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Bypassing subjacency effects: How event structure amnesties extraction out of object NPs[1]

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This paper seeks to shed new light on the conditions governing extraction from NPs. It will show, contrary to general wisdom, that extraction out of NP objects is generally disallowed (even when definiteness effects are accounted for). Rather, extraction from object NPs is found to be limited to NPs which project event (or argument) structures (in the sense of Grimshaw 1990 or Pustejovsky 1991).

1. Some background

The contrast shown in (1) has long been taken as an illustration of subject-object asymmetry vis-a-vis *wh*-extraction.

(1) a. Who did John hear stories about?
b.*Who did stories about terrify John?

In (1a), *who* is extracted from the object NP *stories about*. In (1b), the same extraction, with *stories about* in subject position is illicit. According to Chomsky's (1973:250) "subject condition", (1b) is bad because *wh*-movement crosses out of a subject phrase. Chomsky formalized this into a general principle constraining transformations, but retained in this

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principle the basic observation that extraction out of complement NPs is ok (in opposition to extraction out of subject NPs).

Bach and Horn (1976) argued that the contrast in (1) is not the result of a subject-object asymmetry. They claimed that extraction out of NPs is generally prohibited, and that (1a) is grammatical only because it does not involve extraction out of an NP. In making this claim, they point to contrasts such as (2).

(2) a. Who did they write a book about?
b.*Who did they destroy a book about?

According to Bach and Horn, the PP *about whom* is contained within the object NP in (2b), but not in (2a). This structural difference also explains the contrast in (3), where pronominalization is assumed to affect an entire NP.

(3) a. They wrote [$_{NP}$ it] [$_{PP}$ about Nixon]
b.*They destroyed [$_{NP}$ it [$_{PP}$ about Nixon]]

On this view, the contrast between (1a) and (1b) tells nothing about subject-object asymmetries.

Erteschik-Shir (1981) offers a critique of Bach and Horn's account, claiming that sentences such as (2a) have two available structures: the one proposed for it in Bach and Horn, shown in (4a), and the one that Bach and Horn claim it cannot have, shown in (4b).

(4) a. who$_i$ did they write [$_{NP}$ a book] [$_{PP}$ about t$_i$]
b. who$_i$ did they write [$_{NP}$ a book [$_{PP}$ about t$_i$]]

As evidence for her claim, she notes that some verbs that allow extraction in the manner of (2a) do not permit the complement structure that would be necessary for Bach and Horn's analysis (as in (4a)) to work. The data in (5) illustrate.

(5) a. Who did they read/finish a book about?
b.*They read/finished it about Nixon.

In (5a), we see that extraction is possible from the complement of the verb *read*or *finish* even though the verb does not sanction the NP-PP complement structure (as (5b) shows). Notice further that *finish* in (5a) can be taken to mean 'finish writing' or 'finish reading', and that (5b) is still unacceptable even when it means the former. Erteschik-Shir's own analysis (1973,1981) focuses on the discourse role that different verbs play in licensing extraction out of their complements (e.g. objects of verbs of creation license extraction in contrast with others, cf. (2a) and (2b)).

Alongside these observations, it is also well-known that extraction from object NPs is acceptable out of indefinite NPs, but not out of definite ones. Observe example (6).

(6) a. Who did you read some/many books about?
b.*Who did you read each/that book about?

To account for this, Fiengo and Higginbotham (1981) invoke a "Specificity Condition", that blocks extraction from NPs having "some definite reference". On the syntactic side, Bowers' (1988) solution proceeds from a division of quantifiers into weak and strong classes. The weak (indefinite) ones are taken to be adjectival, while the strong (definite) ones are determiners (with the latter blocking extraction).

Diesing (1992) ties together many of these above observations with the proposal that extraction out of NPs is governed by whether or not the NPs in question have undergone quantifier raising (QR). On her account, NPs that have strong determiners (such as *each*) are presuppositional and undergo obligatory QR, before extraction can take place. At the same time, NPs that are objects of verbs that presuppose their existence (such as *destroy*) are also taken to undergo obligatory QR (existential closure), before extraction can take place. Diesing's solution is to permit extraction only out of NPs that are not required to undergo QR.

