

*A preliminary, but fattened, list of transformations*

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The following list, which makes a half-hearted attempt to assemble the major processes which shape English sentences, was begun around eleven years ago, when I was visiting my friend Franz Guenther and his research group – CIS, das Centrum für Informations- und Sprachverarbeitung, at the Ludwig-Maximilians-Universität, München. I thank Franz and his fellow CISler for their hospitable open-mindedness, over the years. It was fun to work and think with all of you.

I say “half-hearted,” because I am pretty sure that an exhaustive search through all the books and articles that have discussed English syntax in the last 60 years would probably arrive at a list perhaps three or four times as long as this one (or even longer?). But, on the other hand, what army of researchers is liable to do all the reading and compiling that such a list will require? With what funding? Since these questions are both pretty rhetorical, I offer this list of the *!TOP TWO HUNDRED PLUS TRANSFORMATIONS OF 2012!* for your inspection of and additions to. A major fattening was accomplished by my being given a wonderful list of alternations by Xavier Blanco (n.d.), who I have not yet had the pleasure of meeting. *Agradescos!*

For what purpose(s)? For a broad-brush limning of the major players in English syntax. So students in their first syntax course can be shown this list with the admonition that they should try to stretch their minds to a big enough size that they understand that English is no smaller than this.

The list, like your humble author, and his linguistic training, is obviously shaped by and framed in terms of the theories of his teachers: Zellig Harris, Noam Chomsky, Ed Klima, Hu Matthews, Paul Postal, Roman Jakobson, and then those of his friends, at MIT and thereafter: Alan, Alice, Aravind, Arnold, Barbara, Benoît, Beth, Bill, Bob Stockwell, Bob Fiengo, Bruce, Callef, Carlota, Charlotte, Chuck, Dave Perlmutter, Dave Stampe, Deborah, Dick, Dorothy, Edwin, Erich, Erv, Ewald, Frank, George Lakoff, George Miller, Gilles, Geoff, Gustav, Howard, Ivan, Jack, Jake, Jane, Janet, Jason, Jeff Coulter, Jeff Gruber, Jerry Fodor, Jerry Katz, Jerry Sadock, Jim, Joan, Joe, John Goldsmith, John Lawler, Jorge, Joseph, Judith, Judy Aissen, Judy Levi, Ken Hale, Ken Safir, Larry, Len, Lila, Livia, Manny, Marga, Margot, Mark Aronoff, Mark Baltin, Mark Baker, Mark Liberman, Mark Turner, Masako, Masha, Maurice, Merrill Garrett, Mike Brame, Mike Geis, Nancy, Paul Kay, Paul Kiparsky, Paul Stoller, Pete, Polly Jacobson, Polly Ulichny, Ray Dougherty, Ray Jackendoff, Ray McDermott, Rich, Richie, Robby, Ron, Rosália, Shin, Shobhana, Steffi, Steve, Sue, Suz, Theo, Tim, Timmi, Tom, Tony, Uli, Vladimir, Watt, Willem, Wolfgang Motsch, Wolfgang Sternefeld, Yara, Yuki, who multiply on into the impossibly totally nameable hundreds . . . . I thank you each and all.

Above all, this list is intended to be part of the ageless tradition, named so indelibly by Chuck Fillmore: this list is for all of us OWG's – Ordinary Working Grammarians. It hopes to be making no theoretical claims at all – certainly none that will make it uncomfortable for theoreticians of one or another stripe to use. Like Lieutenant Friday, it aims at just the facts, Ma'am.

I know, of course, that theory-neutrality is only theoretically thinkable, and so no one will have trouble seeing that I am a Harrisian, arboreal, relationally grammatical squishificationalist at heart, and if that were not bad enough, one who is

nostalgic for the crazy Syntactic Gold Rush days of the 1960's. Accordingly, I have in several places used the relational grammar (and subsequent evolutions thereof) symbols 1, 2, and 3, to designate subjects, direct objects and indirect objects. At least this much relational information will be necessary for anyone who wants to see whether a particular NP is best characterized by what Paul Postal (in Postal (2010)) calls Array 0 (for direct objects) and Array 2 (for indirect objects). I have not been able to keep accurate track of 4's (or subobjects). I have also assumed the basic correctness of the analysis of auxiliaries-as-main verbs that I suggested in Ross (1969a) and McCawley refined in McCawley (1988), since this right-branching structure seems to provide a good starting point for specifying where various kinds of adverbs and quantifiers can turn up between the subject and the main verb (Cf. especially Ross (1991)). An important distinction among rules is whether they are governed (that is, whether they can have lexical exceptions [I append a G after such governed rules]) or not – cf. Lakoff (1970) for discussion.

I think this list may prove to be useful for advanced learners of English. After your first two years or so of English, you should be able to use all of these constructions / do all of these processes. If you are comfortable with all of them, they should serve you in good stead in academic and bureaucratic prose, and even in not-too-flowery literature. This is meat and potatoes English.

If you find this list useful, but are put off by some of the glaring omissions that I am sure are there, please let me know what they are, and I will try to remedy them in subsequent refurbishments.

Last, it is obvious how much this list owes to the brilliantly playful spirit and data-fetishism of Jim McCawley, to whose memory it is affectionately dedicated.

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## I. EMPHASIS

## A. Pseudoclefts

1. PSEUDOCLEFT FORMATION: *What I ate was (I-ate) an eel.*  
*What I ate was (%I ate) an eel.* → *What I ate was an eel.* The centrality of this kind of sentences for all emphatic constructions has been *ein roter Faden* for me since I first started thinking about it after reading a pivotal short article on it by Bob Lees. I have gone into most detail about pseudos in two papers: Ross (2000, 2011)
2. COPULA SWITCH: [*What I ate was an eel.*] → *An eel is what I ate.*
3. BROGAN FAKE RELATIVIZATION: *Say the house that you saw.*  
[*Say which house you saw.* → *Say the house that you saw.*  
This rule also works in pseudoclefts: *Who left was Al* → *The one who left was Al*; *What Tina claims is that we are nuts.* →  
(?)*That which Tina claims is that we are nuts*]
4. CONJUNCTIVE WH-CLAUSE NOMINALIZATION (G): *Bill's claim is that he is an alien.* [From: *What Bill claims is that he is an alien.*  
Works for conjunctive *wh*-clauses in other contexts as well:  
*We mentioned what Bill claimed* → *We mentioned Bill's claim.*  
NB: G = a governed rule, i. e., a rule which does not work for all predicates, and for which one must therefore indicate for each predicate or class of them whether the rule applies or not. Thus, with respect to the present rule, it is impossible to apply it to *what Ed saw was that his van was gone* – see will not undergo this rule (cf. *\*Bill's sight was that his van was gone*).
5. LEFT AND RIGHT DEICTIC DISLOCATION:  
[*It won't cost \$2.* → *\$2, it won't cost that.*] (via LEFT DEICTIC DISLOCATION) or: [*It won't cost \$2.* → *It won't cost [this / ?\*that] – \$2.*] (via RIGHT DEICTIC DISLOCATION)
6. LEFT AND RIGHT DISLOCATION: [*My horse snores.* → *My horse, he snores.*] (via LEFT DISLOCATION) or: [*My horse snores.* → *He snores, my horse.*] (via RIGHT DISLOCATION) In pseudoclefts, this rule will produce related sentences like the following: *Anne's brother is the one who left* → *Anne's brother, he is the one who left.* The rule can apply to its own output, producing sentences like *Anne's brother, HIM – HE is the one who left.*  
  
NB: LEFT DISLOCATION may apply to the output of LEFT DEICTIC DISLOCATION, in this manner: *Anne's brother is the one who left.*  
→ *Anne's brother – that is the one who left.* →  
*Anne's brother – HIM – THAT is the one who left.*
7. SLUICING: (cf. Ross (1969)) *I know he is looking at something, but I*

*don't know at what (he is looking)*. In pseudoclefts, this rule will convert (in some dialects) a sentence like *We need a fork is what we need.* into *We need a fork is what %~~(we need)~~*.

## B. Clefts

- 1a. WH-CLEFT SENTENCE FORMATION: *It was an onion which I ate.*  
 1b. THAT-CLEFT SENTENCE FORMATION: *It was an onion that I ate.*

There have to be two distinct rules of clefting, because while the *wh*-clefts cannot cleft sequences of constituents which are not (do not seem to be) dominated by any single node, this is sometimes possible for *that*-clefts, as we see below:

*It was Jim swimming [that / \*who] I saw.*  
*It was in March for six weeks [that / \*when] I worked there.*

At present, I do not know of any interesting story about where cleft sentences could derive from. On the one hand, they seem virtually indistinguishable, functionally, from pseudoclefts – both have the job of putting certain emphasized constituents in the limelight. And there are strong syntactic reasons too – like: neither likes the present perfect of the main verb *be* (?*What I eat has been beans* / ?*It has been beans that I eat.*) [FN: unless the verb in the *wh*-clause is also in the present progressive, e.g., *What I have been eating has been beans.*] However, there are grave differences in behavior which (seem to?) preclude deriving both from the same source. I shall thus temporize by extracting clefts from the brow of Hera.

The clefted constituent may later be topicalized (*An onion it was that I ate.*), and, topicalized or not, it may be deictic dislocated: *An onion – it was [THAT / THIS] that I ate.* *An onion – [THAT / THIS] it WAS [that / > ?which] I ate.*

2. PRESUPPOSITION DELETION: *They say that it was Barbara who ate all the leeks, but I know that it was Michele (who ate all the leeks).*  
 This rule seems highly similar to SLUICING – it may eventually turn out that the two rules are to be identified.

