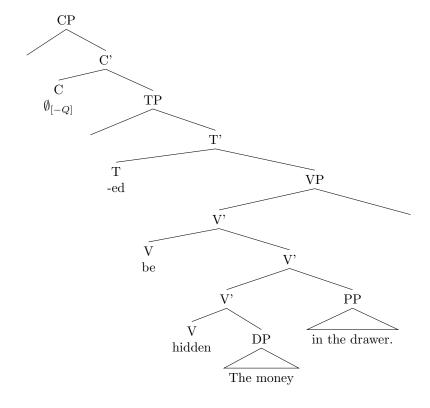
# Homework 9

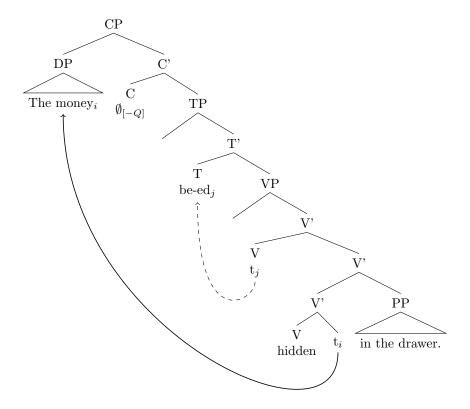
#### Mark Simmons

## April 24, 2020

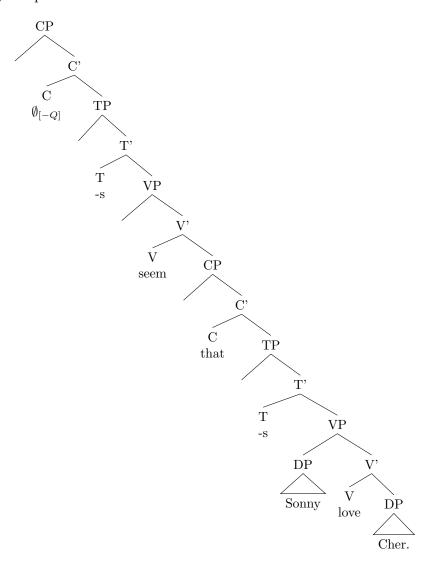
#### 1. Technical

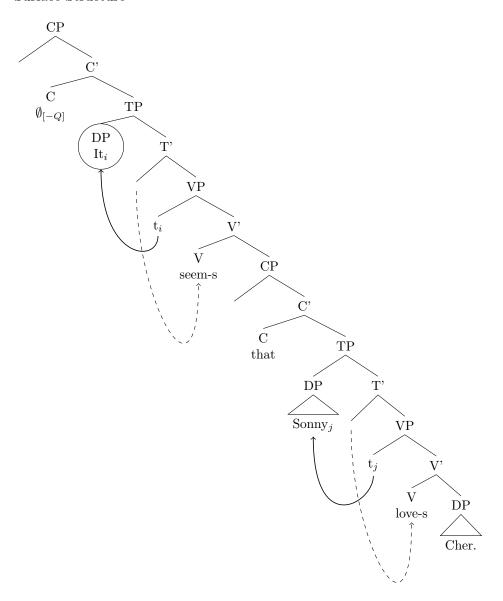
### (a) Deep Structure



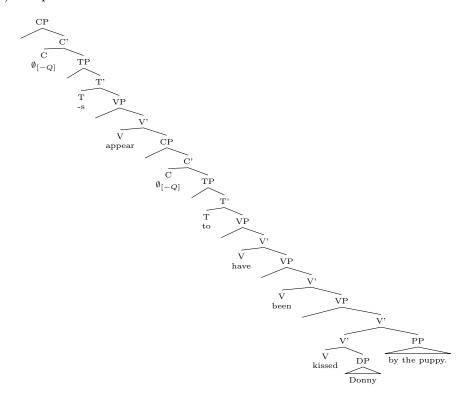


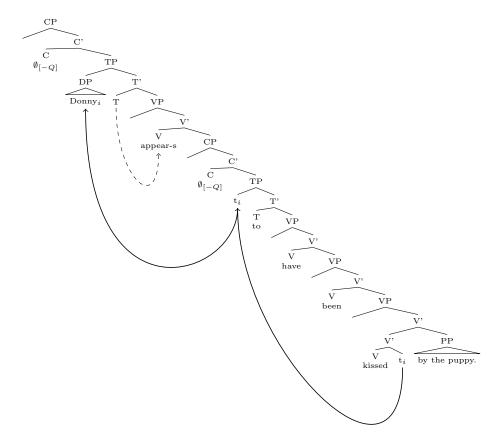
## (b) Deep Structure



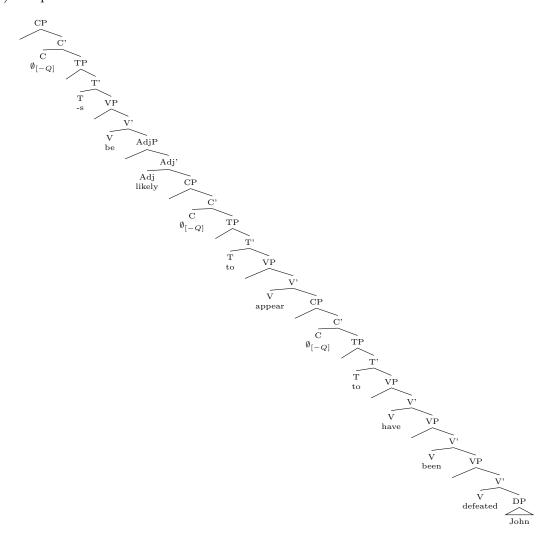


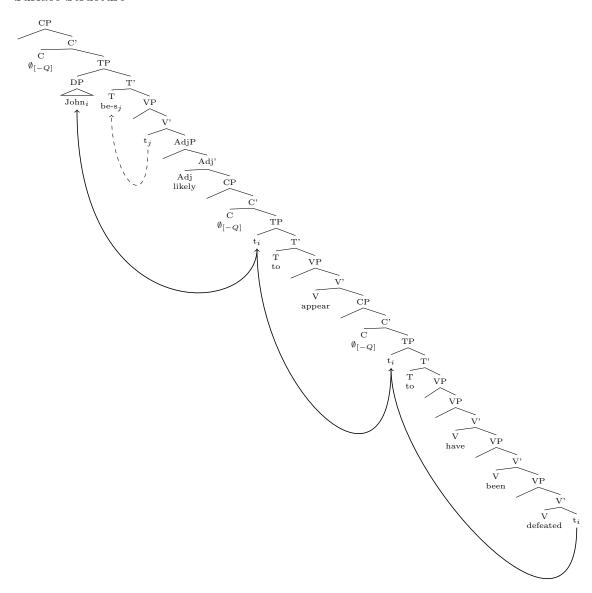
## (c) Deep Structure





## (d) Deep Structure





#### 2. Argumentation

In English passive sentences, the semantic patient of the verb is manifested syntactically and morphologically as the subject, as in (1).

- (1) a. We elected him.
  - b. He was elected.

The object of *elect* in (1a) behaves as a canonical object in English; it follows the verb and is marked with accusative case. In (1b), however, the semantic object has been fronted to before the verb, where the subject normally resides, and is marked with nominative case.

The Icelandic passive in (2) behaves similarly.

- (2) a. Við kusum stelpuna.

  1PL.NOM elected girl.DEF.SG.F.ACC

  'We elected the girl.'
  - b. Stelpan var kosin. girl.DEF.SG.F.NOM was elected 'The girl was elected.'

In (2a) stelpuna follows the verb and is marked with accusative case, while in (2b) it precedes the verb and is marked with nominative case. Thus, it seems that in general the semantic object of a passive verb behaves syntactically and morphologically like a subject.