In the discussion that follows, we will see that all of the above approaches are on the right track. The subject-object asymmetry central to Chomsky's account is real. At the same time, extraction out of NPs (DPs in our terms) is generally disallowed, as Bach and Horn suggested. The choice of verb does, as Erteschik-Shir observed, affect whether a *wh*-operator can be moved out of it. And finally, definiteness does determine that certain NPs will block extraction. This all said, we will see that the key to understanding extraction possibilities out of NPs is to be found in the semantics of the NPs themselves.

2. Some preliminary observations

The analyses that we have reviewed, with the exception of Bach and Horn, share the general feature of explaining the extraction out of NPs on the basis of the context into which the NP is inserted. Only Bach and Horn's account (with its general prohibition on extraction from NPs) is context free. The others attribute licensing (or prohibition) of extraction out of NPs to: whether the NP is a subject or complement (Ross/Chomsky); whether the NP is the focus of discourse (Erteschik-Shir); whether the NP is contained within a DP (Bowers); or whether the NP has undergone QR (Diesing). None of these attribute prohibition/licensing of extraction to the NP itself. This is what our account will show to be necessary.

While Diesing's account comes closest to accommodating all the syntactic and semantic observations that antecede it, it still runs into problems. Let us examine three key cases. First, if definiteness correlates with QR, as Diesing claims, then all definite NPs

should prohibit *wh*-extraction. Since NPs having genitive pronouns are a subclass of definite NPs, we would therefore expect extraction to be impossible from them. Indeed, this is usually the case, as (7) shows.

(7) *Who did Tom read his/their/my book about?

However, notice first that genitive determiners can have either possessive or agentive meanings, as illustrated in (8).

(8) a. Roger owns my pictures of Jane.
b. Roger was the photographer who took my pictures of Jane.

Accordingly, in (8a) *my* denotes the 'taker of the pictures' and not their possessor, and in (8b) *my* denotes the possessor. With this in mind, examine (9).

(9) Who did Tom write his story about?

Example (9) is perfectly grammatical when *his* both (a) takes *Tom* as an antecedent and (b) carries an agentive, rather than a possessive, meaning. The point is made even more salient in (10).

(10) a. Tom finished his/my book about Nixon.
b. Who did Tom finish his/*my book about?

In (10a), the genitive pronoun can have a possessive or agentive sense, depending on whether we interpret *finish [X's] book* to mean 'finish reading [X's] book' or 'finish writing [X's] book'. Of course, in the latter instance, only *his* is appropriate. The extraction in (10b) is only possible with the genitive pronoun *his* and only with the meaning 'finish writing his [Tom's] book'. Under Diesing' account, both (9) and (10b) should be uniformly ungrammatical, since both involve extraction out of NPs that are definite and that undergo QR. Thus, Diesing's analysis appears to be too strong, in that it would rule out a whole class of grammatical cases.

The second case involves Diesing's analysis being too weak. According to her account, indefinite NPs that are not in presuppositional contexts should allow *wh*-extraction, since they do not undergo obligatory QR. What we find, however, is that extractability is also contingent on whether the *wh*-element is construed as an "argument" of the noun (in the sense of Grimshaw 1990). Consider the contrast between (11) and (12).

(11) a. What did Jake take a picture of? (answer: The Alamo)
b. What did China start a war over? (answer: trade)

(12) a.*What did Jake write a letter of? (answer: apology)
b.*What did Sherman commit a crime of? (answer: passion)
c.*What colors did Joseph make himself a coat of? (answer: many colors)
cf. What color coat did Joseph make himself? (answer: one of many colors)

Given that the NPs in (11) and (12) are all indefinite and are complements of verbs of creation, they should not (according to Diesing) undergo obligatory QR, and should allow *wh*-extraction. The ungrammaticality of (12a,b,c) is therefore unexpected under Diesing's account. What is crucially different about (11) and (12), is that the extractions in (11) each involve an element that can be construed as the object of the noun in question, while in (12), this is not so.[2]

Another shortcoming of the existential closure account is that it makes wrong predictions concerning extraction from NPs whose quantifiers are NPIs. It is the case that NPIs are in the class of "dependent" quantifiers, and that "dependent (existential) quantifiers cannot assert or imply existence" (den Dikken and Giannakidou 2000). Thus, the following contrast obtains.

(13) a.?He didn't burn some books about Truman, because there were none.
b. He didn't burn any books about Truman, because there were none.