## C. Frontings

1. TOPICALIZATION: [*I don't watch TV* → *TV I don't watch.*] [*I would never send anything to Harry.* → *To Harry I would never send anything.*] [*We have been stupid only about citizenship.* → *Stupid we have been only about citizenship.*] [*We should word this reply tersely.* → *Tersely we should word this reply.*] NB: Many Southern speakers aver that they can't do this kind of preposing. For some reason, NP's with deictic determiners prepose easier: [[*THAT / THIS*] / > ?*The* / ?\**A*] *cat I fed.*]

2. NEGATED CONSTITUENT TOPICALIZATION: [*She will invite no one from Montana.* → *No one from Montana will she invite.*] [*You should pat my tarantula under no circumstances.* → *Under no circumstances should you pat my tarantula.*] [*I have never lied* → *Never have I lied.*]
3. THOUGH-PREPOSING: [*Though Bill is rich, he eats a mean waffle.* → *Rich though Bill is, he eats a mean waffle.*] NB: this rule must be formulated in such a way as to delete indefinite articles when a predicate nominal is preposed: *(\*A) pig though Milford is in bed, he sure can sing falsetto.*
4. AS-PREPOSING: [*As Bill is rich, he will be perfect as a dishwasher.* → *Rich as Bill is, he will be perfect as a dishwasher.*] *(\*A) dishwasher as Bill is, he will be perfect as scorekeeper.*
5. VP PREPOSING: [*The feds fear that I will go to Lubbock, and I will go there* → *The feds fear that I will go to Lubbock, and go there I will.*]
6. ADVERB PREPOSING: [*I think he'll be in Texas tomorrow.* → *Tomorrow I think he'll be in Texas.*]
7. SLIFTING [= sentence-lifting] (G) : [*I feel that Terry is brilliant.* → *Terry is brilliant, I feel.*] Cf. Ross (1973, 2011). NB: this rule must follow a rule of NOT-COPYHOPPING: [*I think that Mel is not sober.* → *(\*I don't think that Mel is not sober.)*] Here, the doubled negative is audible (which produces an ungrammatical string, a necessary intermediate stage):

*(\*Mel isn't sober, I don't think.*

But if the complement of *think* is not then SLIFTed, then the original (embedded) *not* must be deleted, producing *I don't think that Mel is sober.*

The rule is also operative in the derivation of sentence-final phrases that are related to the superficial subject of the sentence. Thus in *Maxwell came home drunk*, it is clear that drunkenness is being attributed to Maxwell, a fact easily observed from its underlying structure: *Maxwell was drunk [when he came home].*

Evidence for the correctness of this SLIFTING analysis comes from the fact that when the relevant sentence-final phrase is a predicate nominal, it must agree in number with the superficial subject: *<He/They> returned from the war <an atheist/atheists>.*

Thus this rule is responsible for the *as*-phrase in *He served in the army as a private*, from *He was a private while he served in the army.*

8. SENTENTIAL AS-PREPOSING (G) : *Mel is drunk, as I feared.* [From (perhaps): *I feared that Mel was drunk, and he was.*] NB: when these sentential *as*-clauses follow a sentential negative in the (superficial) main clause, the *as* can refer to the positive clause which is inside the sentential negative, as we see below:

*Mort is not, as we feared, completely besotted.*

This can mean either that we feared that he was drunk, or that we feared that he was not. When the *as*-clause precedes the negative, the *as* cannot retrieve the positive. Thus this sentence is unambiguous: *Mark is, as we feared, not completely besotted.*

9. ADVERB OF RANGE PREPOSING: [*Tom, of all the students, has the biggest house.* → *Of all the students, Tom has the biggest house.*] NB: the adverb of range (the PP starting with *of*) can be niched into all the places which other sentential adverbs can be. Cf. the discussion of NICHING in Section V below. Some examples in this sentence are: *Tom has, of all the students, the biggest house; Tom has the biggest house of all the students.* These *of*-phrases, which are called “adverbs of range” in Ross (1964), are possible in sentences with superlatives, with *first*, *last*, *only*, and with a few other words. Cf. *Tom bought the [first/ only / fast(\*est) car of all my pals.*
10. EXCEPTIVE FRONTING: [*I bet everyone except for Claude had a blast.* → *Except for Claude, I bet everyone had a blast.*] [*I bet everyone except for Claude’s house was ransacked.* → ??*Except for Claude, I bet everyone’s house was ransacked.*]

AAA

## II. COORDINATE STRUCTURES

- A. CONJUNCTION REDUCTION: [*Ed sings and Jane sings.* → *Ed and Jane sing*]; [*Ed eats and Ed runs.* → *Ed eats and runs.*]
- B. COORDINATE CONJUNCTION SPAWNING: copiable coordinate conjunctions (like *and*, *or*, *nor*) get Chomsky-adjoined to each conjunct. [[*and* ( / *or* / *nor*, etc.)] [C C C ...C]<sub>C</sub>] → [[*and* C]<sub>C</sub> [*and* C]<sub>C</sub> [*and* C]<sub>C</sub>...[*and* C]<sub>C</sub>
- C. WEIRD FIRST CONJUNCTION:  
The first *and* → (*both*) before anything but a S. Before S, it deletes.  
The first *or* → (*either*). The first *nor* turns to *neither*. Thus: *And Ed sings and Jane sings* → ∅ *Ed sings and Jane sings*; *And Ed and Jane sing* → *Both Ed and Jane sing*; *Or Ed sings or Jane sings* → (*Either*) *Ed sings or Jane sings*; *Nor Ed sings nor Jane sings* → *Neither Ed sings nor Jane sings*
- D. ALL BUT LAST CONJUNCTION ZAPPING: *red and white and blue* → *red, white, and blue*; *either red or white or blue* → *either red, white or blue*; *neither animal, nor vegetable, nor mineral* → *neither animal, vegetable, nor mineral*
- E. GAPPING: *Mike ordered Cheerios and Anne ordered Wheaties.* → *Mike ordered Cheerios and Anne Wheaties.* Cf. Ross (1971). If GAPPING has deleted the highest verbs in a coordinate structure, and the next highest

verbs are also identical, then these latter verbs may also be gapped. *Mike wanted to order Cheerios and Anne wanted to order Wheaties.* → *Mike wanted to order Cheerios and Anne Ø to order Wheaties.* *Mike wanted to order Cheerios and Anne Ø Ø Wheaties.* For ununderstood reasons, negation weakens this reduction process: *No freshmen liked Kant and no sophomores liked Hegel* → *No freshmen liked Kant and no sophomores Ø Hegel.* For some reason, changing *and* to *or* improves things a bit: *No freshmen liked Kant or (?any) sophomores Ø Hegel.* But: *I don't play chess well, and Sandra doesn't play bridge poorly.* → *I don't play chess well, [or/\*and] Sandra Ø bridge (\*poorly).* <Many/?Few> *Americans like pizza and <many/?few> Japanese Ø sushi.*

- F. RESPECTIVELY COORDINATION. *Bill ordered a pizza and Sal ordered a grinder* → *Bill and Sal ordered a pizza and a grinder, respectively.* As with GAPPING, this reduction process is weakened by negation: *Bill won't order a pizza and Sal won't order a grinder* → *\*Bill and Sal won't order a pizza and a grinder, respectively.*

BBB

### III. DELETIONS

- A. EQUI (A.K.A. CONTROL) The Granddaddy of all deletions. I will call it Equi for nostalgic reasons. Basically, this rule deletes the subject of a non-finite subordinate clause under identity with some NP in the immediately superior clause. *I want [for me to win]* → *I want [for Ø to win].* I will not specify here the various cleanup rules that are necessary (like the rule which removes the complementizer *for* after the following subject has been zapped). This rule may be the same one which is necessary after Equi deletes the subject of subordinate clauses starting with *while, if, before, after, in*: *While I shaved myself, I thought of my pussycat.* → *While Ø shaving myself, I thought of my pussycat.* In English, the default kind of non-finite clausal residue is an *-ing*-phrase; I currently know of no subordinate clauses which allow an infinitive to follow a subordinate conjunction: *\*I will call you after Ø to shave myself.* In other languages, which, unlike English, have only one morphological choice for non-finite clauses, the infinitive follows this kind of post-subordinating conjunction deletion: *Je vous téléphonerai avant que je parte* → *Je vous téléphonerai avant de Ø partir* (I have no idea where the *de* comes from).

We should note that it is often possible, or necessary, to delete the form *being* after Equi has removed the subordinate clause subject: *While I was happy about the rebate, I was still ticked about the delay.* → [via Equi] *While Ø being happy about the rebate, I was still ticked about the delay.* → [via other rules, perhaps collapsible with the rule(s) that delete the copula in certain non-finite complements, as in *I consider you to-be a scoundrel, sirrah!* Cf. section D below.] *While Ø Ø happy about the rebate, I was still ticked about the delay.*

- B. COMPARATIVE AND EQUATIVE DELETION: *Sandi has [more cars/ as many cars] [than / as] Ted (does / has) yachts; Bill wanted to try to build as big houses as Toni (wanted (to try (to build))) igloos.*
- C. COLON ZAPPING: *Terry said something dumb to them: he said a swear to them.*



→ Terry said something dumb to them: ~~he said a swear to them~~

- D. BE-DELETIONS (G): The semantic and pragmatic conditions under which these deletions are possible are discussed brilliantly by Ann Borkin (cf. Borkin (1984).
1. In adverbial clauses: *Though (being) polite, Ted was angry; [If / When / Though / While] (being) [in London / drunk / a patient], I always rely on Schweppes.*  
Cf. also: *[When(ever) / If / Where(ver) / As [soon/long] as / Insofar as] (\*being) [possible / expected], I keep my cool.* NB: in these latter sentences, the subject of the deleted copula was the expletive pronoun *it*, instead of a pronominal copy of the subject of the matrix sentence.
  2. After RAISING (G): *Max seems (to be) happy. I found Max (to be) odd.* Some verbs, instead of deleting the embedded copula, substitute *as* for it: *I consider her to be a friend → I consider her (as) a friend.*
  3. After EQUI (G): *I appointed him; [he; be secretary] → I appointed him; [Ø; to be secretary] → I appointed him; [as secretary] → I appointed him; [secretary]. I used the plate; [the plate; be a palette] → I used the plate; [\* Ø be a palette] → I used the plate [as a palette].* Some verbs can nominalize the post-copular phrase: *We nominated her; [for [[she; be president]<sub>S</sub>]<sub>NP</sub> → We nominated her; [for [Ø; be president]<sub>S</sub>]<sub>NP</sub> ]<sub>PP</sub> → We nominated her; [[for the presidency]<sub>PP</sub> → We nominated her; [[for president]<sub>PP</sub>*
  4. Absolutives: *(Bob) (being) scared of the ice, Jill drove slowly.*
- E. Adverbial Preposition Deletion(s):
- (\*in) [last / this / next] week; (for) three weeks; (on) (last/next) Friday; (in) [this \*last / \*next] month, (in) [that / the same] way*
- F. Deletion after *too* and *enough*:
- He sent me something [too slimy / slimy enough] to eat (\*it).*
- G. PRE-(SENTENCY) COMPLEMENT PREPOSITION ZAP:
- I'm ashamed (\*of) [that I have / to have] two Porsches.*
- Compare: *I'm ashamed \*(of) having two Porsches.*
- H. QUANTIFIER OF-ZAP:
- [All / Both] (of) the owls were asleep.*
- NB: if this deletion happens after *all* + Number, the head NP must undergo ascension, or the definite article must also be deleted:
- \*All three the owls were asleep. → The owls all three were asleep. OR:  
→ All three owls were asleep.*

- I. INFINITIVE DELETION: This rule is OPTIONAL after only one verb that I know of *help*: *I helped him (to) bathe his cheetah*. A few verbs delete the infinitival *to* when the verb is active (*I [made / saw / heard] him (\*to) leave*.) but must keep it when the verb has been passivized (*He was [made / seen / heard] \*(to) leave*.) And *let* has to delete its *to* when active, and refuses to passivize, except if the embedded verb is *go* (*We let him (\*to) [go / play chess] vs. He was let [go /\*play chess].*)

It may be that the rule which gets rid of the *to* after the “semi-modals” *need* and *dare* (and even *ought*, in Britain (*Ought I watch telly while eating scones?*) in affective environments can be collapsed with the transitive cases above – this remains an open issue, as far as I know.

