacent to the Preposition at least for two reasons: (i) in order to check-off the appropriate functional features having to do with Case--recalling our earlier discussion that a Preposition carries with it a [-Nom] Case feature--and (ii) to maintain its Phrase constituency. Consider the phrase structures of (221d,e) below:



4. @ Movement & Constituency

The idea of feature checking, forming chains, etc. now leads us to further examine the role of *Movement and Constituency*.

(223) **Movement** Perhaps the most interesting linguistic phenomenon of all is the idea that language allows movement--and we are not talking about an abstract metaphysical idea of movement here, but a movement that is both physiologically and physically real: physiological in the sense that psycholinguistic experiments have detected such movement/traces (in the brain), and physical in the sense that movement can even affect one's phonological output (see 'wanna' contraction below). For example, we had earlier looked at instances of movement regarding Aux. Inversion (of Yes-No Questions) where the Aux. was seen to move across the subject into front position: *Are you t fixing dinner?* (You *are* fixing dinner) (leaving a trace (*t*) index behind to show movement). Well, movement in general seems to be a very productive means of forming abstract grammatical rules--the Yes-No Question Aux-inversion rule just being one amongst a number of possible movement operations. Below, we sketch out and organize some general movement operations by asking (i) "*How*" the movement takes place, and (ii) "*Where*" the movement takes place: our "*how*" question examines the movement operation *per se* and asks what types of elements are involved; while our "*where*" question examines at what level does the movement take place (e.g., word-level, phrase-level, etc.). Much of the discussion on Movement today centers around the idea that it is the need to check-off functional features which forces movement. In other words, if a given language- α were ever considered to hold no functional categories, then a strong case could be made that all sentences structure types would be base-generated (that is, all words would remain in their original positions) showing no movement. Claims of this kind have appeared showing that some languages have more movement as opposed to other languages, and that these differences in movement are directly linked to the qualitative & quantitative measures of the given language's functional features.

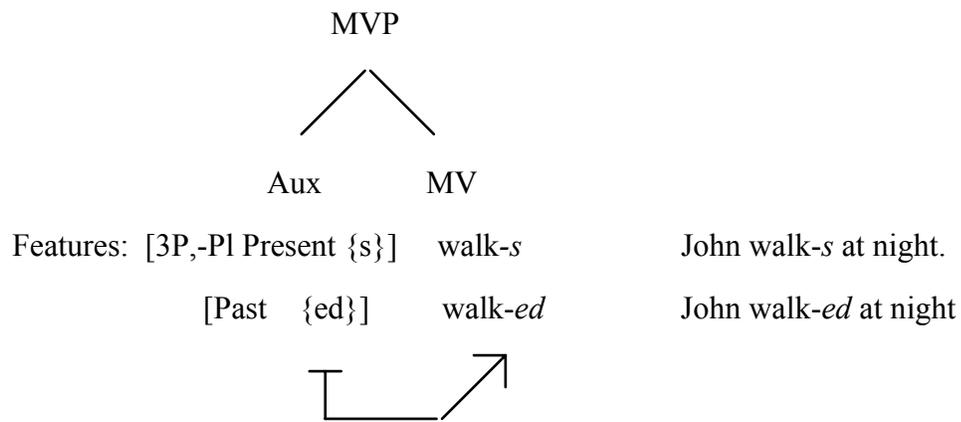
(224) **Constituency** One very important finding that has come out of a Phrase-Structure grammar has been the notion of constituency. A *Constituent* is defined as a structural unit or component--i.e., an expression which is one of the components out of which a Phrase/Sentence is built up. For example, in considering a Verb Phrase *likes ice-cream*, the components which build up the VP would include the two constituents Verb *like* and Noun *ice-cream*--generating the Phrase [VP [V like-s] [N ice-cream]]. What we have found in the study of syntax is that phrases form tightly knit constituencies that cannot be broken or torn apart by separating/movement operations. So, in a nut shell, what we can say is that whatever adjacency condition might have come out of our functional-to-lexical

relationships as discussed through this text, a similar (and closely inter-dependent) condition also stipulates that the components which make-up a phrase must remain adjacent--keeping the phase whole.

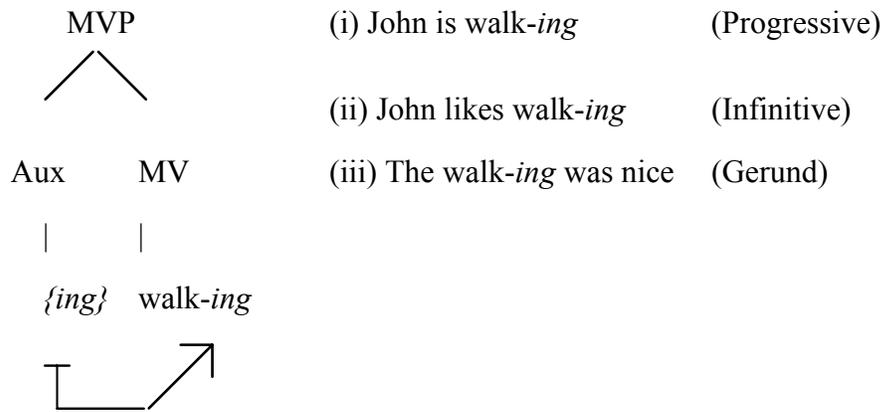
(225) Particle/Inflection Movement

In a real sense, the smallest form of movement takes place at the morphological level--morphology being defined as the smallest unit of meaning. One classic example of this particle movement has come to be known as *Affix Hopping* (see below). The affix particle can be seen as moving and inserting itself across word boundaries in an number of ways. Consider the examples below showing different forms of affix movement (Inflection):

(226) Verb Tense Inflection: {s} & {ed} Movement



(227) **Verb Inflection: {ing} Verb:**



(228) **Affix hopping** Consider the following example of affix hopping:

(i) The grammatical Aux. rule of the Present Perfect Progressive is:

[[Subject] + Aux (→ Tense) + [have + {en}] + [be + {ing}] + [Main Verb]]

(ii) The exact sequence of the elements above should then give you:

* The student s have en be ing read (with *read* serving as the main verb here)

→ wrongly yielding: s-have en-be ing-read

(iii) The actual target sentence is:

The student ha-s be-en read-ing.

