# A Note on Reprojection and the Dual-Merge Status of DP as a Phase

<>

## **Complex Nominal Expressions.**

#### **Abstract**

- Looking bevond broad the subcategorization for VVerb, and peering into the more narrow feature selectivity of a specific verb's Probe-Goal relation (Vdrink vs *Vbreak*), coupled with the defining status of **DP** as Phase, this brief note examines the behavior of complex DP-nominals and attempts to peg Merge-operations to X-bar theory in ways which show how, in reprojection, the lower more prosaic lexical merge-1 ('Comp of DP-as-Phase') contrasts with the upper functional merge-2. We suggest the former Merge-1 is a [-AGR] projection, (and not a full-fledge Phrase) while the latter Merge-2 is a full-expansive XP [+AGR] projection. Hence merge has Xbar theory implications.
- •We'll come to consider only the full-expansive/Merge-2 XP [+Agr] as valued as the default Head-selection, i.e., that projection which allows for simultaneous projections of either verb type. (See verb in sentence (a') above as having this default H-selection status: Vbreak selects for either Merge-2 or Merge-1), hence the H-selection of Vbreak as default.

#### Setting out the Problem.

#### **Complex DP-Nominals**

•Let's consider the complex DP-Nominal Expression, as found in sentence (a'), which seems to require *reprojection*—viz., where two separate 'probe-goal' re-projections apply on a singular surface-structured string:

### Reprojection of sentence (a'):

- a. 'John drank a bottle of beer /\*a beer bottle'.
- a'. 'John *broke* a bottle of beer/a beer bottle'<sup>1</sup>

Compound: [beer-bottle], 'bottle' is H.

→ Merge-1 (lexicalized, [-AGR]).

Phrase: [bottle<sub>i</sub> of [beer-\_\_i], 'beer' is H.

- ⇒ Merge-2 (phrasal, [+AGR]).
- •Accordingly, in English, Compounds set H(ead) rightward while Phrases set H leftward: e.g.,

[beer [beer, bottle]] = compound [beer-bottle], 'a kind of bottle' (H is 'bottle'), 'bottle of beer' = phrase, H is 'beer':
[D bottle [D' [D of ] [N beer\_\_]]].

N-Compound: Comp(lement), H(ead)

Comp H

Black - bird (blackbird: a kind of bird)

AdjP

H Comp

Black bird (a **black** bird: a color of bird)

<sup>&</sup>lt;sup>1</sup> Other examples of possible reprojection include:

a. She ate a box of chocolates/\*a chocolate box.

a'. She wrapped a box of chocolates/a chocolate box.

b. Tom *hammered* a bag of nails/\*a nail bag.

b'. Tom dropped a bag of nails/a nail bag.

#### Verb Head-feature selection via Probe-Goal:

- (i) Vdrink selects Head 'beer' <drink beer/\*bottle>
- •(Note (a) H Verb 'drink' probes for G(oal) 'beer' <Vdrink x <x, beer>>, while (a') H Verb 'break' probes for G 'bottle' <Vbreak x <x, bottle>>. The surface PF (phonological form) doesn't distinguish what otherwise must take place at LF (logical form).

<u>Problem:</u> How should we understand the fact that only sentence (a') (but crucially not (a)) allows for both (re)projections? Does this suggest that the full-phrasal (Merge-2) DP represents the default<sup>2</sup> projection, similar to how the order Indirect Object + Direct Object (not the assumed DO+IO) surfaces as the default phrase order (where IO in default IO+DO sequence (ex. i) doesn't require overt Case marker {to} )?

i. John gave (IO) (to) Mary (DO) flowers.

(John gave (to) Mary Flowers) (= default order)

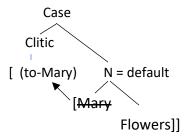
ii. John gave flowers\*Mary/to Mary.

(a ban on NN-adjacency) (Also see fn 4).

where {to}-clitic Accusative Case is required... (John gave flowers to Mary).

(John gave Mary flowers) = default order.