*We need [\*(to) change this tire / not (to) change this tire.] Need we (\*to) watch this bilge? Dare I eat a peach?*

- J. IT-DELETION (G): Some verbs (no adjectives or nouns, I believe, God knows why . . .) can manifest an expletive *it* immediately before a very sentency (cf. Ross (2004)) sentential complement (only in object position). In general, these *it*'s are obligatorily deleted, but for some verbs, this deletion can be made optional or blocked: *I saw % (to it) that we had a good seat. I hate % (it) that it rains here so much. I hate it [to have / %having] to shave every month; I hate (\*it) sorting of letters.*

CCC

#### IV. NOUN MODIFICATIONS

- A. APPOSITIVE CLAUSE SWOOPING: *Ev has two fruit bats, and I really trust her* → *Ev, and I really trust her, has two fruit bats*. NB: we note that the shared NP (to use Harris's term) in the clause to be appositivized, need not have been topicalized, though it can be: *Ev has two fruit bats, and I really trust her* → OPT *Ev, and her I really trust, has two fruit bats*.
- B. RELATIVE PRONOUN FORMATION: *Ev, and her I really trust, has two fruit bats*. → *Ev, who I really trust, has two fruit bats*. NB: special provisions must be made for parasitic gaps (Cf. Culicover and Postal (2001)): in the following sentence, there is one gap after *threw away*, and another, the "parasitic" one, after *reading*: *The book; which I threw away Ø; before reading (it;) was extremely interesting.*
- C. WHIZ DELETION: *Somebody (who is) tall slept here; Mort, (who is) (a) consummate chess player, has warthogs in the basement*. [NB: there are interesting dependencies between WHIZ DELETION, the properness or commonality of the modified noun, and the possibility of various deletions *Sally, (who is) (the one) who called you last night, has moved* vs. *The painter (who is (\*the one)) who called you last night has moved / The painter (??who is) who called you last night has moved*.
- D. MODIFIER SHIFT (G): *the children sleeping quietly* → *the children quietly sleeping* → *the quietly sleeping children*. Modifiers can shift to prenominal position only if their head is phrase-final: *\*the sleeping quietly children*.

- E. INCORPORATION (G): *the detective smoking a pipe* → (\*)*the detective pipe-smoking* → *the pipe-smoking detective*; *the detective traveling to London* → ??*the to London traveling detective*; *the detective having a big heart* → (\*)*the big-heart-having detective*, whence, obligatorily: *the big-hearted detective*.
- F. PRENOMINAL ADVERB PREPOSING CUM PREPOSITION OBLITERATING: *the temperature in the city in Dallas on Thursday* → *the (\*on) Thursday (\*in) Dallas (in-city) temperature*
- G. THAT-DELETION AFTER A HEAD NOUN: *The house [that → ∅] I looked at was costly*; *We mentioned the fact [that → ??∅] it had rained too much*.
- H. ATTITUDE-PREPOSING (G): *his attitude of "No, you can leave it right there* → *his no-you-can-leave-it-right-there attitude*
- I. POSSESSIVE FORMATION (G): *a book which Mel has* → *a book of Mel's*. NB: for some nouns there is a pluralization of the head noun, sometimes optional, sometimes obligatory, as a kind of agreement with the number of the possessivizing NP, and I don't know which when: *the height(\*s) of Mel* - *the height\*(s) of Mel and Al*
- J. OWNING: *himself's* → *his own*
- K. POSSESSIVE FRONTING: [*A picture / the height*] of Mel('s) → *Mel's [picture / height]*.
- L. CHARACTER TRAIT POSSESSOR EXTRAPOSITION (G?): *I admire his honesty* → *I admire the honesty in him*; *Her generosity amazed us* → *The generosity in her amazed us*; *Jane's beauty overwhelmed me* → ?*The beauty in Jane overwhelmed me*. *Ted's height is noteworthy* → \**The height in Ted is noteworthy*. NB: the postposing of the possessor of an attribute takes place within the confines of a NP; the resulting sequence of elements Det N P NP forms an NP, as we see in this example: *They admire his honesty* → *They admire the honesty in him* → (via PASSIVE) [*The honesty in him was admired by them* / \**The honesty was admired in him by them*.] [Cf. Blanco 2.13.2 ATTRIBUTE OBJECT ALTERNATION]

DDD

## V. INSERTIONS

- A. NICHING: "*Ed • might • not • have • been • talking • to Pete • about this • yesterday,*" *said Tex*. [The parenthetical "*said Tex*" can be inserted anywhere where there is a black dot. The same applies to such sentence adverbs as *perhaps*, *reportedly*, *why am I telling you all this?*; *could you reach over and pass me the flyswatter?*, etc. - all can be inserted in (VERY) roughly the same niches.] In general, there are niches between major constituents of sentences (except anywhere in the sequence Verb (Indirect Object) Direct Object), and there are no niches in NP's or PP's.
- B. THERE-INSERTION (G): *A commotion arose* → *There arose a commotion*; *A*

*giraffe is standing in the shower.* → *There is a giraffe standing in the shower.*  
 (Cf. Levin p. 88, Blanco 6.1) In addition to the well-known and quite sturdy copular sentences whose subject is *there*, *there* exists a small number of true verbs which can have the expletive *there* as a subject; all of them are concerned with (coming into) existence: *appear, arise, exist, emerge, develop, occur, etc.* This latter class of sentences are much weaker and less integrated into the grammar. They are systematically weakened by negation and SUBJECT VERB INVERSION: cf. *There will [be/??exist] problems; There will (??not) develop a consensus; There may (\*dis)appear a large flock of ravens; Will there [be/\*exist] serious difficulties.* Cf. Ross (1974) for some discussion.

Many *there*-sentences can, with simple present and past tense verbs, be converted to inverted sentences whose *there* has been replaced by an adverbial: *There developed a community of protesters in East Anglia* → *In East Anglia (?has) developed a community of protesters. An old woman lives in the woods* → *In the woods lives an old woman.* Cf. Blanco 6.2 LOCATIVE INVERSION.

- C. PREDICATE LOWERING (G): *The reasons [that /??for which] we should not go are three/numerous/several, etc.]* → *We should not go for [three/numerous/several] reasons.*
- D. PREDICATE RAISING (G): Cf. Lakoff (1970), Postal (1971), Blanco 7.3 REACTION OBJECT CONSTRUCTION *Kim forced Pat into signing by whipping him* → *(\*Kim whip-forced Pat into signing)* → OBL *Kim whipped Pat into signing; Lee strikes me as similar to Kerry* → *(\*Lee similar-strikes me of Kerry)* → OBL *Lee reminds me of Kerry; It came about that the sky was red* → *The sky came to be red* → *(\*The sky red-came-to-be)* → OBL *The sky reddened; I caused [the pencil be sharp]* → *(\*I sharp-caused the pencil)* → OBL *I sharpened the pencil; Kim indicated her embarrassment by smiling* → *(\*Kim smile-indicated her embarrassment)* → OBL *Kim smiled her embarrassment.* Cf. Ross (1971b). *The truck rumbled as it went into the driveway* → *(via SLIFTING) The truck went into the driveway rumbling* → *(via PREDICATE RAISING) The truck rumbled into the driveway.* (Cf. Blanco 7.9: **Directional phrases with non-directed motion verbs**)
- E. PLEASE-INSERTION: The word *please* may be inserted to the left of any verb whose illocutionary force is that of a request (either of the speaker, or of someone quoted as making a request. (Cf. Ross (1975))
- F. COGNATE OBJECT CONSTRUCTION (G): Cf. Blanco 6.2 *Sarah smiled in a charming way* → *Sarah smiled a charming smile; Jensen died like a beggar* → *Jensen died a beggar's death.*

EEE

## VI. PRONOMINALIZATIONS

- A. EQUI(-NP DELETION) (a.k.a. "control") (G): Into complements : *I claim that I am able to eat olives.* → *I claim (\*for me) to be able to eat olives.* Into infinitival relative clauses : *We took Betty a novel (for her) to read on the train.* Into adverbial clauses: *Before I got up, I shaved.* → *Before getting up, I shaved.*

- B. REFLEXIVIZATION: (\*)*I want to talk to me about you* → *I want to talk to myself about you*; (??)*I want to talk to you about you*. → *I want to talk to you about yourself*. Split antecedents are impossible for REFLEXIVIZATION: \**Bob<sub>i</sub> talked to Mike<sub>j</sub> about themselves<sub>i,j</sub>*. Some verbs (no adjectives, to my knowledge) require reflexive objects: *perjure, ingratiate*. The apparent reflexive objects of such verbs are precluded from undergoing many processes which apply generally to NP's: *I defended/\*perjured [only/even/also] myself. It was myself that I [defended/\*perjured]*. (Cf. Blanco 8.2) Similarly, some verbs and prepositions (but no adjectives?) have nouns in their objects which require a possessive pronoun that is coreferential with a preceding NP: *Mel broke \*(her) word; I held Sam to [his/\*my/\*Ø] word; I am not at \*(my) best in the morning*. And some verbs require possessives on nouns in their objects which are obligatorily **not** coreferential with the preceding subject: *Fred<sub>i</sub> has [my/your/her/\*his/Toby's/our/their] sympathy*. (Cf. Blanco 8.3)
- C. THAT<sub>2</sub>THERE-ING: *He moved to Illinois, and after moving to Illinois, he became a narc.* → *He moved to Illinois, and after that, he became a narc.* → *He moved to Illinois, and thereafter he became a narc.* → *He moved to Illinois, thereafter becoming a narc.* Other *there*-able prepositions: *there + [upon / by / in / from / with / etc.]*
- D. ANAPHORIC COMPLEMENT DELETION (G): *He left, but they don't know (that he left)*.
- E. "VP"-DELETION: *If you will order a bagel, I will also (order a bagel)*.
- F. S DELETION (G): *Greg always had fleas, but he never knew [that he had fleas]<sub>i</sub>.* → *Greg always had fleas, but he never knew it<sub>i</sub>.*

NB: under an abstract analysis of actions, where, for instance, *Max is walking* comes from *Max is doing [walk]*, S DELETION can be used to derive the sentential object of *do*, producing so-called "pro-VP's," like *do it*. Cf. Ross (1972)

- G. SO-PRONOMINALIZATION (G): *Jeff used to yoyo secretly, but his mom never thought [that he used to yoyo secretly]<sub>i</sub>.* → *Jeff used to yoyo secretly, but his mom never thought so<sub>i</sub>*

NB: under an abstract analysis of actions, where, for instance, *Max is walking* comes from *Max is doing [walk]*, SO-PRONOMINALIZATION can be used to derive so-called "pro-VP's," like *do so*. Cf. Ross (1972).