In (13a), the quantifier *some* creates an implicature of existence regarding *books about Truman*, even though this implicature is defeasible. Example (13a) is somewhat odd for this reason. In (13b), on the other hand, the existence of *books about Truman* is neither entailed nor implicated, and the sentence sounds perfectly fine. Returning to Diesing's account, we would assume that existential NPI quantifiers should not undergo QR for existential closure.

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[2]Alongside argument extractions out of NPs, one finds equally grammatical cases such as in (i).

(i) a. Which church did he see the towers of?
b. Which ingredient did you use two cups of?

While neither *church* nor *ingredient* is an argument of *towers* or *cups*, their extractability contrasts with other non-arguments, such as given in (12). Note, however, that the rightmost constituent in a part-whole (or inalienable possession) phrase is always extractable, irrespective of definiteness, choice of matrix verb, or presupposed existence. This suggests to us that (i) does not involve extractions out of NP at all. Rather, we would claim, the preposition *of* heads a phrase that encodes the part-whole relation, with the structure given in (ii).

(ii) $[_{of\text{-}P}\ [_{DP}$ two cups] of $[_{DP}$ which ingredient]]

Accordingly, when the *of* expressing this relation is present, extractions that would be otherwise impossible become grammatical, as the contrast in (iii) shows.

(iii) a. Which club did you fight every member of?
b.*Which club did you fight every member from?

Example (iiib) is ungrammatical because *which club* is extracted from a modifying phrase inside the definite NP *every member from*. Example (iiia), in contrast, does not involve extraction out of NP.

Accordingly, *wh* extraction should always be permissible out of an indefinite NP with an NPI quantifier such as *any*. Example (14) shows that this is not the case.

(14) a. Who didn't he read/write any books about?
b.*Who didn't he burn/shelve any books about?

The extraction in (14b) ought to be as good as that in (14a) under Diesing's analysis, since the NP *any books about* will not undergo QR for existential closure. However, the ungrammaticality of (14b) is easily explained under our account, since predicates such as *burn* and *shelve* do not activate the argument structure associated with the noun *book*.

Finally, we find that the prohibition of *wh*-extractions out of NP is determined more by whether the NP denotes an individual concept than whether the individual's existence is presupposed. Diesing attributes the ungrammaticality of (2b) to the fact that the existence of the object of *destroy* is presupposed, forcing the NP to undergo QR for existential closure. Consider though the contrast in (15).

(15) a. What is Marie preparing to be a teacher of?
b.*What is Marie preparing to welcome/train a teacher of?

Example (15a) is significantly better than (15b). The difference between them resides not in whether *teacher* is existentially presupposed or not, but rather in whether *teacher* denotes a physical or metaphysical object. In (15a), extraction is fine when *a teacher of* is a predicate noun, denoting the conceptual class of *teacher*. In (15b), where *a teacher of* must refer to a particular individuation of the concept, extraction is ruled out. Crucially, extraction is ruled out both with the verb *welcome*, which presupposes the existence of its object, and with the verb *train*, which does not. The sensitivity of extraction to differences between metaphysical concept denotations and physical token denotations is further illustrated in (16).

(16) a. When writing papers, which presidents do children usually use books about?
b.*When propping open their desks, which presidents do children usually use books about?

Example (16a) is significantly better than (16b). The difference between them resides not in whether the *book* is existentially presupposed or not, but rather in whether *book* denotes a physical or metaphysical object. Using a book to write a paper entails utilizing the conceptual entity denoted by *book*. In using a book to prop open a desk, on the other hand, one utilizes the physical entity denoted by the noun. It is only the conceptual (or metaphysical) denotation of *book* which involves argument structure (i.e. one writes and reads instances the former, not the latter). Thus, while contextual factors (such as definiteness) do indeed play a role in determining extraction possibilities out of NPs, nominal

argument structure is just as crucially involved.

3. Some explanation

In the remainder of this presentation, we will seek to show the following: (i) NPs lacking argument structure do not permit *wh* extraction at all, and (ii) NPs having agentive structure permit extraction even when they are definite.