However, an issue arises with verbs that take so-called "quirky case" DPs as direct objects, rather than accusative DPs.

- (3) a. Við hjálpuðum/björguðum/heilsuðum stelpunum.

  1PL.NOM helped/rescued/greeted girl.DEF.SG.F.DAT

  'We helped/rescued/greeted the girl.'
  - Við söknuðum/leituðum/gættum hennar.
     1PL.NOM missed/searched\_for/looked\_after 3sc.sg.f.gen
     'We missed/searched for/looked after her.'

Our current theory of nominal case predicts that the use of dative in (3a) and genitive and (3b) are mere morphological proxies for an abstract [+uACC] Case marked syntactically on the DP. When the verb is passivized, it loses its ability to check for accusative case, requiring the object to move to subject position, which checks for [+uNOM]. If the dative and genitive observed above are indeed proxies for [+uACC], we would expect the DPs to lose the oblique case inflection and manifest as morphologically nominative when moved to subject position in a passive sentence. As the following data show, that is not the case (ba dum tsss).

- (4) a. Henni var hjálpað/bjaragað/heilsað.

  3.SG.F.DAT was helped/rescued/greeted

  'She was helped/rescued/greeted.'

  b. Hennar var saknað/leitað/gætt
  - b. Hennar var saknað/leitað/gætt.
     3.DEF.SG.F.GEN was missed/searched\_for/looked\_after
     'She was missed/searched for/looked after.'