FFF

## VII. ADVANCEMENTS

To subject position:

- A. PASSIVE (G): *The paparazzi stalked Terence* → *Terence was stalked by the paparazzi*. For certain idioms, there are two possible passives: *Someone took advantage of the favorable climactic conditions* can become either

*Advantage was taken of the favorable climactic conditions* or *The favorable climactic conditions were taken advantage of.* (Cf. Levin p. 85, Blanco 5.1) NB: the set of types of post-verbal constituents that can be advanced to subject position by this rule supersedes those sets that can be advanced by the next two rules. Two brief examples: \**Advantage was untaken of my absence.* \**These students are adequately talked to about this by the time they graduate.* Blanco points out that the objects of certain prepositions can be passivized (Blanco 5.2 PREPOSITIONAL PASSIVE): *George Washington slept in this bed* → *This bed was slept in by George Washington.* Some verbs must be lexically marked to obligatorily undergo PASSIVE: *It is rumored that you like reptiles* / \**People rumor that you like reptiles.* (Cf. Blanco 8.1)

- B. UNPASSIVE (G): *No one has painted the car.* → *The car is unpainted.* ;  
*Nobody is caring for my sheep.* → *My sheep are uncared for.* *I was uninformed*  
 (\**that there was going to be a party*). *I was ungiven a prize*; *The gun was unshot*  
 /\**Frank was unshot*; *The protesters were unshot down.* *This law is unwritten*  
 (\**down*).
- C. STATIVE PASSIVE (G): *Someone has paid for the shoes.* → *The shoes are paid for.* (Cf. Levin p. 86-87: “adjective” passive) \**These principles are too rarely spoken up for.* Blanco (5.3) calls such passives “Adjectival Passives”: *Feathers remained stuffed in(to) the pillow* → *The pillow remained stuffed with feathers.* I suspect that this is a subcase of LOCATIVE → I (Cf. §VII.E below).
- D. SOURCE → I (G): *Beer is oozing from the vat.* → *The vat is oozing beer.* *Heat radiates from the sun* → *The sun radiates heat* (Cf. Levin p. 32) [Cf. Blanco 1.1.3 SUBSTANCE/SOURCE ALTERNATION and also Blanco 2.3.5 CLEAR ALTERNATION (intransitive)] *Clouds cleared from the sky* → *The sky cleared of clouds.*
- E. LOCATIVE → I (G): *Bees are swarming in the garden.* → *The garden is swarming with bees.* (Cf. Levin p. 53) [Cf. Blanco 1.1.3 SUBSTANCE /SOURCE ALTERNATION and 2.3.4 SWARM ALTERNATION]
- F. HIDDEN (?) LOCATIVE → I (G): (Perhaps from (\*) *water filled into the pail*) *Water filled the pail.* → *The pail filled with water.* [Cf. Blanco 3.5 LOCATUM SUBJECT ALTERNATION] (Cf. Levin, p.81) List of all verbs said by Levin to undergo this transformation (Cited on John Lawler’s page: <http://www-personal.umich.edu/~jlawler/>): *adorn anoint bandage bathe bestrew bind blanket block blot bombard carpet choke cloak clog clutter coat contaminate cover dam dapple deck decorate deluge dirty dot douse drench edge embellish emblazon encircle encrust endow enrich entangle face festoon fill fleck flood frame garland garnish imbue impregnate infect inlay interlace interlard interleave intersperse interweave inundate lard lash line litter mask mottle ornament pad pave plate plug pollute replenish repopulate riddle ring ripple robe saturate season shroud smother soak soil speckle splotch spot staff stain stipple stop up stud suffuse surround swaddle swathe taint tile trim veil vein wreath*
- G. CRYPTOLOCATIVE NATURAL FORCE SUBJECT DISPLACEMENT BY PATIENT (??) (G):  
*The sun dried the clothes.* → *The clothes dried in the sun.* (Cf. Levin, p.79)

- H. TEMPORAL OR LOCATIVE → I (G): (*Columbus was in Sorrento in 1491*) → *1491 [saw / found] Columbus in Sorrento. Protesters against the Nazis were executed in Munich* → *Munich [saw/\*found] protesters against the Nazis executed. The tsunami at Fukushima sounded a deathknell for the Japanese* *The Japanese heard a deathknell from the tsunami at Fukushima.* (Cf. Levin pp. 79-80) [Cf. Blanco 3.1 TIME SUBJECT ALTERNATION]. NB: an initially attractive source for such sentences, namely sentences starting with expletive *there*, must be rejected, because the deep subjects of *there*-sentences are indefinite, and there would be no grammatical source for the abovesited *Columbus*-sentence. At present, I see no clear analysis for these sentences.
- I. SOURCE → I (*OUT OF* → *INTO*) (G): *An oak tree grew [from /?out of] the acorn.* → *The acorn grew into an oak tree* (Cf. Levin, p. 57) [Cf. Blanco 2.4.2 MATERIAL PRODUCT ALTERNATION (intransitive)] NB: the assumed direction of the transformation is that the *out of/from*-phrase is deep, which means that the *into*-phrase should be a *chômeur*. One piece of evidence for this hypothesis is the weakness of the *into*-phrase if the object NP is definite. *The acorn grew into [an/??the] oak tree.* Cf. Ross (1995b) for a discussion of *chômage* and defective NP's.
- J. MIDDLE (a.k.a. PATIENT SUBJECT)) (G): *Students can easily translate this book into Gothic* → *This book translates ??(easily) into Gothic (?for students); Authors can write well with this pen* → *This pen writes \*(well) for authors; Journalists can take pictures of Einstein well (with this camera)* → *Einstein takes a \*(good) picture (with this camera) (?for journalists).* Note the variable necessity of adverbs like *easily, readily, well* (which Harris called "catalysts") [Blanco 1.1.3] [CF. BLANCO 4.1 VIRTUAL REFLEXIVE] In §4.1, Blanco mentions alternations like *One cuts the meat - The meat cuts itself; One opens the window - The window opens itself.* The type of NP's that can become subjects here (namely, direct objects (2's in Postal's terms [cf. Postal (2010)]) are the same as for those that undergo MIDDLE. I do not know if the reflexive pronoun that occurs with this transformation can make the otherwise necessary "catalytic" adverb unnecessary, as in *Solar cars sold [quickly/themselves]; ?\*Solar cars sold*, or whether the two necessities are independent (and thus whether each verb must be marked to indicate which of the two addenda are required).
- K. INSTRUMENTALS TO SUBJECT POSITION [CF. BLANCO 1.2.6.2 AND 3.3 INSTRUMENTAL SUBJECT ALTERNATION] {INSTRUMENTAL → I} *Somebody cut (the bread) with the knife* → *This knife cut (the bread) (This knife doesn't cut* – NB: after the formation of an instrumental-subject sentence, the rule of UNSPECIFIED (PREPOSITIONAL) OBJECT DELETION is enabled (Cf. §XII.F)) Cf. also Blanco 3.4 [ABSTRACT CAUSE SUBJECT ALTERNATION]: *He established his innocence with his letter* → *His letter established his innocence.* The two alternations Blanco cites differ in the abstractness of the object of the *with*-phrase, but I can detect no difference beyond that in their syntactic behavior. Note that both types of *with*-phrases are precluded in negative clauses: *It is with this knife that I will (\*not) cut the bread; It is with this letter that he will (\*not) establish his innocence.*

- L. LOCATIVE CAPACITY SUBJECTS [Cf. Blanco 3.6 LOCATION SUBJECT ALTERNATION] *Five people can sleep in each room* → *Each room sleeps five*; *45 people can sit at this dining table* → *The dining table seats 45*. *Everyone fits in this size* → *This size fits everyone*. There appear to be very few verbs which undergo this rule. One restriction appears to be that the Theme must be animate: *Five {people/TV sets} can sit on this bench* → *This bench seats five {people / \*TV sets}*.
- M. Blanco 3.7 CONTAINER SUBJECT ALTERNATION (G): *I incorporate the new results in the paper* → *The paper incorporates the new results*. I see no viable underlying structure for these sentences. Like such instrumental subject alternations as *Someone broke the window with the hammer* - *The hammer broke the window*, while the former sentence clearly requires the participation of an animate initiator of the event, the latter sentence does not. Neither of the clauses which have no human argument admits of a passive version with a *by*-phrase: *\*The new results are incorporated by the paper*; *\*The window was broken by the hammer*. Thus neither alternation can be said to have a satisfactory analysis at present. What appears to be necessary is to broaden the notion of alternation in such a way that it does not link only actually occurring clauses, but instead predicate-argument configurations whose arguments are a subset of the argument sets in actually occurring sentences. This is a significant departure from the notion that syntactic relatedness is a relation holding between actually occurring clauses. The consequences of the broadening of the core notion of syntactic relatedness are at present unguessable.
- N. Blanco 3.8 RAW MATERIAL SUBJECT ALTERNATION. *She {made/baked} wonderful bread from that whole wheat flour* → *That whole wheat flour {made/>??baked} wonderful bread*. *\*Whole wheat flour {made/baked} into wonderful bread*. Again, as in the case of the CONTAINER SUBJECT ALTERNATION discussed immediately above, there is no actually occurring sentence with an object of creation (*bread*) and a (material) Source phrase (*flour*) which can surface with any other subject than the Source phrase. Unguessableness continues.
- O. Blanco 3.9 SUM OF MONEY SUBJECT ALTERNATION (G): *One can buy someone a ticket for \$5* → *\$5 can buy someone a ticket*. As far as I know, this alternation only works with a few synonyms of *buy*, such as *purchase*, *get*, *pay for*, *?procure* [but cf. *\*acquire*, *\*obtain*]
- P. INVERSION (a.k.a. FLIP) (G): [Cf. Blanco 3.10 SOURCE SUBJECT ALTERNATION] *I benefited from the market crash* → *The market crash benefited me*. All of the verbs in the *surprise*-class undergo this rule obligatorily as verbs and adjectives. All these verbs have underlying Experiencer subjects and sentential objects [Thus: Subject - *I*; Object - *at that S*. Deep: *(\*)I surprise (\*at) that you won*.] As a surface verb, we find *That you won surprises me*; as a surface adjective, we find *That you won is surprising to me*; but as a surface noun, we find a structure that is closest to the source: *my surprise that you won*. There are few verbs in English (*benefit*, *profit*) for which INVERSION is optional, but INVERSION figures importantly in the analyses of many predicates. Cf. Postal (1971)
- Q. Blanco 4.2 REFLEXIVE OF APPEARANCE ALTERNATION (G): (*Someone*)