Pustejovsky 1991 lays out the essential aspects of what he calls the "qualia structure" of a lexical item. These include:

1. The relation between it and its constituent parts
2. That which distinguishes it within a larger domain
3. Its purpose and function (telic)
4. Whatever brings it about (agentive)

The last two are, as noted here, its telic and agentive aspects. Consider, for example, the noun *book*. In its physical sense, a *book* is an object having pages, a cover, and perhaps a dust jacket. In its metaphysical sense, a *book* is an object that is created through an act of writing or composition, and is something which is experienced through a process of reading. These aspects of the meaning of *book* present in the "qualia structure" of this noun refer principally to its metaphysical sense. Consider, for example, when the noun *book* is inserted as the complement of an aspectual verb such as *finish*, which requires that its complement denote an event or activity.

(17) Joan finished the books.

In (17), without additional context, we construe Joan to have finished reading the books or finished writing them (referencing, respectively, the telic and agentive structure of the noun). With some added context, we might even understand (17) to mean that she finished editing or typesetting them, an activity which is part of bringing them into existence and therefore elicits the agentive structure again. It is significantly harder to coerce (17) to mean that she finished dusting or shelving them. Let us assume then that the telic structure of *book* is primarily associated with its metaphysical sense, and that (at least) the telic structure must be evoked in order to license extraction.

(18) Which presidents do children usually read/hate/finish/buy/*shelve/*soil books about?

In (18), *which presidents* is extracted from the indefinite NP *books about*.[3] The extraction

[3]Following Diesing (1992:12-24), example (18) includes the adverb *usually*. This is to avoid the episodic reading that would normally be associated with certain verbs, such as *buy*, and which would in and of itself block extraction.

is licensed when the main verb activates the telic structure (use and function) of metaphysical *book* (namely, that it is something to read), but not when the noun denotes a purely physical object. In our account then, *wh*-extraction in (18) is facilitated when *book* denotes the metaphysical entity associated with its argument structure.[4]

Where some activation of argument structure is necessary to license any extraction at all out of NPs, activation of a noun's agentive structure is in fact sufficient to override definiteness effects. Consider the contrasts in (19-21).

(19) a. Who did you write/??read those essays about?
b. Who did you write/read essays about?

(20) a. Who did you tell/*hear those jokes about?
b. Who did you tell/hear jokes about?

(21) a. Who did you paint/??see that portrait of?
b. Who did you paint/see a portrait of?

In each case, when a verb of creation such as *write*, *tell*, or *paint* activates the noun's agentive structure, *wh*-extraction becomes possible even out of a definite NP. This licensing capacity of agentive structure was also seen in (9) and (10b), where *wh*-extraction is possible across a genitive pronoun denoting the agent role, but not across one denoting possession.

The part played by event structure in licensing extraction out of NPs, and the special role of agentive structure is further illustrated by some striking data first noticed by Ross (1967). The examples in (22) (inspired by Ross but adjusted for inflation) illustrate the surprising fact that even the Complex NP Constraint can be violated.

(22) a.*The money which I am discussing the claim that the company squandered amounts to $30 million.
b.?The money which I am making the claim that the company squandered amounts to $30 million.

What we find in (22a) is what we expect, extraction out of the complex NP is prohibited. (22b), which is grammatical (though degraded for some speakers), differs from (22a) only

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(i) ??Who did the children buy a book about?

[4]The noun *books* in *buy books* can denote either the physical or metaphysical sense of the word. This distinction becomes quite clear in certain discourse circumstances. If one points to a book that you own and says "I would like to buy that book", it is ambiguous in that one might wish to buy the actual physical object that you possess or might simply wish to buy their own copy of the metaphysical object that your book is a token of. It is in the latter case that extractions such as in (18) with the verb *buy* are grammatical.

in containing the verb *make* instead of *discuss*. Here *make* activates the agentive structure of *claim* in the same way *write* activates the agentive structure of *book*. From our present perspective then, (22b) should actually be expected and not surprising.

Further support for the distinction we are proposing comes from data on bound anaphora in NPs. Fiengo and Higginbotham (1981) show that under some circumstances indefinite NPs are transparent while definite NPs create opaque domains. Thus the clitic pronoun *'im* cannot be bound in its own clause (23a) but can be in (23b).

(23) a.*John$_i$ read books about'im$_i$. (= F&H (32))
b. John$_i$ read that book about'im$_i$. (= F&H (34))

What we find is that if the agentive structure of the N is activated by the choice of the verb (here *write* rather than *read*), the NP is (unexpectedly) transparent and coindexation is again prohibited, as shown in (24).