(The student has been reading)

In order to yield the proper sequencing of elements, movements or affix hopping must apply accordingly:

(229) → The student have + {s} be + {en} read + {ing}

So as you can see, there indeed is a real sense of movement even at the smallest level of language--the morpheme. This type of movement is usually what is behind the term Inflection since Inflectional Processes take a morphological (functional) affix and inflect it onto a (lexical) stem.

(230) **Word level movement**

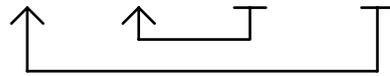
The best examples of Word-Level movement can be found in operator movements such as Wh-Questions. Consider the word movements below:

(231) **Wh-movement** In English, the Wh-words (what, where, when, who(m), why, which, how) originate at the end of a sentence (as a DP-object) and move into the front position (a term sometimes called Wh-fronting). The rule for such Wh-movement is also triggered by an adjacency condition which stipulates that a Wh-word can never sit alongside a subject--hence, the adjacent rule calls for an abstract Auxiliary "do" (or any other Aux. depending on the specific grammar at hand: e.g., progressive "be" or perfect "have") to insert in order to satisfy the condition--e.g., [Wh-word] + {Aux} + [Subject].

So what we have here is a Wh-word that has in fact originated at the end of the sentence, and has, via movement, positioned itself into the front of the sentence. Consider the examples below showing such Wh-movement:

(232) (a) Ann is doing *what*?

(a') *What* is Ann *t* doing *t*?



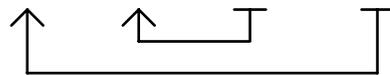
(i) showing Aux Inversion

(ii) showing Wh-movement

(the index *t* shows trace of the movement)

(b) You want which film?

(b') *Which film* do You *t* want *t*?



Notice that which films functions as a DP-object constituent and cannot be torn apart via movement:

(c) **Which* do you want *film*?

(233) Diagramming Wh-movement

Diagramming Wh-movements and Aux Inversions can be tricky. They require one to posit additional structure to a phrase tree. Thus far, we have been starting our Trees with an S (to mark Sentence): [S [DP][MVP]]. This seems to hold up nicely when drawing simple SVO sentences without movement. Once we incorporate movement however, we need some additional phrase markers to host the moved elements--a marker that must be added to the top outermost layer of an already established S-structure. In more recent syntactic analyses, the upper-most phrase which can host moved elements have been labeled Complementizer Phrase (CP). The CP then sits on top of an S. In more recent terminology, the "S" label has likewise been made redundant and has been reanalyzed as an Inflectional Phrase (IP) since as part of the definition of a Sentence, the [+Fin] Main Verb is required to be inflected for Aux. functional material. The Verb Phrase analysis has not changed. So then, using more recent Phrase Structure terminology, we get an IP>VP tree (where IP=S) for all SVO declarative structures and a CP>IP>VP for all interrogative structures. (See Appendix-1 for a final word regarding tree diagramming). While Considering the newly fashioned CP>IP>VP tree below, note that all trace indexes serve as a quasi-functional category in themselves, labeled herein as an **empty-category**. The syntactic role of the empty category (or trace) is to recall where the moved element originated from within the original basic order of the sentence. Due to theory internal assumptions, elements may only move upward through a tree (down-ward movement is banned).

Clearly, one can see the all too conspicuous movement of the Aux “do” (again, triggering the Yes-No question grammar: *Do I? I do!*). These above are easily recognizable examples of movement, but sometimes movement is less conspicuous and involves a more convoluted analysis. Consider examples of “*wanna*” contractions and Negative “*not*” movements below:

(236) **wanna contraction** The “*wanna*” contraction example of movement is perhaps the most interesting of them all since it also demonstrates, in one full sweep, the fact that an empty category--indicated here by a trace--continues to have a real linguistic influence over the sentence. Although an empty category doesn’t continue to have a phonological shape (there is no sound) it maintains a real syntactic presence. Consider the two sentence types below--where one overtly demonstrates the effect of a syntactically real *empty* (null) category (the *e*-category is denoted herein as *e*):

(237) **Possible wanna contraction**

Derived order (showing movement) Original order (before movement)

(a) Who do you *want to* help? (a’) You *want to* help who?

➔ Who do you “*wanna*” help? ➔ You “*wanna*” help who?

Syntax showing traces/empty categories:

(b) Who_i do_{ii} You *e_{ii}* want to help *e_i*?

(c) (You do want to help who?)

(238) **No Possible wanna contraction**

Derived order (showing movement) Original order (before movement)

(a) Who do you *want to* help you? (a') You *want* who *to* help you?

→ *Who do You wanna help you → *You do wanna who help you?

→ Who do You want to help you? (no contraction)

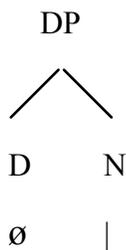
Syntax showing traces/empty categories:

(b) Who_i do_{ii} You *e_{ii}* want *e_i* to help you?

(c) (You do want who to help you?)

Notice in (238b) above that there is an intervening empty category/trace (*e_i*) situated between the Main Verb *want* and the following infinitive “*to*” particle (*to help*) which blocks any possible phonological contraction of *want-to* to “*wanna*”. Hence, in a real sense, we can say that an otherwise phonologically null category maintains a certain amount of syntactic relevance in overt syntax. The “wanna” contraction cannot contract here since there is in the underlying syntax an empty category maker keeping a grip on its syntactic space. This should come at no surprise to us considering that we have discussed elsewhere the relevance of the zero allomorph { \emptyset } in DPs--e.g., where a pronoun was said to take on a functional categorical status via an empty zero allomorph in D (restated here):

(239)



features:

[1P,+Def] |

[+Nom] |

(a) I.....speak English (English)

(b) (Yo) \emptysethablo inglés (Spanish)

(240) **N't contraction**

Similar to the “wanna” contraction, there’s a type of movement that seemingly applies to a Negative “*n't*” when it is realized as a clitic (that is, when “*n't*” has no phonological syllabic structure of its own and is morphologically fastened onto a verb stem). Consider the negative clitic movement below:

- (241) (a) Marie *does not* speak French. :Base Order
(b) *Doesn't*_t Marie _t speak French? :(moved clitic *n't* showing trace)
(c) *Does*_t Marie _t not speak French? :(lexical *not* remains in base position)
(d) **Does not* Marie speak French? :(lexical *not* cannot move)
(e) **Does n't* Marie speak French? :(clitic *n't* must attach to verb stem)
(f) * *Does Marie n't* speak French? :(clitic *n't* isn't a lexical word)

Note that when *not* is a lexical word (with its own syllabic stress), it cannot move across the Subject (*Marie*), but rather must preserve the original base order [Aux Verb + not] configuration. (Conversely, as a clitic {*n't*} can never be left dangling on its own without a verb stem.) It is only when *not* is generated as a clitic (= *n't*) that we find it getting a free ride--‘piggy-backing’ on the Auxiliary verb *do*. Again, the reason for this syntactic maneuvering is due to the fact that the clitic *n't* is realized as part of the phonological Verb Stem, and so it travels wherever the verb goes (a kind of adhesive glue has been applied tying the clitic to the verb stem forming one phonological chunk).

(242) **Phrase level**

Having examined movement operations from a variety of word positions (e.g., Wh-word, Aux-word, *wanna* contraction and negative clitic movement) we can begin to look at the next level of language (**the phrase**) and see if movement can likewise be found. One example of movement found at the phrase level has to do with Prepositional Phrase (PP)-movement (or fronting). Recall that PPs originate at the back of the sentences since one of its major roles is to check the [-Nom] Accusative Case Feature to its counterpart DP-Object (sometimes this functional feature is referred to as *Oblique Case*). As a way of marking emphasis, the PP often gets fronted. Consider PP-movement below (noting that the constituency condition which stipulates that all phrases must be kept intact during movement operations continues to hold throughout):

(243) **PP-movement**

(a) In the beginning, God created the word (*t*). (showing PP-movement)



[PP [P In] [DP [-Nom] the beginning], God create the word.

(b) God created the word in the beginning. (showing original SVO base order)

(244) **Other example of PP-movement**

(a) Under no condition should children be left alone.

(b) Between you and me, I think our Presidential choice stinks.

(c) After the storm, the children played in the park.

(d) Without any hesitation, our militia killed the trained killers.

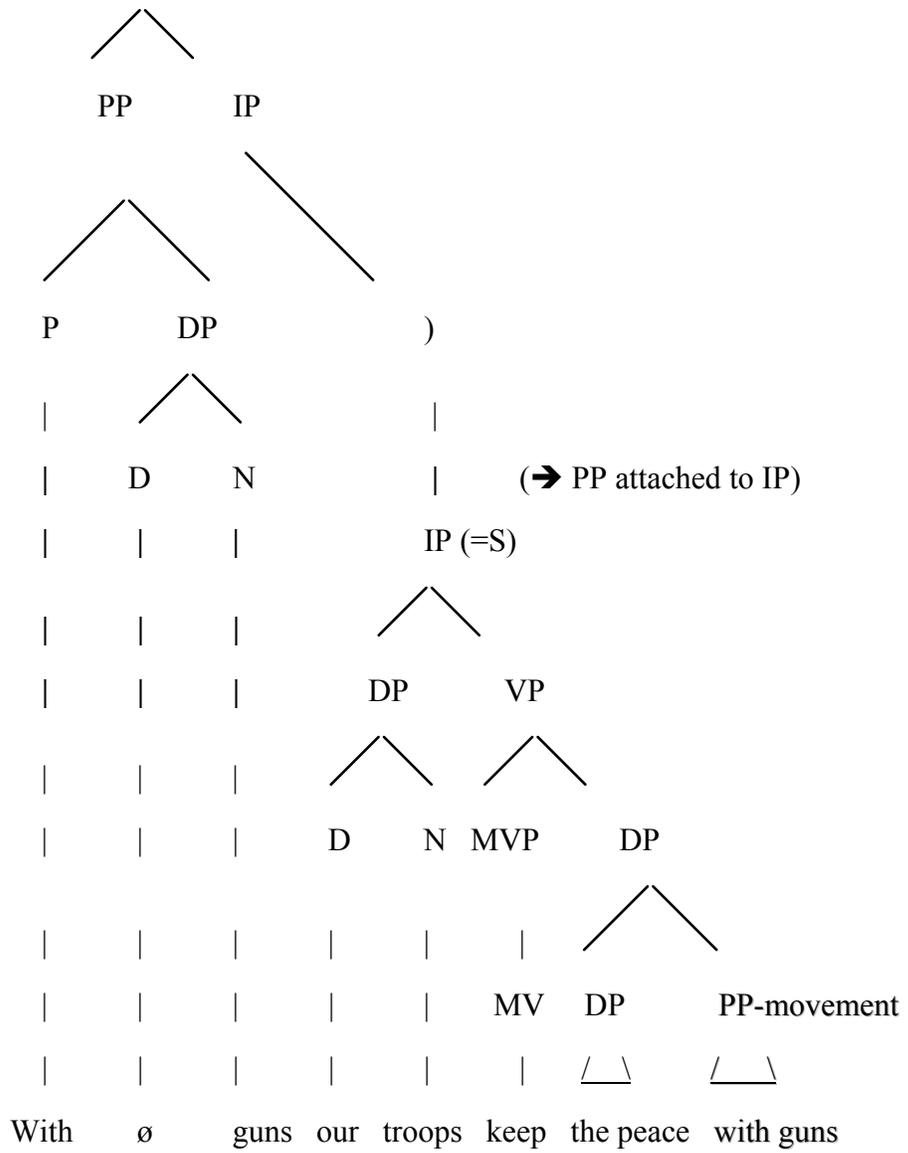
(e) With guns, our troops keep the peace.

Note that in (c) above where you have two PPs, (*in the park* & *after the storm* respectively) only the last of the two PPs fronts. One wouldn't say *The children played after the storm in the park*--the sequencing would have us utilize the last PP *after the storm* as a (time) modification to the (place-preposition) *in the park* (it seems "place" supercedes "time" according to a prepositional hierarchy). This kind of hierarchy might also be found amongst Adjectival Phrases (AdjP) whereby certain adjectives supercede others--e.g., *The red brick house* vs. **The brick red house*, where "color" comes before "material", etc.).