*presented a solution to the problem* → *A solution to the problem presented itself*;  
*(Someone) suggested a way out* → *A way out suggested itself*;  
*(Someone) made a shorter route available* → *A shorter route made itself available*. This alternation seems to be different from that of MIDDLE or VIRTUAL REFLEXIVE OF APPEARANCE ALTERNATION, because in both of these, the reflexive alternant presupposes the involvement of an agent in the action. But in the present case, *present*, *suggest* and *make (available)* seem to clearly deny any such involvement.

- R. RICHARD (G): (Cf. Rogers (1974)) *It looks like Ed is blasted* → *Ed looks like he is blasted*;  
*It looks like there will be no more beer* → *There looks like there will be no more beer*.  
 ??*There looking like there will be no more beer bums me out*.

To object position:

- A. DATIVE (G): *I sent a jararaca to Mitchell*. → *I sent Mitchell a jararaca*.  
*Mitchell was sent a jararaca*. *A jararaca was sent* [*%ome* / *?\*Mitchell*] (Cf. Levin p. 45) [Blanco 2.1] Paul Postal treats this alternation in great detail in Chapter 3 of his invaluable study (Postal (2010)). One of the basic things that Postal shows is that there are at least three kinds of “simple NP objects” – i. e., lone NP’s following the verb. In terms which originated in Relational Grammar, these three are 2’s (traditional direct objects), 3’s (traditional [but not in generative grammar] indirect objects) and 4’s, which can be called “subobjects,” but which are not recognized in traditional or generative studies. In Chapter 2, Postal lays out three arrays of syntactic behaviors which allow the precise recognition of these three object types. In brief, while in *I sent a jararaca to Mitchell*, *a jararaca* is a 2, it is no longer one (it is a 4) in *I sent Mitchell a jararaca*. Further, in this latter sentence, *Mitchell* is a 3, while it is not in the former sentence. Space limitations preclude a more exhaustive discussion here.
- B. BENEFACTIVE (G): *We baked a cake for Al*. → *We baked Al a cake*. (Cf. Levin p. 48) [Blanco 2.2] *\*A cake was baked Al*. *%Al was baked a cake*.
- C. GOAL → 2 (G): *We loaded hay onto the wagon*. → *We loaded the wagon with hay*. (cf. Levin, p. 50) [Blanco 2.3.1 & 2.7 IMAGE IMPRESSION ALTERNATION] *The jeweler inscribed the name [into the ring/onto the shield]*  
*The jeweler inscribed [the ring/the shield] with the name*. Also: *We fashioned the noodles into bayonets*. → *We fashioned bayonets out of the noodles*. (Cf. Levin, p.56) NB: this transformation works in French (*Luc charge des caisses dans le camion* → *Luc charge le camion de caisses* “*Luc loads the truck with boxes*”) and in German (*Lucas lädt die Kisten auf den Laster* → *Lucas lädt den Laster mit Kisten*) A suggestion that the transformed version ends with a PP that is a chômeur (cf. Perlmutter) is provided by the fact that in all three languages, the object of the preposition is less happy as a definite (cf. *?with the hay*, *?des caisses*, *?mit dem Kisten*), a fact consistent with the general tendency of chômeurs to diminish in saliency (and thus definiteness). Cf. Ross (1995b) The following is the list of verbs which Levin says are like *spray* and *load*: *Spray/Load Verbs* (Levin 1993:117-119)  
*brush cram crowd cultivate dab daub drape drizzle dust hang heap inject jam load mound pack pile plant plaster prick pump rub scatter seed settle sew shower slather*

*smear smudge sow spatter splash splatter spray spread sprinkle spritz squirt stack stick stock strew string stuff swab vest wash wrap* {Cited by John Lawler at <http://www-personal.umich.edu/~jlawler/>}

- D. LOCATIVE → 2 (G): *Harrison searched for nuts in the forest.* → *Harrison searched the forest for nuts.* (Cf. Levin p. 70) [Cf. Blanco 2.11 SEARCH ALTERNATION] Blanco mentions that for the verb *hunt*, the *for* can be omitted when following the verb. Cf. §XII.F below for discussion.
- E. TO → WITH (G): *He presented a cake to me.* → *He presented me with a cake.* (Cf. Levin, p. 65) [Cf. Blanco 2.6 FULFILLING ALTERNATION] This alternation is discussed in Postal (2010), pp. 85-87, where the following list of verbs which undergo it is given: *credit, entrust, furnish, present, provide, supply, . . .*
- F. AGAINST → WITH (G): *We hit the stick against the fence.* → *We hit the fence with the stick.* (Cf. Levin, p. 67)
- G. BLAMING (G): *I blamed the damage on Oz.* → *I blamed Oz for the damage.* (Cf. Levin, p. 69) [Cf. Blanco 2.10 BLAME ALTERNATION]
- H. PARTICLE MOVEMENT (G): *You have ripped off too many taxpayers.* → *You have ripped too many taxpayers off.*
- I. SOURCE → 2 (G): *Ted cleared the snow from the sidewalk.* → *Ted cleared the sidewalk of snow.* Also: *We left from Dallas for Waco.* → *We left Dallas for Waco.* [Cf. Blanco 2.3.2 CLEAR ALTERNATION] Note that the deep object of verbs like *clear* must be a plural or a mass noun (a multiplex noun, in Len Talmy's felicitous terminology): *I cleared the table of [the dishes / \*my cup].* Cf. Ross (1995b) for a discussion of why the *of*-phrase in the transformed version is, like many chômeurized NP's, defective – for instance, unlike decent, upstanding NP's, it is less than happy to pronominalize: *?I cleared the table of them.* Some other verbs which undergo this alternation (some better than others): *empty, clean, sweep, wipe, etc.(?).* The verb *rid* seems to be one which obligatorily must undergo the rule.
- J. SOURCE → 2 (G): *We wiped the fingerprints clean off of the wall* → *We wiped the wall clean of fingerprints* [Cf. Blanco 2.3.3 WIPE ALTERNATION] NB: this alternation is unique to English; there appear to be no other adjectives/adverbs (?) like *clean* which can appear where it does.
- K. SOURCE (MATERIAL) → 2 (G): [Cf. Blanco 2.4.1 MATERIAL PRODUCT ALTERNATION (transitive)] *Martha carved a toy out of the piece of wood* → *Martha carved the piece of wood into a toy.* NB: the *into*-phrase is uncomfortable as a definite: *Martha carved the piece of wood into [?the/\*my] toy,* a fact which may suggest that this PP is a chômeur, despite the fact that it looks like a Goal-phrase. Cf. Ross (1995b) for discussion of chômeage and defectivity.
- L. AGAINST/WITH ALTERNATION (G): [Cf. Blanco 2.8] *I hit the stick against the fence* → *I hit the fence with the stick.* I have here suggested that the

underlying form has the preposition *against*, as opposed to Blanco's suggestion, which is to consider the variant with *with* to be basic. The question either of these proposals leave us with is this: could one not say that the *with*-phrase here is an instrumental phrase, and that the *against*-phrase is simply a variant of the direct object – as in % *I was eating a bun* - *I was eating on a bun* [Cf. BLANCO 1.3]. It seems to me that at the present, all analytic possibilities are open.

- M. *THROUGH/WITH ALTERNATION* (G): [Cf. Blanco 2.9, Gruber (1976)]  
*Alison pierced the needle through the cloth* → *Alison pierced through the cloth with the needle* → *Alison pierced the cloth through with the needle*. These sentences are all motional; clearly the Theme in all of them is *the needle*. The fullest path-structural version might be: *Alison pierced the needle [from the belt through the cloth to the zipper]<sub>Path</sub>*. In such a sentence, it is clear that the function of the *through*-phrase is that of Trajectory, in the terminology of Ross (1995a). It is not clear to me how the preposition *through*, which heads a medial leg, can come to function as a particle. It reminds one of alternations like *I let the cats into the house* → *I let the cats in (to the house)* → *I let in the cats* which were first discussed in Fraser (1965), but the prepositions which manifest particle-like behavior in such sentences (namely, *in, out, on, off*) are those which head Goal-phrases, not Trajectories, and the arguments which they show up on either side of are Themes, not Trajectories. This alternation, then, seems, for the moment, to be a lone wolf. None of what I have here suggested it written in anything more permanent than pencil.
- N. *THERE-REPLACEMENT* [Cf. Ross (1986)] *There is a spot on my shirt* → *My shirt has a spot on [it/\*your car]*. *I have a spot on [my/\*Harold's] shirt*. *There is a stain on your photo of Ed* → *Your photo of Ed has a stain on it / You have a stain on your photo of Ed / \*\*Ed has a stain on your photo of him*. *There is a stain on the rug that is under these chairs* → *\*These chairs have a stain on the rug that is under them*.