(24) *John$_i$ wrote that book about'im$_i$.

Thus, in the same way that we have seen that NPs can be made transparent for extraction, NPs can be made transparent for binding.

These observations are reinforced with data involving universal (i.e. strong) quantifiers. Example (25a) is normally assumed to be ill-formed.

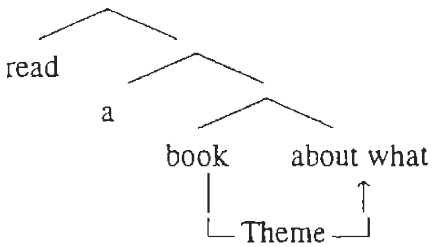
(25) a.*Who did he write/start every book about?
b. Smith wrote/started every book about Nader. (cf. *He started it about Nader.)

However, on closer examination we find that sentences of this form are not as bad as expected, but only acceptable under an interpretation involving agentive structure. Notice first that (25b) has two possible readings, one in which every book written/started about Nader was written/started by Smith and one in which every book written/started by Smith was about Nader. The latter sense is conveyed by the archaic and marginally acceptable NP *his every book about Nader* (which is itself similar to the archaic and acceptable *his every move/wish/thought/command*). Thus, speakers who find (25a) acceptable understand it to mean "Who did he write/start every one of his books about?".

From all this, we make the following proposal: extraction from object NPs is generally disallowed, and the only elements that can be extracted out of an NP (or DP) node are those which denote arguments in the event structure representation of the noun. One way to capture this would be to adopt the strong/weak determiner hypothesis of Bowers 1988, and to incorporate into the representation the event-structures proposed by Pustejovsky and Jackendoff. We will assume the following:

1. Nouns have complements only in their telic, metaphysical sense. On this view, *about Nixon* is a complement of the conceptual denotation of *book*, but an adjunct/modifier of the individuated token. If we assume that NP blocks proper government of traces, then a trace of *wh*-movement would be θ-governed in (26a) with *read* and ungoverned in (26b) with *shelve*. A trace of *wh*-movement would also be blocked in (26c), since the *of* phrase is a restrictive descriptor, rather than an argument of *letter*.

(26) a.



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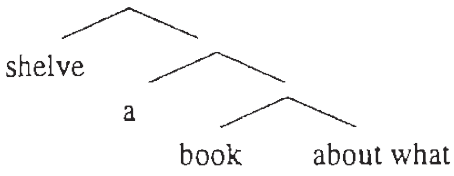
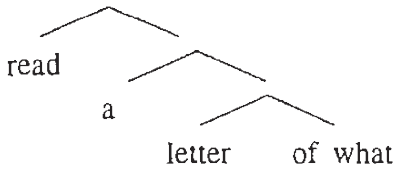


c.



2. We further assume that DP (as opposed to NP) blocks *wh*-movement categorically, and, following Bowers 1988, that definite (strong) determiners are D-heads, while indefinite (weak) determiners are modifiers within NP, as shown in (27).

(27) a. $[_{DP}$ each $[_{NP}$ book about Nixon]]]
b. $[_{NP}$ some book about Nixon]

3. Finally, we adopt an analog of Chomsky's (1995) vP for agentive structures, suggesting that the agentive structure of a noun projects an nP shell.

(28) $Todd_1$ wrote $[_{nP}$ PRO_1 n $[_{DP}$ that $[_{NP}$ book about Nixon]]]

We can now discuss how the activation of agentive structure amnesties the definiteness constraint on *wh*-movement.

In (29), *write* activates the agentive structure associated with *book*, which results in the projection of an agentive nP shell.