<sup>2</sup> In this context, when there is one of two choices at the PF level, the default emerges as that which provides the most expansive syntax (that which provides either Case (as in IO-default vs DO) or Agreement (as in Container-DP vs Content NP). Additionally, where there is competition between spell-outs PF and LF (i.e., regarding time-locking at interfaces, etc.), we



Nb. Like the Case (clitic) formation, we see below that an AGR-based Container-DP will also provide the default: (between [+AGR] DP and [-AGR] Content NP).

•One interesting note here is the apparent language-universal ban on NounNoun/DPDP (XX)-projections, often termed 'syntactic stuttering'. Perhaps correlating to an Antilocality constraint, it seems double nouns can only sit in adjacency if they can be distinguished by at least one differing feature: hence, note how NN-Double Objects in English require one of the DPs to house an overt (covert) clitic Case feature {to} (as shown in (i) and (ii) above)

<u>Towards a preliminary solution</u>: Vdrink vs Vbreak...

•In sum, one possible resolution (but certainly not an exhaustive one) is to speculate that there is a real distinction between merge-1 (which is a [-AGR],  $\theta$ -marking, SEMantic domain) and merge-2

take it that it will be PF which surfaces as the default—PF is time-locked earlier than LF. This may be due to sensorimotor contains on interpretation, and the fact that PF must advance ahead of LF due to its taking a 2-dimensional syntactic object and quickly flattening it into a 1-dimensional space.

(which is a [+AGR], SYNactic domain). The distinction must then overlap not only onto PF&LF interfaces, but also must trickle down into sub-categorization feature-specificity on a given H(ead).

•What we will propose is that *vdrink* selects for its Head the Noun 'beer', while *vbreak* selects for its H the noun 'bottle'. What we will come to examine is that the two Heads are contained in different merge projections, 'beer', a merge-1 projection, and 'bottle', a merge-2 projection. We propose this merge distinction comes to bear on whether or not Reprojection is permitted in the syntax.

#### 1. Introduction:

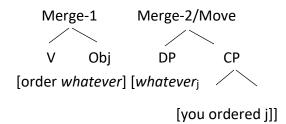
Let's begin by considering items which seemingly carry a 'dual-role' status. It's traditional understood that a moved item- $\alpha$  itself doesn't project, but rather that it is the element- $\beta$  which probes and forces movement of  $\alpha$  which projects. In other words, the element which hosts the moved item projects. However, there are cases where the moved item- $\alpha$ , (the goal of a probe) itself projects, both from in-situ positions as well as from the newly formed (move) higher position. Consider the CP-Relative Clause (RC) construct below:

i. I'll eat [whatever you ordered last night].ii....[DP whatevert [CP you order t]].

The item whatever seems to carry a 'dual-role status' (viz., it seems to project from

both its merge-1 lexical in-situ position as well as from its merge-2 (moved) position:

- First, whatever is the object of ordered, a Merge-1 sequence [order whatever];
- Second, whatever serves as the Head of the CP/RC (it maintains its Hsyntactic properties over CP).



The question here is what is the nature of this dual status, does Merge (merge-1) vs Move (merge-2) play any role, and might there be a default status of one over the other?

This same dual status shows up in Chomsky's (2013) example: Which books did John read?

⇒ For which books x, John reads books x.

DP 'Which books' serves two semantic roles (it seems to *fold* onto itself)<sup>3</sup>

- (i) It receives its role as object of 'Read',
- (ii) It serves as a distinct Interrogative operator. Binding the variable on the object position.

So, the interpretation is something like 'For which books x, John reads books x'...

<sup>&</sup>lt;sup>3</sup> 'Fold' unlike 'double project' as found in VP-shells, etc. By virtue of this DP-folding, there are times when either projection can satisfy the

probe-goal relation: merge-1 as found in content DP, merge-2/Move as found in Container DP (as discussed below).

CSUN~Linguistics/syntax/joseph galasso/spr. 2022

where which books serves both as the object of read,  $\langle read x \rangle$  (x = book) replete with its theta (DP) semantics/phi-features & marking, while also serving in its capacity as Interrogative force (CP). It is in this sense that DP's can serve both CP (DP/CP) and vP (DP/<sub>vP</sub>) domains (noting that when CPbased, a merge-2/Move operation, it holds AGReement status, since AGR is a CP projection, but when via merge-1/Merge vPbased, Case is projected—following the 'duality of semantics'). The double folding projection of DP seems to have X-bar theory implications: merge = X', vs move = XP (where the latter full XP projection is AGR based, and presumably the default)4.