GGG

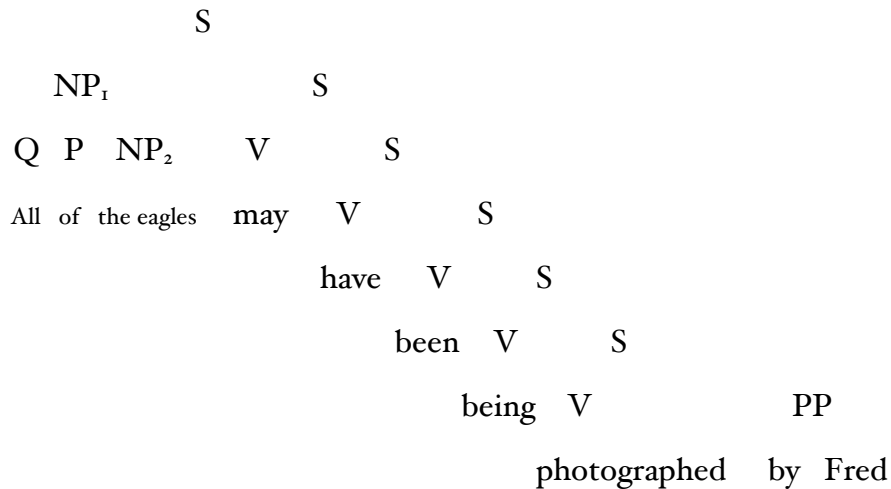
## VIII. ASCENSIONS

To subject:

- A. *A-RAISING* (G): *For Mark to win is likely.* → *Mark is likely to win.* [Cf. Postal (1974)]
- B. *TOUGH-MOVEMENT* (G):  
 Short - *To get Mike to bite me will be tough for me.* → *Mike will be tough for me to get to bite me.* \**This hat will be tough to say that I wore.*  
 Long - *To imagine making Betty say that she wore this hat will be tough for me.* → *This hat will be tough for me to imagine making Betty say that she wore.*

- C. POSSESSOR ASCENSION (G): *IBM's price went up.* → *IBM went up in price.*  
(Cf. Levin, p. 77) [Cf. BLANCO POSSESSOR SUBJECT ALTERNATION (intransitive) 2.13.5]
- D. QUANTIFIER FLOATING (chopping): [*All / Both*] of the eagles had a snack. → *The eagles [all / both] had a snack.*
- E. QUANTIFIER COPY FLOATING (copying): [*All / Both / None / Some / Neither / Either / Many / Most / Half / Several / Each*] of the eagles had a snack. → *The eagles [all / both / none / some / neither / (\*) either / many / most / half / several / each] of them had a snack.*

NB: a fuller treatment would have to specify the various nichabilities for each of the copying floated quantifiers. The problem can be seen in this first sentence: *all of them* can be inserted in all of the places marked with a ‘•’ dot. The problems most of them can be handled by treating auxiliaries as main verbs, as suggested in this diagram:



*The eagles • may • have • been • being • photographed by Fred – •.*

If we assume that QUANTIFIER COPY FLOATING is an optional cyclic process, and that the quantified NP started out as the subject of the lowest cycle –*photographed by Fred*– then the output of that cycle will be *the eagles all of them photographed by Fred*; NB –the subject of this clause will be *the eagles*, which will then raise to become the subject of the next higher verb – *being*. There being no more quantified NP’s in the structure, after three more applications of RAISING, the resultant sentence will be *The eagles may have been all of them being photographed by Fred*. If the floating had not happened on the first cycle, but on the second, the result would have been *The eagles may have all of them been being photographed by Fred*. The only places in a surface structure that these phrases of the form *Quantifier of them* can be found are immediately to the left of a verb. The floating never happens post-verbally: *\*I kept the students all of them company*; *\*I talked to the students all of them about golf*. There are, however two other places where phrases of the form *Quantifier of them* can appear: after a Left-Dislocated phrase (as in *The eagles\*(-) all of them – I want to photograph them.*) and sentence-finally, after a “dash”

intonation (as in *I want to photograph the eagles\*(-) all of them.*) I do not have any explanation for these two “extra” environments for such copied quantifier-phrases to appear. I assume, however, that their existence is connected with the general grammar of dislocation, given the fact that both of the contrary *Quantifier of them* phrases are separated from the main clause by the “dash” intonation that is the fingerprint of dislocations.

- F. PROPERTY FACTORING (chopping or copying) (G): *Bob's eyebrow texture and Hal's eyebrow texture are similar.* → *Bob and Hal are similar in (their) eyebrow texture(s).* Cf. Postal (1971)
- G. BY-RAISING (chopping) (G): *Mel's winning the lottery surprised me.* → *Mel surprised me by [O/?him/??his] winning the lottery.*
- H. WITH-RAISING (copying) (G): *Carol's surliness shocked us.* → *Carol shocked us with \*(her) surliness.* (Cf. Levin, p. 76-7) [CF. BLANCO 2.13.4 POSSESSOR SUBJECT ALTERNATION (transitive) 2.5.4]
- I. CONJUNCT MOVEMENT (G): [CF. BLANCO RECIPROCAL ALTERNATIONS 2.5; cf. especially 2.5.4] Predicates with NP\* subjects (i.e., these subjects are deeply coordinate; they are not derived from coordinate sentences *via* CONJUNCTION REDUCTION (cf. Lakoff and Peters (1969)) can make one conjunct ascend to subject position, which thus chômeurizes the other conjunct, moving it become a sister of the main verb, marking it as a chômeur by Chomsky-adjointing a preposition to its left. *Pat and Lee danced* → *Pat danced with Lee*; *Gallia and Britannia fought* → *Gallia fought against Britannia*; *Caviar and hummus differ* → *Caviar differs from hummus*. *The oil and vinegar separated* → *The oil separated from the vinegar*.
- J. CONJUNCT MOVEMENT WITH TOGETHER (G): [CF. BLANCO TOGETHER RECIPROCAL ALTERNATION (intransitive) 2.5; CF. ESPECIALLY 2.5.5] *The eggs and the cream mixed* → *The eggs and the cream mixed together* → *The eggs mixed (?together) with the cream*.
- K. CONJUNCT MOVEMENT WITH APART (G): [CF. BLANCO APART RECIPROCAL ALTERNATION (intransitive) 2.5; CF. ESPECIALLY 2.5.6] (\*) *The twig and the branch broke* *The twig and the branch broke apart* *The twig broke (\*apart) off of the branch*.

To object:

- A. B-RAISING (G): *I know that Solly chews gum.* → *I know Solly to chew gum.* [Cf. Postal (1974)]
- B. POSSESSOR ASCENSION (G): *We kissed Queen Victoria's hand.* → *We kissed Queen Victoria on [the/ ?≤her hand].* (Cf. Levin, p. 71) [CF. BLANCO BODY-PART POSSESSOR ASCENSION ALTERNATION 2.12] *Selina touched the horses's back* → *Selina touched the horse on the back*; *The horse kicked Penny's shin* → *The horse kicked Penny on the shin*. NB: this transformation requires that the possessor be animate: *I kissed [the*

*girl/?corpse/\*statue] on the lips; \*\*I kissed the phone on the dial.*

- C. EACH-FLOATING: *We will give each of the finalists a piece of gum. → We will give the finalists each a piece of gum.*
- D. EACH-HOPPING: *We will give the finalists each a piece of gum. → We will give the finalists a piece of gum each.*
- E. POSSESSOR ASCENSION WITH [FOR/THE] (G): *We admire Bev's determination. → We admire Bev for [her/the] determination.* (Cf. Levin, p. 73) [CF. BLANCO POSSESSOR OBJECT ALTERNATION 2.13.1] *They praised the children's dedication → They praised the children for their dedication; I admire his courage → I admire him for his courage; The inspector analyzed the building's soundness → The inspector analyzed the building for its soundness.* NB: there is some trace of humanity involved in these alternations, as we see in the slight offness of some of the following sentences: *They praised the cable for its tensile strength; They praised this argument for its completeness; ??They praised the rock for its specific gravity; ?They admired the well for its depth; They admired [the bridge/??river] for its length.* Clearly, the default objects of verbs like *praise* and *admire* are humans, but the set of objects can be extended if a non-human NP can be viewed as having been created by humans, or as being of value for some human purpose.
- F. CONJUNCT ASCENSION TO DIRECT OBJECT (G): *He compared the new oar and the old oar → He compared the new oar with the old oar; We separated the wheat and the chaff → We separated the wheat from the chaff.* [CF. BLANCO SIMPLE RECIPROCAL ALTERNATION (transitive) 2.5.1] *I mixed the sugar and the butter → I mixed the sugar into the butter.*
- G. CONJUNCT ASCENSION TO DIRECT OBJECT WITH TOGETHER (G): *I mixed the flour and sugar → I mixed the flour and sugar together → I mixed the flour (??together) with the sugar.* . [CF. BLANCO TOGETHER RECIPROCAL ALTERNATION (transitive) 2.5.2]
- H. CONJUNCT ASCENSION TO DIRECT OBJECT WITH APART: (G) *I split the twig and the branch → I split the twig and the branch apart → I split the twig off of the branch.* [CF. BLANCO APART RECIPROCAL ALTERNATION (transitive) 2.5.3]
- I. CAUSATIVIZATION (G): *Jim caused [the cup broke] → Jim caused the cup to break; Jim causes [the bell ring] → Jim caused the bell to ring; Jim caused [the horse jumped over the fence] → Jim caused the horse to jump over the fence.*

HHH

## IX. INCORPORATIONS

- A. SUBJECT INCORPORATION (G): *Rain [fell]<sub>V</sub>. → (\*It [rain-fell]<sub>V</sub>). → OBL It rained.* NB: the substitution of the verb *rain* for the incorporated verb compound *[rain-fell]<sub>V</sub>* is obligatory if this lexeme is a surface verb. However, if it surfaces as a noun, the results of the operation of SUBJECT

INCORPORATION can be clearly seen, in such compound nouns as *rainfall*, *snowfall*, *birdsong*, etc.

- B. THEME INCORPORATION (G): *I removed the peel from the banana.* → (\**I [peel-removed]<sub>V</sub> the banana*). → OBL *I peeled the banana*. And: *Tanya spread butter on the toast.* → (\**Tanya [butter-spread]<sub>V</sub> the toast*.) → OBL *Tanya buttered the toast*. As with the previous process, while incorporated forms show up rarely as superficial verbs, this is sometimes possible in nounier environments: *The butter-spreading* (?\**of the King's toast*) *can take hours*.
- C. VERB-FROM-BY-PHRASE INCORPORATION: *Mary forced John into [John signing] by [Mary whipping John]* → (\**Mary whip-forced*) (> *whipped*) *John into signing*.