Consider the structure below showing PP-fronting:

(245)

S (→ sentence with PP-movement)



(246) **DP-Movement (Dative Shift)**

A second type of movement at the phrase level has to do with *DP-movement*--sometimes called **Dative Shift**. In a nutshell, Dative shift has to do with variable orderings of Direct and Indirect objects within the predicate. Typically speaking, the Direct Object (=DO) comes first as the complement of the verb with the Indirect Object (=IO) following (e.g., the complement of a Prepositional Phrase). Consider the sentences below which afford possible DP shifts:

(247) (a) John gave *the book* to *Mary*.

(i) John gave [[DO DP¹ the book] [PP to [IO DP² Mary]]]

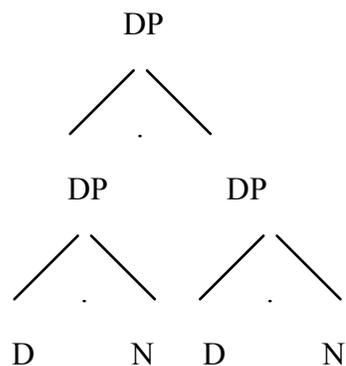
(b) John gave *Mary the book*.

(i) John gave [[IO DP² Mary] [DO DP¹ the book]]

(ii) John gave [[(PP to) IO DP² Mary] [DO DP¹ the book]]

Note that the Preposition {*to*} may delete in (247b,i) due this Dative Shift. What is of interest to us here is that two DPs [[D \emptyset] [N *Mary*]] & [[D *the*] [N *book*]] seem to switch position within the predicate. In tree diagramming such shifts, it's possible to simply draw the two DPs as an adjacent double phrase projection:

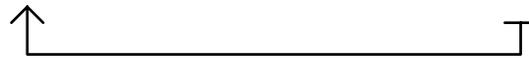
(248) Double DPs



(249) **Clause Level**

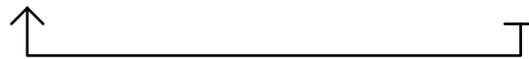
Movement at the Clause-Level is typically associated with certain sentence structure types such as *Dep(endent)* and *Indep(endent)* clauses (forming *C(omplex) S(entences)*). In most cases, the movement here involves the dependent clause--which is typically positioned as the final clause of the sentence--moving out from its final position and seating in the front position of the sentence. Consider the following Clause-Level movements within Complex sentences below:

(250) (a) *While I was driving home, I saw an accident t.* (movement)



→ (a') *I saw an accident while I was driving home* (base order)
[CS [Indep I saw an accident] [Dep *while I was driving home*]]

(b) *Before entering the house, remove all shoes t.* (movement)



→ (b') *Remove all shoes before entering the house.* (base order)

(c) *Because of the rains, the roads were closed t.* (movement)



→ (c') *The roads were closed because of the rains.* (base order)

(251) **Sentence level**

Movement at the Sentence-Level is typically associated with the Passive grammar. Whereas we normally speak in the SVO Active voice, the Passive voice turns the word order on its head yielding a kind of OVS mirror image ordering. (See (136) above). Consider the passive movement at the sentence level below:

(252) **Passive voice**

- (a) *John* announced the names of the linguists. (S-VO active)
(a') The names of the linguists were announce by *John*. (OV-S passive)
- (b) *The French students* gave a going-away party. (S-VO active)
(b') A 'going-away' party was given by *the French students*. (OV-S passive)

(253) **Middle voice**

- (a) John *easily slices the cheese*. (active voice)
(a') *The cheese* was *easily sliced* by John. (passive voice)
(a'') *Cheese slices nicely*. (middle voice)

5. A Summary of Common Grammatical Errors

In this last section, we draw our attention to grammatical mistakes. It is indeed the case that mistakes have gotten a bad rap in recent days and (prescriptive) teachers tend to shy away from them, expelling them at all cost. For the (descriptive) linguist however, mistakes can often provide a window into how the brain actually goes about processing language. In the following sections, we briefly examine common grammatical errors found at the various levels of language.

5.1 Feature-Level

Because Features are precisely the smallest (atomic) sub-particles of language, they can often go misspelled without very little notice. The first feature to consider is Case.

(254) Case

One classic error regarding Case has to do with the Prepositional Phrase. Recall in our discussions that the Preposition, (being a functional category) assigns a specific feature of [-Nom] Case to its complement DP-object. The confusion here typically has to do with PP-fronting and the relevant Case spell-out on the fronted DP. This type of error seems to rely on a confusion between the initial DP-object (which, due to fronting, might appear as a subject) and the embedded DP-subject. Consider the following Case errors below:

(255)

(a) Nonstandard: *Between *you and I*, the teachers need an increase in their pay.

(a') Standard: Between *you and me*, the teachers need an increase in their pay

The error seems to arise out of the counterexample:

(a'') You and I/(**me*) need pay raises.

Of course in (255a'') above, the pronoun *I* gets [+Nom] Case because it's the subject--not so the case for (255a) where *the teachers* is the subject.

(b) Nonstandard: For **John and she*, love seems to come naturally.

(b') Standard: For *John and her*, love seems to come naturally

The original base sentence here for (255b) is: *Love seems to come naturally for John and her* where the DP-subject *Love* takes a [+Nom] Case feature and *John and her* (=them) take on [-Nom] Case as the DP-object(s).

(c) Nonstandard: Mary cooked **John and I* a Mexican dinner.

(c') Standard: Mary cooked *John and me* a Mexican dinner

The structure in (c) is: *Mary cooked* [(*for*) *us* [DP-object] (=John and me)] a dinner.

In addition to Preposition fronting, the seemingly innocent insertions of the conjunctions *and* or *or* also tend to cause confusion regarding proper Case spell-out. Consider the examples below:

(256) (a) Nonstandard: **Me and John* want to take syntax.

(a') Standard: *John and I* want to take syntax.

→ *John and I* (= We [+Nom] Case).