- •DPs enjoy a special status arguably in being the only projection which can fold (expand and/or collapse upon itself). Unlike, say, vP light-verb double VP-shells where the light verb v- $\emptyset$  (do, make, cause)—distinct from the main Verb—is pulled directly from out of the lexicon (similar to what we find with Auxiliary, Do-insertion). Rather, the DP enjoys a privileged dual status of projecting either via Merge-1 or Merge-2 (i.e., 'Content-NP' VS compound, 'Container-DP' respectively), with seemingly identical LF interpretation (the guestion at hand).
- Content-NP here is defined as lexical in nature, holding only semantic [SEM] phifeatures (e.g., 'Beer-bottle' is a kind of 'bottle' replete with its sub-categorical phi-

features [+ SEM]). For the compound 'Beer bottle', it's the H 'bottle' which holds its features, and which must enter into a SEM sub-categorical selection: e.g., the verb VDrink selects its complement's [SEM] as 'Beer', while the verb VBreak selects its complete 'bottle' (drink beer/\*bottle, break bottle/\*beer).

- \*This paper is concerned with the process which governs how a verb can override an otherwise PF representation of a DP and rather 'dip-down' and 'reach' into the lower structure to select the appropriate NP. The fact that the surface PF encodes an ambiguous mapping between LF and PF reveals that the two interfaces are compartmentalized regarding the Faculty of Language (FL).
- Container-DP (X of Y/DP of N) is abstract and functional in nature and holds formal Syntax [SYN] uninterpretable [-INTERP]-features which must be valued and deleted at LF Spell-out. (We note that only the DP entertains AGReement, and not the NP, see below).

#### •Interface Spell-out:

SYN is split into a binary mode: (i) phonological Form PF (PHONE] (which deals with the surface pronunciation of the utterance), and (ii) Logical Form (LF) [SEM]. The essential property of Spell-out is that it linearizes the two components, while SEM may be dynamic and entertain simultaneous

<sup>&</sup>lt;sup>4</sup> One other implication to this is how certain verbs (Latin vs Germanic 'Donate' vs 'Give') might select for its Probe-Goal relation: 'John gave/donated money to him vs John

gave/\*donated him money. Object shift constraints may be a residual artifact of this merge v move distinction.

Probing outcomes (multi-agreement), PHON requires the 2-deminsional Syntactic Object (SO) to be flattened into a 1-deminsional Phonological Object (PO). This flattening is due to human speech (sensory-motor constraints: viz., 'one-phoneme-at-a time'. In other words, even if simultaneous Probe-Goal projections could be realized, only one of the two could project at PF. Hence, two different chains equate to two different projections.

#### 2. Some Theoretical Background.

 Labeling: At the very basic level we find two lexical items Combine [COMB], which forms a set {a, b}. However, COMB is ambiguously ordered as it yields only a flatsisterhood relation between {a, b // b, a} i.e., there is of yet no symmetry-breaking hierarchy (e.g., House-boat ⇔ Boat-house would be ambiguously coded within the Compound morphosyntax of the COMB-Noun sequence). In order to derive some word order, a first-merge operation (merge-1), an External move<sup>5</sup>, selects one of the two potential Heads [H] and moves it to create a hierarchical pair [PAIR] <a, b> (which is rendered by one of the moved items: a Merge-1 SET {a, {a, b}} renders an ordered PAIR <a, b>.

•Summary: We consider Merge-1 (Non-Phrasal, External move) as defining one of the two items as Complement (or in the case of compounds where the H shows up rightward, as defining the Head—since in the compound [Boat [Boat, House]] (the moved

item 'Boat' serves as a kind of complement/modifier to the H 'House' (a 'Boat house' is a kind of House)

NB. This is a distinction between Phrases and Compounds, where the former is H(Left) in English, and the latter where the compound has H(right). Merge-2 (Phrasal, Internal Move) is both Spec(ifier)-defining as well as 'Phrasal' since it projects a full XP. (Merge-1 projects intermediate-level X-bar).