### III

#### X. RULES AFFECTING PATHS (cf. Ross (1995))

- A. TOWARDS-INCORPORATION (G): *We swam towards the shore.* → *We swam shorewards*.
- B. PREPOSITION ZAPPING IN END-LEGS: *They swam from (in) the river to (in) the lake.* → *They swam from the river to the lake*.
- C. PREPOSITION ZAPPING BEFORE PATH-LINKED PROFORMS (G) *We can skate (?to) there in a flash. I don't want to stay (\*at) here. We have been skating (\*at / ?to) everywhere for free.* NB: in some dialects, the *at* can surface if stranded: %*Where's Joe Bob at?* vs. *who's (\*at) where?*
- D. DEPREPOSITIONALIZED GOAL-FRONTING: (??)*Felicia flies from LA* (??*to*) *everywhere.* → *Felicia flies everywhere from LA*.
- E. ANAPHORIC LOCATIVE PROFORM DELETION (G): *Let the cats in (to ~~here~~)* → *Let the cats in. Let the cats out (of ~~there~~)* → *Let the cats out. We had to push the needle through (~~there~~).* → *We had to push the needle through.* [Cf. Fraser (1965/1976)]

### JJJ

#### XI. REORDERINGS

- A. SUBJECT-VERB INVERSION(S?): Note that these inversions, though they overlap in many ways, often treat structures in which *have* has a nominal object differently. When *have* is a main verb, as in *They have friends*, in American, the only viable *yes-no*-question is the one involving the late great rule of *DO-SUPPORT*: *do they have friends?* Anything resembling *Have they friends?* sounds thumpingly like a British movie from the 30's. If an adverb like *often* is added to the mix, American grinds to a halt: ??*Have they friends often?* >> \*\**Have they often friends?* And when causative *have* (as in *Bertie had Jeeves lay out his tails*), not even British can get away with \*\*\**Had Bertie Jeeves lay out his tails?* So with a clear spectrum of main-verbality lying at the genius of English – the variations of the order of Subject and the tense-bearing auxiliary verbs – it is of great importance to

take most careful note of the ways in which the following inversion(s) play out.

- i. After preposed *wh*-words (only in main clauses) – (*\**)*When you were in Moscow?* → *When were you in Moscow?*
- ii. After preposed negative constituents – (*\**)*At no time you will be alone with King Kong.* → *At no time will you be alone with King Kong; Never [did he have/\*had he] friends.* For all speakers this rule applies in some embedded contexts (*Michael said ?(that) under no circumstances would he participate*), and for some, the rule applies in less flexible subordinate contexts: *%That under no circumstances are rattlers suitable pets for toddlers is sometimes necessary to remind new parents.*
- iii. In *than*-clauses and *as*-clauses – *Hasso is more vicious than Bodo was.* → *... than was Bodo. Lilo is as considerate as Lucretia was.* → *... as was Lucretia. Niccolo had as sumptuous a pad as [did/\*had] Patrizia.*
- iv. After certain degree-modified preposed constituents:  
*Max was so big that ...* → *So big was Max that ...*  
*Sonja was tall enough for me to ...* → *Tall enough was Sonja for me to ...*  
*This is too zany a plan for me to ...* → *?Too zany a plan is this for me to ...*  
*So fast a car [does Max have/≥ ?has Max] that I fear for my life when I drive with him.*
- v. In exclamations that do not start with *wh*-words – *Am I glad that it's raining! Does Pat need a new mouthwash!! ?\*Could Jason have been being followed! Does Mr. Scranigan have a long beard! \*Has Mr. Scranigan a long beard!*
- vi. In counterfactual *if*-clauses whose *if* has been zapped: *Jack knows that [if I were/ were I] an alien I would take him off this backward planet.* Note that this rule will not function to invert forms of *do* (no matter what the following main verb is [*\*Did I fear for my life I would flee*]), though unlike many of these inversion rules, it will invert the main verb *have*: *Had I world enough and time, ...; ?Had he family here, they would help him out. ?Could I be a fullback, ...; \*Did I need money, I would rob a bank.*

- B. PP-SCRAMBLING: Post-verbal PP's are in general pretty freely ordered.  
*Talk to Homer about this for a few days. - Talk for a few days to Homer about this. - Talk about this for a few days to Homer. - etc.*

NB: This rule is also applicable in sentence-initial position, if more than one PP has been preposed. In general, it is only possible to prepose more than one PP if the PP's are loosely attached ("adjuncts," in GB terms); preposing two PP-objects is (always(?)) prohibited: cf. (*To Ed*) (*\*about deforestation*) *I will be talking tomorrow.* vs. */For this reason / on the fourteenth of July / in front of the old oak tree, we drank seven sixpacks.*

In this sentence, the preposed PP's between *'/* marks can be scrambled in any order.

- C. HEAVY NP SHIFT: *I painted the little birdhouse sky blue.* → *I painted sky blue the little birdhouse.*
- D. RIGHT NODE RAISING: *I may have psoriasis, and Ray definitely does have psoriasis.* → *I may have, and Ray definitely does have, psoriasis.*



- E. EXTRAPOSITION (G): *That you like ouzo is pretty obvious.* → *It is pretty obvious that you like ouzo.* And, in object position: *(??)We took that you would be back for granted.* → *We took it for granted that you would be back.* This rule can only be governed when the complement is in the object. Problem: why is this rule OBL with *seem* and *appear*, but OPT with the *surprise-class*? Both of these have (superficially post-verbal) human experiencers.
- F. EXTRAPOSITION FROM NP: (a) For relative clauses (only restrictives can participate): *A sergeant (that) I had never met lurched in.* → *A sergeant lurched in (that) I had never met.* For noun complements: *The claim that our salaries should be tripled was discussed.* → *The claim was discussed that our salaries should be tripled.*
- G. EXTRAPOSITION OF PP: *A review of Nodoffski's newest tome is coming out this month.* → *A review is coming out this month of Nodoffski's newest tome.*
- H. RAISING TO OBJECT OF HAVE (etc.(?)) (G): *I have to remember grading these papers.* → *I have grading these papers to remember.* Cf. also *There is grading these papers to remember.* (No agreed-on source yet proposed)
- I. INVERSION IN ROOT CLAUSES: *The cops dashed into the lab.* → *Into the lab dashed the cops.* Cf. also: *(?)The weasel goes pop* → *Pop [goes/?will go/\*\*must have been going] the weasel.* *Willa shrieked, "Yikes!"* → *"Yikes!" shrieked Willa.*
- J. INTENSIFIER CLIMBING: Intensifiers like *even*, *also*, *only*, and laid-back *like* can be raised to Chomsky-adjoin to the left or right of any higher constituent that contains them in their original position adjacent to their focus (marked here by boldface). In the example that follows, the left margins are marked with dots: *He might • have • been • talking to Ellen [even / also / only / like] about **the cosmos**.* Cf. Ross and Cooper (1979).
- K. NOT-HOPPING (G): *We believe that Tim is not exactly a liberal.* → *We do not believe that Tim is exactly a liberal.* NB: this rule should best be seen as a two-part rule: first the negative is copied into the higher clause, and then, after SLIFTING has had a chance to apply, if the lower clause is still adjacent to the one into which the negative has been hopped, the lower negative is zapped. This split into copying and deletion is necessary to account for the fact that parentheticals can show up negated in just those verbs for which NOT-HOPPING works; cf. *Max is not, I don't [think /\*say], a terrorist.* Cf. #7 above.
- L. NEVER-HOPPING (G): *I want to never go there again* → *I never want to go there again.*
- M. EVER-HOPPING (G): *I don't remember ever having gone there.* → *I never remember having gone there.* NB: the rule, which only works for *remember*, seems really to be necessarily seen as a copying rule – cf. *I never remember ever having gone there.*

- N. NEGATIVE INCORPORATION: *I will not force her to marry anyone* → *I will force her to marry no one.* (cf. Klima (1964))
- O. EXTREMING: *I never eat walnuts.* → *I never ever (ever) ... (ever) eat walnuts.*  
NB: I do not know if there is only one or if there are many rules which produce things like: *I do not ever eat walnuts – never – not ever – never at any time – NEVER!*
- P. N'T-ING (G): *I do not believe this.* → *I don't believe this.*
- Q. EXTRAPOSITION OF PP FROM AP (G): *How sure of this are you?* → *How sure are you of this?*
- R. QUANTIFIER CIRCUMPRONOMINAL POSTPOSING: *I photographed [all / both] of them.* → *I photographed them [all / both].*
- S. ADJECTIVE → ADVERB (G): *The FBI kept track of Harold carefully.* → *The FBI kept careful track of Harold.* *I drank a cup of coffee [quickly/, regrettably].* → *I drank a [quick/\*regrettably] cup of coffee.*
- T. NOMINALIZATION (G): *That Janice dislikes baths categorically is alarming.* → *Janice's [categorical dislike for baths/\*dislike for baths categorically] is alarming.*

KKK

## XII. LEXICALLY GOVERNED RULES OF DELETION

- A. POSSESSED BODY PART DELETION (G): *Maxine flosses (her teeth).* *Tony shaved (his face).* *Max waved (his hand) at me* (Cf. Levin, p. 34) [Cf. Blanco 1.2.2]
- B. REFLEXIVE DELETION (G): *Miss Johnson is dressing (herself).* *Ted will not behave (himself)* (Cf. Levin, p. 35) [Cf. Blanco 1.2.3]
- C. DIRECT OBJECT RECIPROCAL DELETION (G): *Bill and Christine kissed (each other).* *France and Italy touch (each other)* (Cf. Levin, p.62) [Cf. Blanco 1.2.4]
- D. THAT-DELETION (G): *Twombly knew that he had lost everything.* → *Twombly knew he had lost everything.* *Moritz ascertained (that) he had been swindled.* This rule works best when the *that* directly follows the verb which the *that*-clause is the complement of: *It was reported (?by the magazine) he was drunk.* The rule is blocked if the *that*-clause is in subject position (*\*He was drunk was reported.*) or has been fronted (*\*He was drunk the NYT published.*). If the verb has been gapped, the rule is weakened: *One magazine reported he was sick, and another?(that) he was drunk.*
- E. MODAL DELETION (G): *Sue demanded that she (must) not be weighed.* The argument that tenseless *that*-clauses derive from a source which contains a modal verb (perhaps *must* or *will*) comes from the observation, due to Joe Emonds, I believe, that the normal position for *not* in a tensed copular clause is after the copula: *that they are not hell-raisers.* However, in tenseless clauses, the *not* must precede the copula: *that they [not be /\*be not]*

*bell-raisers*, a fact which the postulation of a deleted modal would account for.