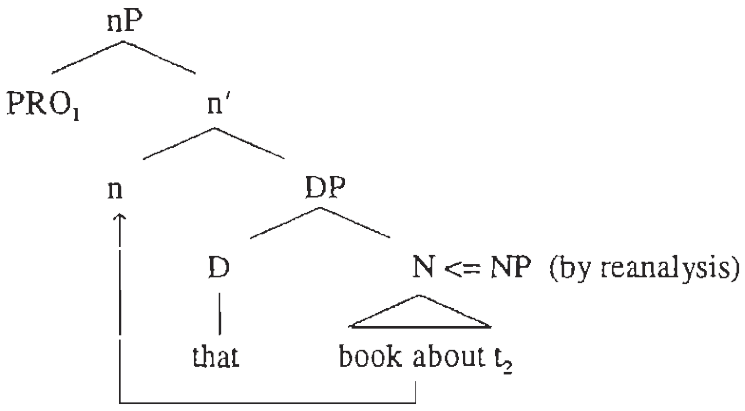
(29) $what_2$ did $Todd_1$ write $[_{nP}$ PRO_1 n $[_{DP}$ that $[_{NP}$ book about t_2]]]

Now, let us generalize Larson's (1988) V-bar reanalysis rule as (30).

(30) Generalized reanalysis
Let α be a phrase whose θ-grid contains one undischarged θ-role. Then α may be reanalyzed as a complex lexical category.

The phrase *book about* t_2 in (29) contains one undischarged θ-role, iff the agentive structure of the noun *book* is active. Reanalysis enables it to move, at LF, to the head of nP, as shown in (31).

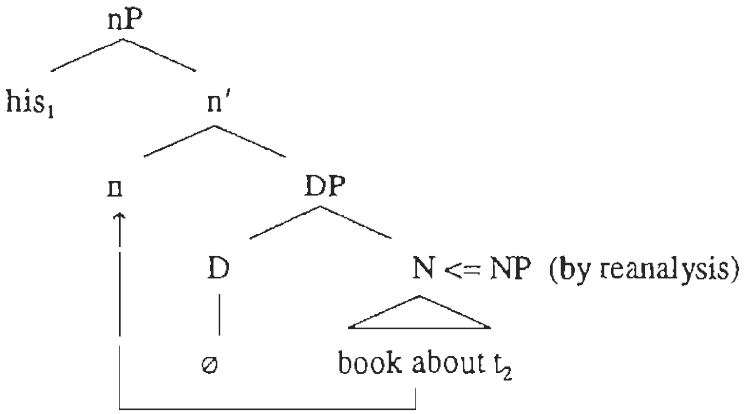
(31)



At LF, the moved N *book about* t_2 can check the θ-role assigned to PRO_1. At the same time, the trace of *wh*, is no longer blocked by the DP.

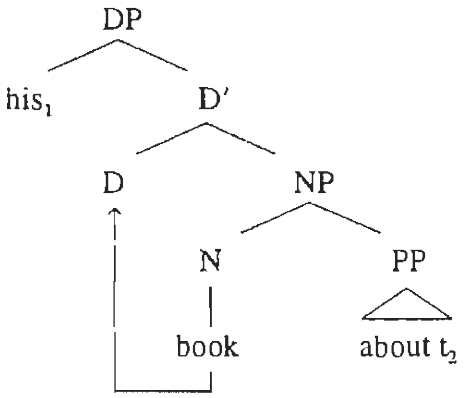
This approach can also explain why it is that only an agentive interpretation is available for the genitive pronoun in (10b), assuming that *his* may only occupy one position, spec,DP or spec,nP.

(32)



In (32), the reanalyzed phrase (containing *book*) checks the genitive Case of agentive *his* in spec,nP. If *his* had a possessive, non-agentive reading, then it would occupy spec,DP, as shown in (33). In this instance, there can be no reanalysis and the head noun *book* moves to D to check the genitive Case of possessor *his*.

(33)



4. Why there still is a subject condition

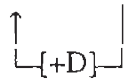
The foregoing leads to the obvious question of whether the same mechanism that amnesties extraction from object NPs can apply to subject NPs. Clearly the answer is 'no', given the subject-object asymmetry so long noted in the literature and demonstrated in (34), where the same environment allows extraction from object NPs but not subject NPs.

(34) a. Who is the class reading a book about?
b.*Who is a book about being read by the class?

It's this uniform ungrammaticality of extraction from subjects which lead to the formulation of the subject condition and its descendants. The question one can ask now is why there still is a subject condition.