(\*Reprojection of element Z).

#### 3.Phases

- Syntactic Structure is built bottom-up, in chunks, referred to as P(hase), with P being defined as the dual locus of what drives displacement—a version of 'The Duality of Semantics':
- (i) vP (light verb associated with [SEM] of argument structure, Case), and
- (ii) CP (associated with AGReement, a [SYN] operation).
- (iii) \*DP (associated with both CP, vP domains. When DP associates with CP (DP/ $_{CP}$ ,) it carries AGR-features. When associated with vP, it carries  $\theta$ /Case... e.g.,

this sense of compounds, Merge-1 is a H-defining movement.

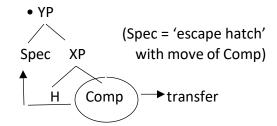
<sup>&</sup>lt;sup>5</sup> We define Merge-1 here as External move (particularly with Compounds) since Merge-1 is typically a Complement-defining movement. In

(See below Case assigning mechanism via Probe-Goal). One additional note here to recall the argument that Nominative Case is a merge-2 property (along with [+AGR]) while Accusative Case is a Merge-1 property.

#### Case:

- (i) [+Nom] Case when in Probe-Goal configuration between uppertier: T'-Spec & vP, (Merge-2),
- (ii) [-Nom] Accusative Case when in Probe-Goal configuration between lower-tier: v' & Spec VP (merge-1).
- •Once a Phase (vP, CP, DP) has been built-up and is finished, complement of P is "spelled out"-frozen, inaccessible to further computation. We'll come to include here the DP as Phase<sup>6</sup> can float between vP and CP, the former being a Merge-1 operation (related to SEM (Case), and the latter being a Merge-2 operation related to SYN (AGR).
- Phase Impenetrability Condition (PIC) PIC is a PF phenomenon which states that once the Comp(lement) of P has transferred, it becomes Frozen and is no longer accessible to further derivational operations up the tree.
- \*The only phenomena (below) which can save Comp of P from being frozen in place

are the acts of movement (out of Comp of P and into H or Spec of a higher functional phrase):



- Movement: It is the Head of a lexical item, its bundle of F(eatures), which serve as Probe in a Probe-Goal (PG) relation. The twin index of F: 'valuation-of' (when SEM) or 'erasing-of' (when SYN) of PG-feature index is what which drives phrase projection (movement).
- •Nb. In this paper, we are only concerned with the SEM of PG which motivates the selection properties between the two verbs Vbreak vs Vdrink, and how such properties promote a dual-merge analysis of DP as (i) Phase (when SYN based, [+AGR], a Merge-2 operation, and (ii) as Non-Phase (when SEMbased, [+Theta/-AGR], a merge-1 operation).
- In order for a Phrase with items {a, b} to project, asymmetry must be formed via movement  $\{a, \{a, b\}\}.$

Comp), vs Merge-2 (deriving Spec) maps onto the dual status of DP: (i) NP-content and compounding represent a lower DP and (ii) DPcontainer and raised wh-DP, (which show Agreement) represent a higher DP.

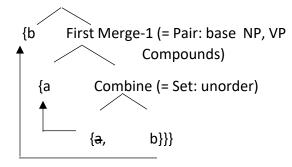
<sup>&</sup>lt;sup>6</sup> The DP-status becomes a consequence of Hmerge to either C or V, thus DP requires a multispell-out domain. DP/<sub>CP</sub> (AGR related), DP/<sub>vP</sub> (Case/ $\theta$ -related). We also overlap this duality by suggesting that X-bar theory (merge-1 (deriving