As (4) demonstrates, these nouns maintain quirky case even when subject of a passive sentence. Since, as stated above quirky case is assumed to be a proxy for an abstract [+uACC] feature, it appears that these sentences have an accusative DP in subject position. This is a problem for our theory, which predicts that subject position checks only for [+uNOM], and should not allow nouns marked for any other case in this position.

However, there is a possible explanation other than assuming that *henni* and *hennar* are underlyingly Accusative in (4). It is possible that they have accusative Case in (3) and nominative case in (4), but surface as dative and genitive because of a post-syntactic rule that overrides whatever morphology is expected from abstract Case.

Before we imagine what such a rule could be, let us consider the behavior of phrasal verbs in English in passive sentences.

- (5) a. We looked after her.
  - b. She was looked after.

In (5a), the direct object her is expressed as the object of the preposition after. However, this is not what the compositional semantics entail, otherwise (5a) would by synonymous with We looked beyond her. Instead, the meaning is closer to We protected her. In other words, the direct object of the verb in (5a) is expressed morphologically as if it were an oblique argument. This is similar to Icelandic's quirky case. Where English quirky verbs have an idiosyncratic preposition that governs the direct object, Icelandic quirky verbs assign an idiosyncratic case affix to their direct object. I write these affixes as  $\emptyset_{[+DAT]}$  and  $\emptyset_{[+GEN]}$ .

The key here is the distinction between a preposition (that is, a lexeme) and an affix. A lexeme can stand on its own in SS, for this reason appears separate from the patient DP in (5b). Trying to front it along with the pronoun results in an ungrammatical sentence.

(6) \*After her was looked.

An affix, however, must have a lexical host. Thus, the affix has no choice but to raise with its nominal host in order to satisfy the Stranded Affix Filter.

Other forms of the passive require further explanation.

- (7) a. Bækurnar voru lesnar. book.PL.NOM.DEF were returned 'The books were returned'
  - b. það var lesnar fjórar bækur.
    EXPL were read four.PL.NOM book.PL.NOM
    'Four books were read.'

Here we see that, in an alternate passive contruction, the patient DP is left in its original position following the verb, rather than raised to subject position, and an expletive pronoun occupies the sentence's subject position. As expected, the patient DP is not marked accusative, as the passive verb has lost its [+ACC] feature. There is still a problem, nonetheless: the patient DP should not be able to stay within the VP at all; our theory predicts that passive verbs should not be able to assign any case, which is why the noun phrase is expected to raise, so that it can check its case feature against the TP.

One possible solution to this is to modify the rule for feature-checking on Icelandic nouns. When a noun has no place in the sentence to check its case feature, it is realized in SS with the most unmarked morphological case, which in Icelandic appears to be the nominative. I will refer to this rule as the Unmarked Nominative Filter. Note how this contrasts with English, which (according to the model we have developed so far for it) does not allow for nouns to lack a case feature in DS.

The assignation of nominative morphology to  $fj\acute{o}rar\ bækur$  thus occurs post-syntactically, as a "last resort" option since no other case has been assigned to it. Thus, we might expect that other post-syntactic processes might assign case before the Unmarked Nominative Filter occurs - for example, if a noun is assigned a case by a null affix that governs it morphologically.

(8) a. Bókunum var skilað. book.PL.DAT.DEF was returned 'The books were returned' b. það var skilað fjórum bókum. EXPL was returned four.PL.DAT book.PL.DAT 'Four books were returned.'

Since the verb *skila* has a quirky-case affix that associates onto the object noun and gives it dative morphology, we see it marked so in the SS, even though underlyingly the object DP lacks abstract Case.

Another type of passive appears to disprove the posited Unmarked Nominative Filter.

(9) a. það var barið mig.
EXPL was beaten 1.SG.ACC
'I was beaten.'

This sentence is identical in structure to the passive in (7b), save that the patient DP is marked accusative rather than nominative. This violates the proposed Unmarked Nominative Filter. However, the reason that the nominative case was used in the rule was not for any underlying syntactic motivation, but rather simply because it seemed to be the most unmarked case in Icelandic. Given the recency of this new construction, I propose that it could be motivated by a shift in markedness, namely, that the accusative case in modern Icelandic is becoming less marked than the nominative. Compare sentences in English such as Me and my friends went to the store - though me is part of the subject DP and, thus, should be nominative, it appears accusative, seemingly because it is separate from the main verb by a conjunction. The fact that the accusative case is assigned to this pronoun when there is no syntactic or semantic motivation to do so suggests that the accusative is less marked overall than nominative in English. Thus, the same could be true of modern Icelandic, which would reconcile the data above with the theory established in this paper.