We propose that the explanation lies in the fact that in English **all** subjects must be DPs. That is, while we have claimed that the object *stories about* t_i in (34a) is an NP, the subject *stories about* t_i in (34b) is a DP. In a series of papers (Davies and Dubinsky 1999a, 1999b, 2000) we have argued that all English subjects, whether nominal, clausal, verbal, adjectival or prepositional, are dominated by a DP node. This DP-shell analysis accounts for a variety of syntactic properties of English subjects. This DP-shell is a by-product of the fact that English is a D-prominent language, that is, Tense contains a D-feature which must be checked prior to Spell-out and this forces all tensed clauses to contain a subject that is a DP. This is given schematically in (35).

(35) $[_{AgrP}$ Spec $[_{Agr'}$ Agr $[_{TP}$ T ...]]] English



As we argue, especially in Davies and Dubinsky 1999a, this DP-node accounts for sentential subject and subject island facts simply as a case of subjacency. In (36a), the DP node dominating the CP subject means that the movement violates subjacency. Conversely, the sentential complement in (36b) is a simple CP; thus, movement in this environment does not violate subjacency.

(36) a.*what$_1$ do you think $[_{DP}$ $[_{CP}$ t'$_1$ that John lost t$_1$]] is a tragedy?
b. what$_1$ do you think Judy regrets $[_{CP}$ t'$_1$ that John lost t$_1$] ?

But not all languages are D-prominent languages. As first proposed by Massam and Smallwood (1997) (and subsequently argued for by Davies and Dubinsky 1999b, 2000, Massam, forthcoming, and Rackowski and Travis, forthcoming), some languages are V-prominent, that is, Tense contains a V-feature which must be checked prior to Spell-out. While Massam & Smallwood and Rackowski & Travis have argued this is true for obvious V-initial languages such as Niuean and Malagasy, we have proposed (Davies and Dubinsky 1999b, 2000) that Slavic languages are also V-prominent languages and clauses (in at least Bulgarian and Russian) have the structure in (37).

(37) $[_{TP}$ (Spec) $[_{T'}$ T [+V] $[_{AgrP}$ Spec $[_{Agr'}$ Agr ...]]] Slavic

Since there is no D-feature in Tense to be checked in V-prominent languages, there is no requirement that subjects have the DP-shell that we have proposed for English. If our account of the subject condition is correct, this predicts that extraction from sentential subjects in V-prominent languages should be possible. That this extraction is possible is a fact well known for clear V-initial languages, but it also obtains in Slavic languages, as illustrated in (38) for Bulgarian.

(38) na kakvo$_1$ misliš [če [da otide t$_1$] beše važno za nego] Bulgarian
to what you.think that to go was important for him
'To what do you think that to go was important for him'

Our analysis of V-prominent languages together with our present account of extraction from NPs makes a clear prediction: if extraction is possible from object NPs, extraction should also be possible from subject NPs. This is, in fact, the case. In (39), we find data which parallel the English examples from above: when the appropriate telic

structure of the head N is elicited under the influence of the verb-object pairing (as in the pairing of *read* or *write* with *book*), extraction is possible (39a,b); when it is not (as in the pairing of *destroy* with *book*), extraction is seriously degraded (39c).

(39) a. (ti) za kogo napisa kniga?
about whom (you) wrote-2sS book
'About whom did you write a book?'
b. Za kogo četeš kniga?
about whom read-2sS book
'About whom are you reading a book?'
c. ???Za kogo uništožixa kniga.
about whom destroyed-3pS book
'About whom did they destroy a book?'

True to the prediction of our analysis, extraction is possible from the subject when the telic structure of the N is activated (40), in contrast with the English counterpart (34b).

(40) Za kogo e knigata četena ot celija klas?
about whom is book.the read by whole.the class
'About whom is the book being read by the class?'

5. Conclusion

Data in the foregoing discussion have demonstrated that extraction from NP objects is both more restricted and less restricted than has been portrayed in the literature. We have shown that such extraction is indeed quite restricted: it is sanctioned only when the event structure of the nominal head is activated. The syntactic structure that we have proposed at once accommodates the event structure of nouns and provides an environment from which extraction is licensed. Thus, the "subject-object asymmetry" in extraction from NPs is far less robust than has sometimes been claimed and has an explanation far different from that which is generally assumed. The analysis proposed here allows us to maintain the strong position that DP is an absolute barrier to movement. Combined with our previous proposals, we are able to account for the total ban on extraction from subjects in English as well as the possibility of extraction from nominal subjects in languages such as Bulgarian.

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