#### 4. Merge

- We consider the twin operation of Merge to parallel the Duality of Semantics: CP, vP (light verb), where CP is locus of AGReement, and vP is local of (structural) Case.
- •Combine: simply draw two lexical items from out of an array (this is a Pair, unordered, unlabeled). This is the first step before any Syntactic Object (SO) can be constructed.
- Merge-1 (external): merge {a<sub>i</sub>} with {a<sub>i</sub>, b} to break {a {a, b}} symmetry of sisterrelation. This first-merge operation mirrors what we find with vP (in terms of first-order internal domain) as vP is considered the domain of Theta-marking ( $\theta$ ), and Case (both being quasi-semantic in nature, driven by properties of the verb). Merge-1 establishes H only, it renders an identifiable H of an otherwise unordered set {H, H}, with Complement now defined as other than H. Consider the dual merge operations below as relevant to our discussion of the distinction between Merge-1 (-AGR) NPlexical content/compounds 'beer bottle' vs Merge-2 (+AGR) DP-container 'bottle of beer'.
- •The upshot here is that a Probe H vverb must select (via sub-categorization) the nature of its Goal (PG-Union). We also want to note that both Merge-1 and Merge-2 have access to spell-out at PF and LF (given the DP's status as Phase), where merge-2 keeps alive the COMP of an otherwise frozentransferred phrase due to movement of

Comp to a higher projection. (Nb. Movement saves an item/phrase from transfer). The question may be the timing between the two, and whether which merge operation serves as the default (at PF), assuming that PF is the default transfer.

Second Merge-2 (= DP) (Both accessed)<sup>7</sup>



Merge-2 (internal) {b, {a, {a, b}}} makes Merge-1 vacuous and establishes full XP (via internal merge): Spec established as *elsewhere category* to host moved elements from lower down in the tree.

•Both merge operations have access to spell-out, even as a 'split projection'. For example, a merge-2 may be sent to PF while its merge-1 matrix gets sent to LF (simultaneously, or with some time lag). It seems, and we argue in this note, that we do find such split-phase spell-outs, where the phrase at PF 'break a beer bottle' simultaneously maps at LF as 'break a bottle of beer' (but note how the verb Vdrink does not: 'drink \*a beer bottle / a bottle of beer').

<sup>&</sup>lt;sup>7</sup> We find this same dual distinction in (R)oot vs (S)ynthetic (C)ompounds (e.g., a 'chain-smoker' /RC is not the same as a 'cigarette smoker' /SC,

where only the latter SC is a merge-2/Move operation: [smoker of [cigarette smoker]] vs [\*smoker of [chain smoker]].

CSUN~Linguistics/syntax/joseph galasso/spr. 2022

(Nb. Restrictions (anti-locality) on double nouns have been noted: it may be the compounding nature of 'beer-bottle' which allows NN locality)8:

#### Restrictions (anti-locality) on double nouns

'It's cold' said John.

'It's cold' John told Mary.

'It's cold' said John to Mary

'It's cold' \*told John Mary

#### •An In-note on Linearization:

Although PF [PHON] strictly stipulates for a flat, linear structure (due to sensory-motor constraints on 'one-phoneme-at-a-time'processing (human speech), we do find instances of variation at the PF-level of linearization, namely with Adjuncts (Adverb 'quickly'). It seems adjuncts (below) allow for an overriding of such constraints since prior to their move/fronting, linearization had already been settled lower down in the tree.

- John drank quickly his beer. (i)
- John *quickly* drank his beer. (ii)
- (iii) John drank his beer quickly

Adjuncts can freely insert in each available slot

John drank \_\_ his beer\_\_.

(Noting that adjuncts can't split DP constituency ... \* 'his quickly beer').

<sup>8</sup> Double NN 'John Mary' (an N-merge+merge sequence) must be broken by Case marker (to). We also find this with Direct Object+Indirect Object projections (cited above).

#### \*Reprojection H-movement is Not Adjunction.

•We argue against the analysis that such Hmovement (as found in reprojections) are instances of adjunction the various reason LF/PF discussed herein regarding interpretability consequences.

#### •The twin Interfaces: PF & LF

There are two things a speak needs to perform on a lexical item/string (word or Phrase):

- (i) To pronounce the word (PF)
- (ii) To interpret the word (LF)...