(b) Nonstandard: He offered **my sister and I* a full grant.

(b') Standard: He offered *my sister and me* a full grant.

→ *my sister and me* (= Us [-Nom] Case)

(c) Nonstandard: Like **you and I*, the teacher dislikes reciting notes.

(c') Standard: Like *you and me*, the teacher dislikes reciting notes.

→ *you and me* (= Us [-Nom] Case) → AdvP-fronting

A second classic example of Case errors has to do with the over extension of the [+Nom] Pronoun in the following copular examples:

(257)

(a) Nonstandard: It is/was *I*. It is/was *we*. It is/was *she*. It is/was *they*.

(b) Standard: It is/was *me*. It is/was *us*. It is/was *her*. It is/was *them*.

Although some prescriptive grammarians still maintain the old relic of Latin [+Nom] Case on the Pronouns for the above examples, I remain baffled to think that any relation at all should have ever arisen between English (a Germanic language) and Latin-based languages. It was once thought that English should be modeled after Latin (the so called ‘mother of all tongues’), and in Latin (notwithstanding variable word orders) the subject could be dropped rendering copular verb (*be*) construct \emptyset V, V,S orders (with the latter showing a type of subject movement) e.g., \emptyset *Is I*, or in Italian \emptyset *Sono* or *Sono Io* (= *It’s me*), and Spanish \emptyset *Soy Yo*. If we really want English to be a Latin language, then perhaps we should start-off by simply stipulating that all subjects can likewise be optionally dropped in all sentences (since Latin permits it). Note that Latin-based languages keep Subject Verb Agreement e.g., *Sono Io* (=agreement “*am I*” and not “*is I*”). Our English counterparts do no such thing: e.g., *It is we* (as opposed to the agreeing **It are we* which is never spoken in English) goes without Subject [+Nom] Verb Agreement.

(258) **Agreement**

Typically speaking, errors of Agreement commonly result in (embedded) relative clauses where the Subject and Verb agreeing components might somehow get buried in the embedding. Consider the following relative clause examples:

(259) **Nonstandard:**

(a) The *students* in my class [who **is* studying syntax] **does* a lot of work.

→ Subject [3P,+PI], (relative clause) Verb *[-PI], Main Verb *[-PI]

(b) The *journalist* [who **want* to interview you] **work* for the BBC.

(c) *The book* [that my father placed on the last two shelves] **are* mine

(260) **Standard:**

(a') The *students* in my class [who *are* studying syntax] *do* a lot of work.

→ Subject [3P,+PI], (relative clause) Verb [+PI], Main Verb [+PI]

(b') The *journalist* [who *want-s* to interview you] *work-s* for the BBC.

(c') *The book* [that my father placed on the last two shelves] *is* mine.

Very often the misspelling of agreement here relies on a confusion over where to identify the subject. For example, *The book* in (260c') is clearly the subject, however, there seems to be a general failure to recognize the true subject and, consequentially, erroneously treat the DP of the embedded clause as a subject since it is the closest to the verb (in adjacency). The DP *the last two shelves* in (c) very often gets wrongly treated as the DP-subject which in turn wrongly agrees with the adjacent verb. Factors of Phonology and adjacency seem to complicate the Agreeing mechanism of features

This same Agreement failure often occurs with the pleonastic DP *There*.

(261)

(a) **Nonstandard:** *There's several people* being fired from the company.

→ Several people **is/are*...

→ Subject-DP [+PI] Verb [+PI]

(a') **Standard:** *There are several people* being fired from the company.

The pronoun (pleonastic) *There* has no referential Agreement of its own (unlike the pronoun (pleonastic) *It* which is [3P], [+/-Nom] and so must take on the features of its referential DP-subject--in the case above, *several students* is the true DP-subject carrying features. This type of referential agreement between adjacent DPs is somewhat similar to what we find with reflexives--e.g., *John hurt himself*/**herself*/**ourselves*, etc.

Our last example of Agreement error is perhaps the most common. It seems that an intervening preposition can often cause havoc with identifying the true subject:

(262)

(a) Nonstandard: The development *of pedagogies* **are* discussed.

(b) Nonstandard: The war *between the two Indian tribes* **were* bloody.

(c) Nonstandard: The man *sitting on the steps* **work-ø* for me.

→ Feature crash: [DP-Subject [-PI]] [Verb [+PI]]



(a') Standard: The *development* of pedagogies *is* discussed.

(b') Standard: The *war* between the two Indian tribes *was* bloody.

(c') Standard: The *man* sitting on the steps *work-s* for me

[DP-Subject [-PI]] [Verb [-PI]]



(263) Though note these rare exceptions:

(a) Nonstandard: There **is a number* of problems with this paper.

(b) Standard: *There are* a number of *problems* with this paper.

(c) A number of cars are made available. (Collective number)

Subject-DP [-Def] Verb [+Pl]



(d) A limited number of cars is made available. (Distributional number)

Subject-DP [+Def] Verb [-Pl]



In the above exception, the pleonastic *there* takes on a referential [+Pl] feature corresponding to the noun *problems* which, on the surface syntax, functions not as the actual subject, but rather as a complement to the genitive phrase (“*of-problems*”). The differences between (c) and (d) above have to do with the Definiteness [+/-Def] feature on the D--it seems that all it takes is the insertion here of the adjective *limited* to render the DP [+Def] and therefore specific, which in turn alters the Verb’s Number feature to [-Pl]. (See (48) above).

5.2 Sentence-Level/Punctuation

In all of writing, perhaps the three most common errors that come-up time and time again have to do with the general failure to know precisely what a sentence is, how it functions in our language, and how it should be punctuated in our writing. This failure often leads to the three classic errors: the *Comma Splice* (C/S), the *Run-on Sentence* (R/S) and the *Sentence Fragment* (S/F). Let's take each of them in turn.