- F. UNSPECIFIED (PREPOSITIONAL) OBJECT DELETION (G): *Zelda is [eating/drinking, etc.] (something). My chauffeur will drive (~~the car~~). Henry was riding (~~a horse~~). Maverick was under the gun, but he opened (~~the pot~~) anyway. That young girl has started kissing (~~people~~). We sold (stuff) (to ~~people~~) like crazy. The sign warned (~~people~~) against skating on the pond. Merwin's report will surprise (~~people~~). My dog bites (~~people~~).* Note that for some predicates (*eat, drink*), the deleted argument is interpreted as an indefinite singular, while for others (*drive, ride, open*) the hearer can narrow down the identity of the deleted object with much more accuracy. And with still others (*kiss, sell, warn, surprise, bite*), the deleted noun phrase seems to have to be interpreted as generic and/or plural. (Cf. Levin, p. 33). It is worth mentioning here that any deletion that is not triggered by identity to a coreferential antecedent, as in the cases under discussion, the deletion of the noun entails the simultaneous disappearance of any preceding preposition(s). No deletion rule ever strands a preposition. [Cf. Blanco 1.2.1, 1.2.5, & 1.2.6]
- G. UNSPECIFIED AGENT DELETION (G): *Gates will be investigated (by someone). Cf. The fire was caused \*(by somebody).*
- H. EQUI-OBJECT DELETION (G): *The buns are ready for us to eat (them).*
- I. RECIPROCAL PP DELETION (G): *Mike and Todd differ (from each other). I compared the banana and the kangaroo (with each other).* (Cf. Levin, p. 59, 61)
- J. TO BE → AS (G): *We appointed Trey to be the Commissioner of Yoyo Size. → We appointed Trey as the Commissioner of Yoyo Size.* (Cf. Levin, p. 78)
- K. COREFERENTIAL POST-VERBAL ARGUMENT DELETION (G): *We will settle (~~the case/it~~) out of court. I don't know where Tom is – I'll look (~~for him~~). Here are the petition letters – do you want to distribute (~~them~~) or [pick/\*tear] (~~them~~) up. Our cat woke me up at 5, and did I get mad (~~at her~~)!* I believe that while these deletions are governed by the predicate whose argument is being deleted, there is another **ungoverned** rule that deletes coreferential adverbs of many kinds. Cf. the rule in L.
- L. COREFERENTIAL POST-VERBAL ADVERBIAL DELETION: *Mike was playing the guitar on the porch, and his sister was reading (~~there~~). I can meet Ellen in Paris on October 6 if you **can't** meet her (there) (then). I can meet Ellen in Paris on October 6, and Bill may meet her ??(there) (then).* As these examples show, under complicated conditions of parallelism, more deletion of coreferential adverbials is possible. While adverbials of space, time, manner, frequency, purpose and reason can be deleted by this rule, it appears that certain tenuously attached adverbs cannot undergo it: *Millie mowed the lawn despite the rain after Jack piled the wood \*(despite it). I contributed \$10 to Senator Fustibule's reelection campaign as an indication of my support, but I did not contribute any money to Congressman Grasswasser's campaign \*(as [one/it]).*

- M. TAG QUESTION DELETION. While no agreed-on source for tag questions exists, it appears clear that they are remnants of full clauses, which can undergo progressively invasive ellipses. *Harry might have been being followed by spooks, might he not (have (been (\*being (\*\*followed))))*). Note that tags are not restricted to appearing only after main clauses; they can also be found after non-restrictive relative clauses (*These grapes, which Mike has certainly had more than enough of, hasn't he (had), were delicious, weren't they?*), and after certain other appositional inserts: *These grapes – although Janet would probably never admit it, would she? – were constructed out of carbon nanotubes.*
- N. DELETION OF PREPOSITION MARKING CHÔMEURIZED CONJUNCT (G): *Mark and Nora met → Mark met with Nora → Mark met (~~with~~) Nora; Italy and France touch → (\*Italy touches {with/to} France → Italy touches France. Monaco and Canada fought → Monaco fought against Canada → Monaco fought Canada.* [Cf. Blanco, WITH-DROP PREPOSITION DROP ALTERNATION (I.4.2)]
- O. WAY OBJECT ALTERNATION (G): *He pushed (his way) through the crowd.* [CF. BLANCO I.2.7]
- P. INSTRUCTIONAL IMPERATIVE ALTERNATION (G?): *Bake (~~the cake~~) for 30 minutes* [CF. BLANCO I.2.8]
- Q. CONATIVE ALTERNATION (G): *Paula hit the zebra → Paula hit at the zebra. Brenda sprayed the lilies → Brenda sprayed at the lilies.* [CF. BLANCO I.3]
- R. DIRECTIONAL PREPOSITION DROP ALTERNATION (G): *Jason climbed (~~up~~) the ladder. Marge descended ~~%(down)~~ the stairway.* [CF. BLANCO I.4.1]
- S. FOR PREPOSITION DROP ALTERNATION (G): [CF. BLANCO 2.II SEARCH ALTERNATION] *Ida hunted for deer → Ida hunted deer.* This alternation may be limited to the lone verb *hunt*: cf. *Ida [fished \*(for) trout/ trolled \*(for) pike/searched \*(for) game]*. I have here suggested that the alternant with *for* may be the more basic form on the slenderest of leads: usually, transformed clauses are more limited in their choices than are their derivational sources. An example: *A student (that) I had never before was crying his eyes out → A student was crying his eyes out ?(that) I had never before.* Here, under the assumption that relative clauses that immediately follow their head nouns are more basic than are those that have been extraposed, we can use this (weak reed of a) guideline to suggest that the possibility of applying the rule of THAT-DELETION AFTER A HEAD NOUN (Cf. §IV.G above) has been slightly limited when the clause it heads has been extraposed.
- Returning to *hunt*, I suspect that when its object does not begin with *for*, it may also be slightly less free than when *for*-ful. One obvious difference is that without *for*, the best objects are living creatures: *We hunted lion(s)/antelope(s)/[geese/?\*goose]/\*\*cookies.* Probably the best paraphrase for this use of *hunt* is “try to kill.” However, after *hunt for*, the possible objects are far more numerous; a good paraphrase of this verb would be “try to find.” I note also that certain quantifiers seem to be disfavored after a *for*-less *hunt*: *??they hunted nothing.* Blanco mentions that *hunt* exhibits another alternation: *we hunted deer in the forest → we*

*hunted the forest for deer.* It seems to me that the latter sentence here is less happy if *deer* is definite: *we hunted the forest for [the/that] deer* is no longer paraphrased by the “try to kill” meaning – it means to me, I believe, simply “try to find.” I admit that this feeling is very subtle, and I may be fooling myself. The main point, though, remains: the lone verb *hunt* can have either a direct object or a *for*-phrase. I suspect that as we look more deeply into the fine structure of the lexicon, we will find more and more cases of phenomena which make each verb unique. I believe that this was in fact the experience of those French linguists who worked with Maurice Gross on a large-scale study of verbs: each verb was a Unikum.

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### XIII. EMBEDDINGS

- A. CAUSATIVE FORMATION (G). [Cf. BLANCO I.I.2.1]  
*Janet CAUSED [that cup broke] → Janet Broke that cup*

1. Subtypes (?)

**Induced Action** [BLANCO I.I.2.2]

*Janet CAUSED [the horse jump over the fence] → Janet jumped the horse over the fence*

2. **Other Instances of Causative Alternations**

[BLANCO I.I.2.3] *The visitor CAUSED [the bell ring] → The visitor rang the bell.*

3. TOTAL TRANSFORMATION ALTERNATION [BLANCO 2.4.3]  
*Janet CAUSED [the frog turn into the prince]*

### XIV. CONSTRUCTIONS

- A. X's WAY (G): Cf. Blanco 7.4, Carrier and Randall. *They were shopping while they went their way around NY → They went their way around NY shopping → (\*They shop-went their way around NY) → OBL They shopped their way around NY.* Note the use of SLIFTING (cf. above § I.C.7) and PREDICATE RAISING in the course of this analysis (cf. above § V.D) Other examples: *He went his way through the book working → He worked his way through the book; The boy went his way pushing through the crowd → The boy pushed his way through the crowd; The explorers went their way cutting through the jungle → The explorers cut their way through the jungle.* The source for the above sentence will not work for the following two: *She talked her way out of class* and *She stipulated her way out of the problem.* Starting with paraphrases like *She got out of class talking* and *She got out of the problem stipulating* does not seem to be a valid option, since there is no source for the *x's way* phrase.

- B. **Resultative constructions.** Cf. Blanco 7.5. *The metal became flat through his hammering the metal → (via SLIFTING (cf. above § I.C.7)) He hammered the metal flat. Janet opened the door through her pushing the door → Janet pushed*

*the door open; The guest drank the teapot dry; Amanda burned the pot black; The river froze solid; Philippa cried her eyes dry.* The following examples seem to require a different analysis: *Belinda walked the soles off her shoes; Philippa cried herself to sleep; The door slid shut.*

- C. **Unintentional Interpretation with Reflexive Object** (Cf. Blanco 7.6.1) *Pauline cut herself (on the sharp stone)* [Ambiguous: intentional or accidental] *Tessa hurt herself* [ditto]
- D. **Unintentional Interpretation with Body-part Object** (G) (Cf. Blanco 7.6.2) *Sylvia cut her finger [on/>with] the knife* [Ambiguous: intentional or accidental – accidental interpretation more difficult with *with*]. All of the following sentences allow the same ambiguity: *Carrie broke her arm; Carrie hit her elbow on the doorknob; Paul hit his arm; Sam touched his nose; Mal sprained his ankle.*
- E. **Bound non-reflexive anaphor as prepositional object** (G) (Cf. Blanco 7.6.2) *The list has my name on it(\*self); Sheila brought the book with her(\*self); This list includes my name in it(\*self); Amanda carried the package with her(\*self); Fanny pulled the blanket over her(self); Tamara poured the water over her(self).* Some of these contrasts have been known for almost 50 years. Daunting to see how little progress we have made.

MMM

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