There may be a mismatch is processing between the two (not only a lag-time between sound & meaning in terms of audio-semantic processing, but also potentially a mismatch between final encoding of the two. Let's recall, that after spell-out/transfer, ultimately a sentence must be processed recombing both PF and LF for full interpretation (a final recombine phrase). Speculation suggests that when the phases recombine at this final stage, the phases (DP, vP, CP) recombine as lexical chunks (large, unsegmented idiomatic strings). The notion here is that PF may have a default status in being processed just ahead of LF (PF locks prior to LF)9, provoking at times mismatches, unalignments between

features may be sensitive to PF and thus are locked early on in the derivation (in contrast to weak features which may lag behind PF): (Lasnik's account of 'Affixal vs Featural' distinctions of Inflections on verb stem, e.g., English vs French verb types (respectively), strong verb raising, overt vs covert movement:

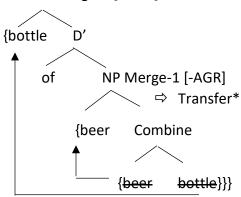
<sup>&</sup>lt;sup>9</sup> If we lock in the pronunciation first, move a little bit more, and then lock in the interpretation we find correct PF of the wh-structure: (Strong

PF and LF (which, of course must be resolved at final Recombine Phases Stage (RPS)). In a verb's selection of its sub-categorical features <Vdrink <x, beer>> vs , <Vbreak <x, bottle>>.

#### **5.Subcategorization and Probe-Goal**

•In terms of PG union, vdrink Probes for 'beer' and vbreak Probes for 'bottle': these PG-unions are the result of the verb's subcategorical/idiosyncratic SEM.

DP Merge-2 [+AGR]\*



\*We note that DP (and crucially not NP) is a full *functional* projection which may map and project onto domains related to CP (DP/ $_{CP}$ , a domain related to Agreement) and vP DP/ $_{VP}$  (a domain related to  $\theta$ -marking, argument structure, Case). Sentences a & b have the same PF spell-out but different LF spell-outs (as based on merge level operations).

•Given our status of DP as phase, the NP merge-1 necessarily must immediately be sent to transfer, with only moved elements

being saved from transfer (<u>Move rescues an</u> otherwise frozen element from Transfer).

#### Sentences:

- a. John drank a bottle of beer.\*a' John drank a beer bottle.
- b. John *broke* a bottle of beer. b' John broke a beer bottle.

By extension, we can suggest that mergelevel projections maps onto X-bar theory (at least regarding NP/DP status): NP =  $X^{\circ}$ , X-bar (merge-1) while DP = XP (merge-2).

#### 6. Unambiguous Merge

•As cited above, no two items (DP<sub>1</sub> + DP<sub>2</sub>) can merge and sit next to each other, since PF would be forced to consider both items as an Edge of X (Spec, left of X), (Spec, right of X), hence, both instructed edges would result in an ambiguous merge. We find remedies for this ambiguity as cited above regarding Double Object Shift in English regarding the Case clitic marker {to}, which breaks identical-feature linearization. While the verb *Vdrink* is sensitive to the XX-ban in our example \*'drink beer bottle', *Vbreak* seems not to be sensitive.

PF yields: What did Pat give to whom?'

<sup>(</sup>i) Lock in pronunciation:

<sup>[</sup>CP whati Tk+C [TP Pat tk give ti to whom ]]?

<sup>(</sup>ii) Lock in Interpretation:

<sup>[</sup>CP whom-m whati Tk+C [TP Pat tk give ti to t-m]].

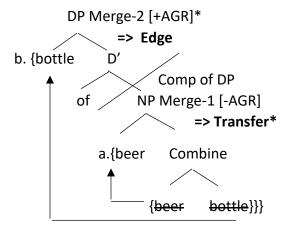
•Question: Might it be the case that such apparent sensitivity between the two verbs is based upon how far down the relevant verb's H must reach into the 'double-tier' merge sequence: viz., (i) if H reaches only into outer top tier (of double merge projection), then you get [-sensitivity] (e.g., John broke a bottle of beer/beer bottle') where both projections are licit. One the other hand, if the verb's H must reach all the way down into the first merge-1 inner projection, the [-AGR] domain projection, then [+ sensitivity]. Is Non-AGR Merge-1 sensitive to this XX-ban? If so, is XX 'syntactic stuttering' a residual feature of [-AGR]?

#### 7. Transfer

Transfer (spell-out) takes place at the Compof-a-Phase (Phase = CP, vP, and DP). Only movement up the tree can save an element from being sent to Transfer (an 'early death'), thus becoming Frozen inaccessible to further derivational operations. The SPEC(ifier) and H(ead) constituent so-called Edge-of-a-Phase allowing for an 'escape-hatch-advancement' of element via cyclic-movement.