(264) **Comma Splice** A comma splice error occurs when one inserts a comma [,] instead of a necessary period [.]. This error typically occurs when one strongly feels that there needs to be something 'extra' added to the content of the sentence--at the expense of its overall structure. Whenever I talk to students about this error, the student's reasoning behind the error always follows a similar line of logic--'Well, I need to say something more about this and, in any event, it's connected: so, surely this second part of the sentence needs to be an extension of the first. No?' Well, this kind of logic never seems to fail--it must be some kind of a universal. Anyway: 'No! It needn't be extended to the first part of the sentence'. What you probably have here are two very good independent sentences that each can stand on their own. The fact that their contents are connected or associated in some way (as a contributing piece of the story) has nothing to do with them being proper self-containing sentences. Students tend to fail me here and insist that if they are not strung together, the reader somehow will go astray and wrongly assume that there is no association/connection between the two sentence--a response to which I am forced to recite the nursery tale below:

(265) '[1] *Humpty Dumpty sat on a wall* [.]

[2] *Humpty Dumpty had a great fall*' [.]

And so here you have it--two sentences with indeed a very important connection (and still marked as two independent sentences). Both short sentences contain the all essential grammatical ingredients in making a sentence: (i) a Subject and (ii) a Predicate (with a Main Verb [+Tense]). That's it. The moment you provide a Subject and Main Verb, your job as a sentence writer is done: a sentence has been formed. Of course, there are always other factors involved: (i) the Verb's [+/-] Intransitivity, (ii) the extension and elongation of a basic sentence with conjunctions (*and/or*), and Adjectives, etc. (iii) the adding of material onto its predicate (e.g., making it a complex sentence, etc.). But one thing you cannot do is pretend that the two sentence are one by inserting a simple comma between them--e.g., **Humpty sat on the wall, Humpty had a great fall* [C/S]. Consider the following examples showing typical Comma Splices below:

(266)

- (a) I took Mary out to dinner last night *[,] we both ate French food for the first time [C/S]

→ Sentences:

[1] I took Mary out to dinner last night.

[2] We both ate French food for the first time.

- (b) We are protected under the U.S. Constitution *[,] the police have no right to take away our free speech [C/S].

→ Sentences:

[1] We are protected under the U.S. Constitution.

[2] The police have no right to take away our free speech.

- (c) John was cheating for ages *[,] however his wife never seemed to mind[C/S]

→ Sentences:

[1] John was cheating for ages .

[2] (However = conjunction): His wife never seemed to mind.

(The conjunction *however* here links two sentences)

- (d) His wife is shy *[,] she doesn't say much [C/S].

→ Sentences:

[1] His wife is shy.

[2] She doesn't say much.

As an exercise, consider the (bracket diagram) sentence structure of (d) above:

(267) [S [DP [D His][N wife] [MVP [V is][Adj shy]]]]

(See §1.2 for a review of copula linking verbs).

(268) **Run-on** Run-on sentences are the result of the lack of punctuation. Like the C/S above, R/S errors fail to acknowledge a complete sentence by simply running-on two or more sentences together (via a lack of a period or semicolon). (Brackets *[] indicate the absence of a period).

(a) John was cheating for ages *[] his wife didn't even know about it [R/S]

(b) We are protected under the U.S. Constitution *[] the police have no right to take away our free speech [R/S].

(c) I took Mary out to dinner last night *[] we both ate French food for the first time [R/S]

(d) The grammar students still feel they are unprepared *[] however they are eager to take the exam [R/S].

→ Sentences:

[1] The grammar students still feel they are unprepared.

[2] They are eager to take the exam. (*however* = conjunction)

(269) **Sentence Fragment** Sentence fragments result when one attempts to treat an incomplete sentence (or dependent clause [D.C.]) as a sentence by marking it with a period. S/Fs tend to occur due to a general lack of a Subject and/or a lack of a Finite [+Tense] Verb. Students tend to generate S/Fs by thinking they can piggy-back the S/F on the heels of a complete sentence--and again like C/Ss, the error tends to rely on the student's confusion in thinking that a sentence that came immediately before can carry over the meaning onto the following incomplete sentence (perhaps, by way of association/connection) (as in (a) below). Consider the S/F examples below:

(a) The Prof. is never late. *[] Works very hard with his students S/F

[] shows a missing subject.

→ S/F Corrected: He (The Prof) works very hard with his students.

(b) *[] Because she wanted to save money S/F (*because*=subordinate

conjunction)

[] shows a missing Independent Clause (I.C.).

➔ S/F corrected: [I.C.] She opened a bank account
[D.C] because she wanted to save money.

(c) He bought a new car. *[] Which was red S/F.

[] shows a missing Independent clause

➔ S/F corrected: [I.C. He bought a new car [D.C. which was red.]]

(d) *[] While I was driving home last night S/F. I saw an accident.

[] show a missing Independent Clause.

➔ S/F corrected:

[D.C. While I was driving home last night,

[I.C. I saw an accident]] (comma shows movement of the D.C.).

➔ While I was driving home last night [,] I saw an accident[.]

(270) **A Note on Movement and the Comma**

Note that the usage of the 'comma' here [,]--between the D.C. and the I.C. (and never vice versa)--indicates movement at the clause level. Movement can be readily indicated by punctuation. As a general rule, whenever you move a Phrase (such as in PP-fronting) or a Clause (such as in D.C-fronting), a comma usually surfaces at the boundary to mark the movement--similar to how I might write my name in reverse order (last to first) *Galasso, Joseph* (with a comma inserted between the two names to show movement from out of the base-order *Joseph Galasso*). As a recap, consider the punctuated moved elements below:

(271) Clause-movement & Comma

(a) While we were dining in Paris last night [,] we were introduced to the lead tenor of the French Opera. (comma insert)

(a') We were introduced to the lead tenor of the French Opera while we were dining in Paris last night. (no comma insert)

(b) After we spoke for hours about Opera Buffa [,]
he began to sing arias from Mozart. (comma insert)

(b') He began to sing arias from Mozart
after we spoke for hours about Opera Buffa. (no comma insert)

(c) During the course of our dinner, (comma insert)
he often spoke favorably about the New York Met.

(c') He often spoke favorably about the New York Met
during the course of our dinner. (no comma insert)

(272) Phrase-movement & Comma

(a) In the beginning,

God created the word. (comma insert)

(a') God created the word in the beginning. (no comma insert)

(b) After the rain stopped,

the children played outdoors. (comma insert)

(b') The children played outdoors after the rain stopped.
(no comma insert)

(273) Restrictive vs. Nonrestrictive Phrases & Comma

(a) Actors who have *large egos* are often insecure (= Restrictive)

┌──────────┐

→ Only those actors who have *large egos* are insecure.