Thus, I propose that the differences in morphology and word order observed in English and Icelandic passives can be explained via parametric variations between the language. First, Icelandic verbs that take a quirky case object instead of accusative assign this case via a lexicalized affix that functions similar to the particle in English verbs such as *look after*, which then follow the object through any movement or transformations due to the Stranded Affix Filter. Further, where English does not allow the object of a passivized verb to remain in-situ as complement to V and be featureless with regards to case in DS, Icelandic does allow so when an expletive subject occupies specifier of TP position. I finally argue that Icelandic employs a filter rule which assigns any such stranded DPs the most unmarked morphological case if no other rule assigns them a case first.

#### 3. Argumentation

Several English verbs can occur with an embedded clause. In X-Bar theory, we say that these verbs take the embedded clause as their complement.

(10) John believes that Bill lied.

Here, "that Bill lied" is the complement of the verb *believe*. The complement clause here is a tensed clause introduced by the *that*. However, *believe* can also take a non-tensed clause as its complement, such as an infinitive clause.

(11) John believes Bill to have lied.

Though believe here appears to possess the same argument structure as it does in (10), I will

argue that *Bill* actually moves from being subject of the embedded clause in DS to being object of the verb *believe* in the matrix clause in SS, meaning that *believe* in (2) has two separate complements.

Disregarding theory, there is reason to believe Bill is the semantic subject of the verb lie, is syntactically the object of believe. If we replace Bill in (11) with a pronoun, we can see it is marked accusative morphologically.

- (12) a. John believes him to have lied.
  - b. \*John believes he to have lied.

Furthermore, believe can occur with an object noun and no complement clause:

- (13) a. I believe him.
  - John will never believe me.

Thus, since *believe* can clearly take an accusative object, it is preferable to consider that *Bill* in (11) and *him* in (12a) are the syntactic object of *believe*, rather than being part of the infinitive clause.

This fits our understanding of Case Filter as well. A non-finite clause cannot check nominative case on a DP, and thus it cannot take a subject. This causes the underlying subject of *lie* to move to the nearest case-checking position, which is the object position of the verb in the matrix clause.

Another theoretical "probe" we can apply here is Binding Theory. Since the binding domain for elements such as pronouns and anaphors is the lexeme's immediate clause, we can discern whether this clause is the matrix Tensed clause, or the embedded infinitive clause.

As demonstrated below, pronouns in this position cannot be co-indexed with the subject of the matrix clause.

- (14) a. John, believes  $him_i$  to have been defeated.
  - b. \*John<sub>i</sub> believes him<sub>i</sub> to have been defeated.

Binding Principle B states that pronouns must be free within their binding domain, which is the immediate clause. (14b) shows that him cannot be coindexed with John, though it is perfectly grammatical if it indexes any other referent. This suggests that him is inside the same clause as John, and that (14b) is unacceptable because John would then bind him, violating Binding Principle B.

On the other hand, anaphors are capable of being coindexed with John in this sentence.

- (15) a. John, believes himself, to have been defeated.
  - b. John<sub>i</sub> believes Bob<sub>i</sub> to have defeated himself<sub>i</sub>.

Binding Principle A states that anaphors must be bound within their binding domain. (14a) proves that *himself* is inside the matrix clause, else it would not be bound by *John* and the sentence would be ungrammatical. (15b) raises a bit of an issue - how can *Bob* bind *himself* if *Bob* is in a higher clause? It is possible that in (15a) *Bob* binds *himself* in DS but not SS, whereas in (15a) *John* binds *himself* in SS but not in DS.

In fact, this could actually be proof that the subject of the embedded clause is undergoing movement. Compare (15a,b) to their follow equivalent sentences.

- (16) a. \*John<sub>i</sub> believes that himself<sub>i</sub> has been defeated.
  - b. John<sub>i</sub> believes that Bob<sub>i</sub> has defeated himself<sub>i</sub>.

When believe takes a finite clause complement introduced by that, the subject of the embedded clause remains in the embedded clause; otherwise it would not occur following that. Since there is no movement in (16), John cannot bind himself either in DS or SS. However, in (15a), John does bind himself in SS precisely because it has moved into the matrix clause.

Thus, I propose that when verbs like *believe* take a non-finite clause complement, the subject of the embedded clause raises to the matrix clause, manifesting as the object of *believe*. I argue this from the observed morphology - the case of the noun in question, and by applying the theoretical rules of Case Filter and Binding Theory.