<u>Question:</u> The question here is what does it mean to say that the lower-tier merge/NP transfers? How does this play out regarding H-features, etc.?

•Let's restated this (from §5) showing a twotier merge operation: (nb. Vdrink selects 'beer' as its Head, Vbreak selects 'bottle'):



<Break < b. 'bottle of beer'>> : [-Sensitive]

< a. 'beer bottle'> (both are licit)

Recall, DP merge-2 is Spec forming (full XP), while NP merge-1 is Non-spec forming (only Head-Complement forming). We believe the licit vs illicit reprojection may have something to do with this distinction.

•The mapping to both PF and LF must enter into the computation of projection at the merge-level: X-bar theory is encoded in Merge.

Recap: Vbreak is not sensitive to XX-ban since it reaches down into Merge-1 (a non-AGR projection)—additionally, and crucially, Merge-1 has already been sent to Transfer in any case.

•Both verbs categorize for a generic NP: but Vbreak selects for an *N-feature* with a particular semantic feature [SEM<sub>1</sub>], and Vdrink for a different N-feature [SEM<sub>2</sub>]. The in-situ placement of the Goal head (either in top tier merge-2, or lower tier merge-1

seems to aid in the selection process of Head-features attributed to the Goal.

#### 8. Subcategorization and Probe-Goal.

As seen above, both verbs (drink, break) subcategorize for an NP (DP). The difference is in the nature of the Probe:

- (i) VDrink Probes for a Head-feature (beer),
- (ii) VBreak Probes for a Head-feature (bottle).

# **Subcategorization** is made at the **Phrasal level**, **Probe-Goal** at the **feature-level**.

E.g., John gave \*Mary/flowers.

*VGive* selects Head-feature 'flowers', not 'Mary'. It is at the feature-level where we define the nature of Direct v. Indirect Argument/Object. The Phrase level is the same: Probe for an NP(DP).

#### 9. Conclusion

•The verb reaches down to select either (i) Merge-2 operation (Phrase Edge) or Merge-1 operation (which has already transferred but which can Reproject its material as a chunk (since, at some point in time anyway, after all has transferred, some form of recombining, or reprojecting must take place in order to interpret the entire string). In the first-order merge-1 operation, the Phase Complement is frozen inside LF-interface and is inaccessible to further derivational operations (except if movement is employed via the Spec-Head 'escape-hatch' of a higher

functional projection in order to avoid a sort of 'sudden death'). However—even if 'frozen-sudden-death' of the element ensues, ultimately, further lexicalized chunking of the element must remain accessible for LF. The Phase-Edge retains the default status for this reason—it's the only viable projection left on the table. In this manner PIC (Phrase Impenetrability Condition) remains a PF phenomenon.

•If this line of reasoning is correct—viz., that PF & LF don't align regarding Phase/Interface, that 'Complement of' and 'Spec-Head of' are spelled out at difference times (different time-lock), then arguments can be advanced to stipulate 'sound-meaning' isolatable units: a feature which underlies displacement of phonology where we interpret the sound/word dislocated from its LF source.

#### **10. Concluding Summary**: 'Drink vs Break'

The verb 'break' (perhaps maintaining a kind of default status) can either (i) reach down into its upper-tier Merge-2 projection and pull-out the Head 'bottle', rendering the projection:

'John broke; [DP a bottle; of [NP beer\_\_\_i]]'

or reach even deeper into its lower-tier lexical Merge-1 projection and pull out the Head 'beer' (of the compound) rendering the projection:

'John broke<sub>i</sub> [DP a [NP beer-bottle<sub>i</sub>]]'.

Conversely, the verb 'drink' is limited in this way as it can only reach into its upper functional Merge-2 [DP bottle of beer [NP beer bottle]]], rendering:

'John drank<sub>j</sub> [DP a bottle of beer<sub>j</sub> [NP beer bottle]].'

A given verb's Head-feature (along with all the other relevant feature specificity must also now include in its feature-value numeration the binary parameterization of [+/- Merge-2]:

<vdrink: < [-Merge-2]>>
<vbreak: < [+Merge-2)>>