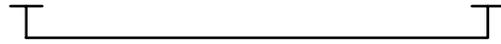
→ Not all actors have *large egos*.

Cannot delete the relative clause [*who have large egos*].

This is what is behind the term Restrictive--Due to the lack of commas here (which would otherwise make the relative clause optional via deletion and therefore Non-restrictive in nature), we are obliged to restrict only those actors who have large egos with being reportedly insecure.

Compare example (a) to (b):

(b) Actors, *who have large egos*, are often insecure (= Non-restrictive)



(b') Actors [] are often insecure (relative clause [] deleted)

→ (All) Actors have *large egos*.

→ (All) Actors are often insecure.

This interpretation of Non-restriction comes about due to the fact that the commas have been inserted--thus, rendering the relative clause optional. As was presented above, the usage of commas/punctuation can affect the way we perceive meaning in sentences. Whereas fronting places an extra emphasis on the fronted topic, the comma usage found in Non/Restrictive clauses can equally exert specific differences in perceived meaning.

(274) **Dangling Modifier** It has been something of a tradition for me to end my grammar sections with *Dangling Modifiers*--not that I hope to ever leave any of my students dangling. And so, it seems only natural that I end this text here. The term "Dangling Modifier" has become quite a catchy English Grammar cliché and is a term often bandied about when one wants to make the impression of being savvy on Grammar. Fine. However, for the most part, I have come to realize that very few people actually know (i) what the term denotes, (ii) if it is even an error, and/or (iii) how the underlying mechanism of the error works. What's nice about this error is that it seems to involve and traverse a number of grammatical concepts--all of which converge in forming one general cataclysmic error. Let's first define the term and then tackle it by deconstructing the various parts that make it an error.

Dangling Modifiers (=D/M) succeed (like a virus) by feeding off of an array of confusions. Let's consider each potential contributing factor in turn below:

(275) Some factors the lead to Dangling Modifiers

(1) D/Ms denote the state of a modification that doesn't refer clearly or logically to its referent. In one sense, we can claim here that D/Ms arise out of a Modification Feature mismatch between (i) the subject of each clause in a complex sentence, and/or (ii) the subject and infinite verb of the matrix clause.

(2) D/Ms rely on a confusion over proper SVO Word Order and Sentence structure--D/Ms tend to emerge during passive construction where word orders are not base generated.

(3) D/Ms emerge when the Subject being modified is ether not clearly stated or is assumed by way of pragmatics (discourse). For this reason, D/Ms often arise in elliptical clauses.

(4) From (3) we get a rule: "The subject of a Non-Finite Verb can only be deleted when it is the same as the subject of the Finite Verb in the main clause". (See (284a) for an example of subject deletion/elliptical clause).

Consider the different types of D/Ms along with their explanations and corrections:

(276) **Dangling Infinitive/Passive:**

(a) *To do well on the exams, syntax must be studied. ([-Fin] Phrase-move)

(a') *Syntax must be studied to do well on the exams. (Base order)

(277) Explanation:

Syntax is not the logical subject of the predicate *do well on the exams*.

E.g., *Syntax does well on the exams.



Semantic Features

(i) DP-Subject [-Agent /-do-er] feature

(ii) MVP/Predicate/Object [+Theme / +do-ee] feature

In order to maintain the proper thematic relationship of [+Theme], the counter structure must also contain the feature [+Agent]. In the example above, there is no coherent meaning behind the notion of DP-subject *Syntax* acting on the predicate *do well on the exam*--hence, the D/M error.

(278) Corrections:

(a) In order for *him* to do well on the exams, syntax must be studied. (passive)

(a') He must study syntax in order to do well on the exams. (active)

In either case, the DP-subject (*He*) must be overtly given in order to maintain the proper thematic roles. (See (279) below for the two relevant thematic roles).

As stated above, the grammatical feature mismatch has to do with presupposed thematic relationships or roles. (See Appendix-2 for the complete thematic grid):

(279) **Thematic Roles:**

(1) Theme = entity or person undergoing the effect of some action.

(*Mary* fell over. *John* hit *the ball*.)

(2) Agent = instigator of some action.

(*John* tripped *Mary*. *John* hit the ball.)

(280) **Dangling Present Participle (=Pres/Part)**

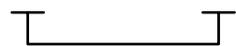
(a) *While studying for the exam, the lights went out. (Pres/Part-move)

(a') *The lights went out while studying for the exam. (Base order)

(281) Explanation:

The lights is not the logical subject of the Pres/Part *studying for the exam*.

E.g., *Lights studying for the exam.



Semantic Features

(i) DP-Subject [-Agent /-do-er] feature

(ii) MVP/Predicate/Object [+Theme / +do-ee] feature

(282) Corrections:

(a) While *I* was studying for the exam, the lights went out.

The overtly stated subject-DP (*I*) carries the proper feature [+ Agent]

There is no sense behind the notion **Lights study* and so due to a feature mismatch between the items associated with the modification, a D/M occurs.

(283) **Dangling Past Participle (=Past/Part)**

(a) While still planted in the ground, she cut off the stems.

Note the confusion over who/what is still planted in the ground. Clearly, one assumes that the *plant* is (planted) in the ground, though the unclear structure renders the DP-subject (She) to be *still planted in the ground*. Consider the counter examples below with the same elliptical D.C.:

(b) While seated in a chair, she listened to music.

Clearly, there is nothing odd with the observation that the DP-subject (*She*) associates with the Past/Part *seated in a chair* in this case. However, if we provide the same assumptions to (a) above, we get the notion that the DP-subject (*She*) was *planted in the ground*--a silly notion that can only result due to an unclear and ill-conceived D/M.

(284) Correction:

(a) While *the plant* was still planted in the ground, *she* cut off the stems.

(cf. (275, no. 4)).

(285) **Passive D/Ms**

(a) *While running, [John was hit by a motorist](passive)

(b) [A motorist hit John] (active)

(c) *A motorist hit John while running.

(The motorist was *driving* not *running*).

(286) Correction:

(a) A motorist hit *John* [while *he* was running].



(b) *A motorist hit John [while *he* was running].



Here below is my favorite example of a D/M. It might serve well to simply memorize it as a mnemonic device in order to recall the inner trappings behind dangling modification--and so I leave (i) an image and (ii) a syntactic structure for you to ponder:

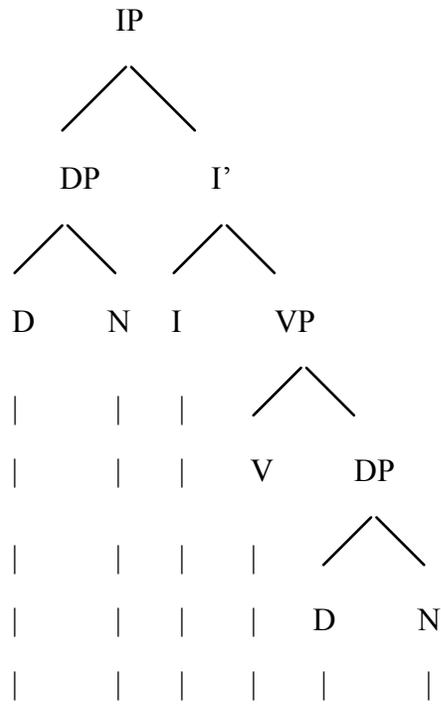
(287) While driving across the Golden Gate Bridge, the lights of the city looked beautiful.

Important Tables

Appendix-1: A Final Note on Tree Diagramming

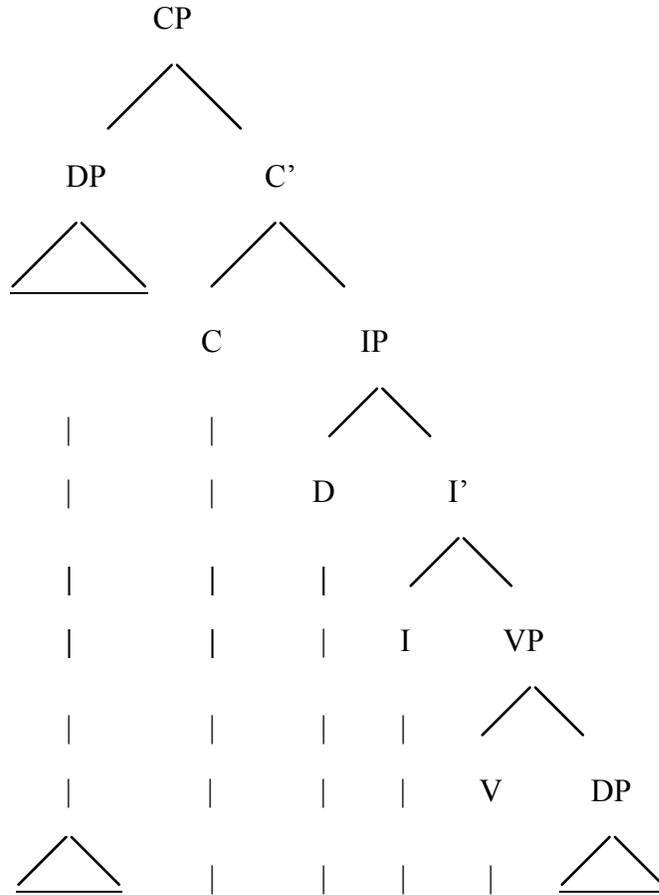
For reasons having to do with the myriad of texts currently available on grammar, along with their multifaceted approach to pedagogy, much of the tree diagramming, structure, and examples have been keyed to earlier grammar texts which have arisen out of the tradition of Transformational Grammar (TG). It goes without saying that TG has greatly changed since then. Therefore, the Chomskyan tree diagrams as presented herein are somewhat out of sync with today's working conception of how theoretical syntax should be diagrammed. In difference of traditional treatments of diagramming, it remains important to stress that even Chomsky himself, at various times, says that much of the debate behind how one should go about diagramming a syntactic structure amounts to little more than notations squabbles. Such inherent misunderstandings have, in the past, even spawned new syntactic theories. In any event, a Chomskyan style tree has evolved over the life of the theory and can be more accurately characterized in the following manner: (S)entence: **CP>IP>VP** with DP (=N) and IP (=V) taking over the roles of functional to lexical categorical status (respectively) in place of the earlier (S)entence = [NP+VP]. A CP denotes the **Complementizer Phrase**--a phrase headed by a complement (of a verb) or an Auxiliary/Modal which precedes the Subject. An IP denotes **Inflectional Phrase**--a phrase which houses the Inflection features of the Main Verb. In one basic sense, the CP has arisen out of the need to generate a phrase which sits higher up (in the syntactic tree) from the IP (where the IP is seen as hosting the subject of a declarative sentence). For example, Auxiliary inversion, Wh-movement, other possible adjuncts which may be base-generated lower within an IP which now sit on top of the IP required the instantiation of a CP. The following Tree Diagrams (current to date) come out of Andrew Radford's new text *Syntactic theory and the structure of English* (1997) and Radford et al.'s (1999) *Linguistics: An Introduction*. Consider the newly revamped tree diagrams below:

(A-1)



- (a) The students \emptyset read many books
- (b) We linguists do love \emptyset syntax
- (c) Our students \emptyset passed their exams
- (d) \emptyset I am marking \emptyset grades
- (e) \emptyset Teachers are grading our finals
- (f) \emptyset You can do \emptyset it
- (g) \emptyset We must review our notes

(A-2)



- (a) Which films_j does_i she t_i like t_j ? (movement)
does which films (base order)
- (b) How many books_j has_i he t_i read t_j ? (movement)
has how many books (base order)
- (c) Have_i they t_i visited the city? (movement)
They have visited the city. (base order)
- (d) Is_i John t_i writing the paper? (movement)
John is writing the paper. (base order)

Appendix-2: Glossary, Further Definitions and Abbreviations

Conjunctive Adverbs (see p. 132. 133 138 della volpe)

Coordinators & Correlations

Subordinators

Thematic Roles

References