

Passive Voice and Raising

Linguistics 322

Voice is a grammatical category, an operator, that has no directly link to conceptual structure. Voice is a complex issue, but it appears to mark a prominent object that the speaker chooses to make prominent. In English there are two voices: active and passive. The passive voice is the marked voice: [+Passive], and the active voice is the unmarked or default voice: [-Passive]. Virtually every verb may occur in the active voice--indeed some of them must:

- (1) a. John ate the potato.
- b. Some birds are flying.
- c. Henry resembles Hank's father.

The passive voice is restricted to transitive verbs. There is a small class of transitive verbs that cannot be marked in the passive voice.

- (2) a. The potato was eaten by John.
- b. *Be flying some birds.
- c. *Hank's father is resembled by Henry.

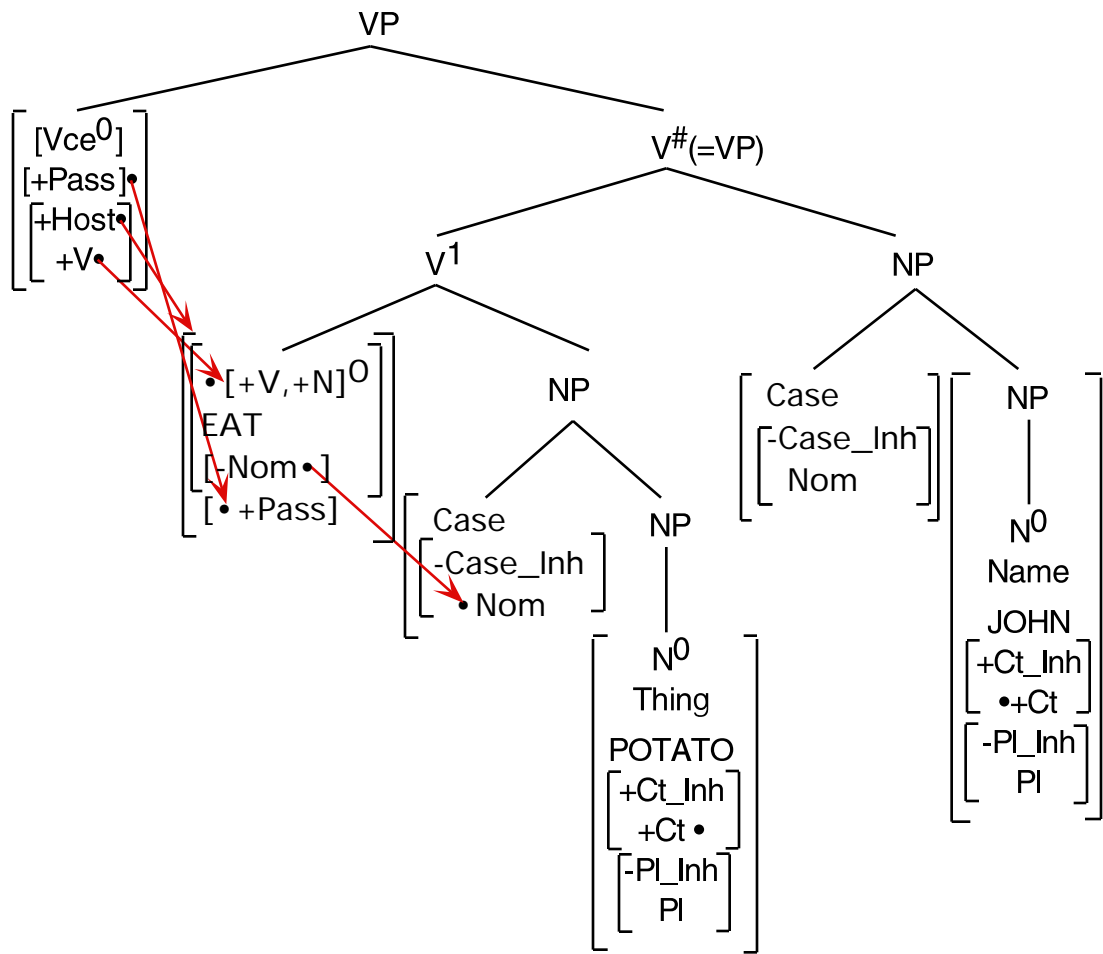
In the grammatical propositional structure, voice like tense and moods is an operator. The first feature set is [\pm Pass] (Passive). [-Pass] is the default represent the active voice The passive voice is represented as:

- (3) [VOICE [\pm Pass]] < VP>.

As far as it is known voice always takes a verb phrase as its argument.

The logical structure for (4) is the following, ignoring the relevance and aspect operators which turn out to be null here:

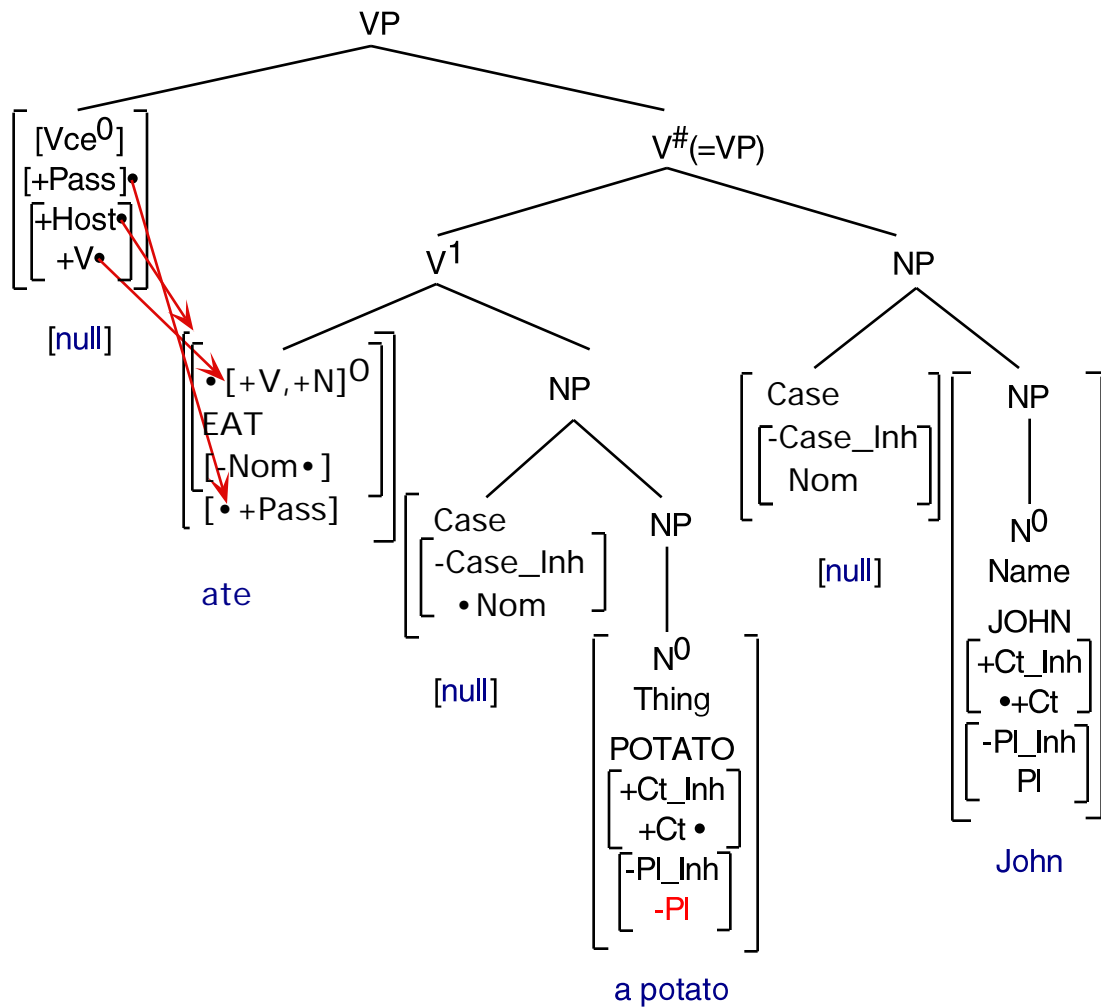
(4)



##Let's start with the voice operator. The lexical entry includes information that [+Pass] needs a verbal host. A copy of the voice operator is made and lowered and adjoined to the verb V, which VOICE governs.

The lexical entry for EAT includes information that the past tense form of EAT is *ate*, and no suffix is generated. V is not spelled out until the last step:

(5)



T is marked as [+Bound]. It too needs a host. One of the restrictions of English morphology is that a host can host only one bound form. Some languages can host two or more. We will return to the host problem at the final stage: spell-out.

The function of the passive voice is to bring the object into prominence instead of the subject. If the object NP is marked for the accusative Case, then it cannot raise and adjoin to TP or raise to Spec-T, since T assigns the nominative Case to the left. There is a general principle that prohibits assigning more than one Case to a NP:

(6)

Case Assignment

*NP, if NP assigned more than one Case.

In order for the object to raise to T, the verb cannot assign the accusative Case to it. Chomsky uses the term *lift Case* when a verb fails to assign Case to its complement. We can attribute Case-lifting here the passive feature.

(7) Accusative Case Assignment Failure

Rule: When a Verb is governed by [+Pass], it fails to assign the accusative Case to its complement.

This rule is undesirable as it stands because it does not tell us how it blocks it.

Suppose we propose the feature [\pm G] (Governor) to the head of a projection. If positive the features of the *hay* may govern the same feature in the *governee*. If negative, it cannot. This feature is like the others in that it may be inherent in a form, or the value of [G] is determined some other way. At this time the only category for which [G] is not inherent is the verb.

If the verb is modified by the active voice, [G] is marked positive. If the verb is modified by the passive voice, [G] is marked as negative. We can capture this in the following rule:

(8) Governor Assignment
[G] \rightarrow [- G] / [Passive].¹

Here, the minus value means the opposite value is assigned to [G] from that of [Passive] If Passive is then [G] is minus; if Passive is plus, then [G] is minus. Hence, when the verb is passive, the value of [G] is minus: [-G]. This means that the verb cannot govern its complement. The accusative Case cannot be assigned to the complement, because no link can be built.

On the one hand we have to raise one of the NP complements to the subject position, and on the other hand both NPs need Case. If the agent, or secondary complement, were raised, there would be no difference between the active and the passive, except that there would be one NP still unmarked for Case:

(9) *John was eaten the potato.

¹ In linking theory this means a link must be established between [Passive] and [G] in the verb.

If the object is raised, it becomes prominent:

(10) *The potato was eaten John.

Of course, this meets with the objective to make *John* prominent. What about the agent NP which is unmarked for Case? English and other natural languages have a card up their sleeve: It inserts a dummy preposition and adjoins it to the left of the Caseless NP. The dummy preposition assigns the accusative Case to its complement. There are four dummy Ps in English: *by*, *with*, *of*, and *for*. The dummy preposition here is the preposition *by*:

(11) The potato was eaten by John.

Dummy prepositions cannot be modified:

(12) *The potato was eaten right by John.

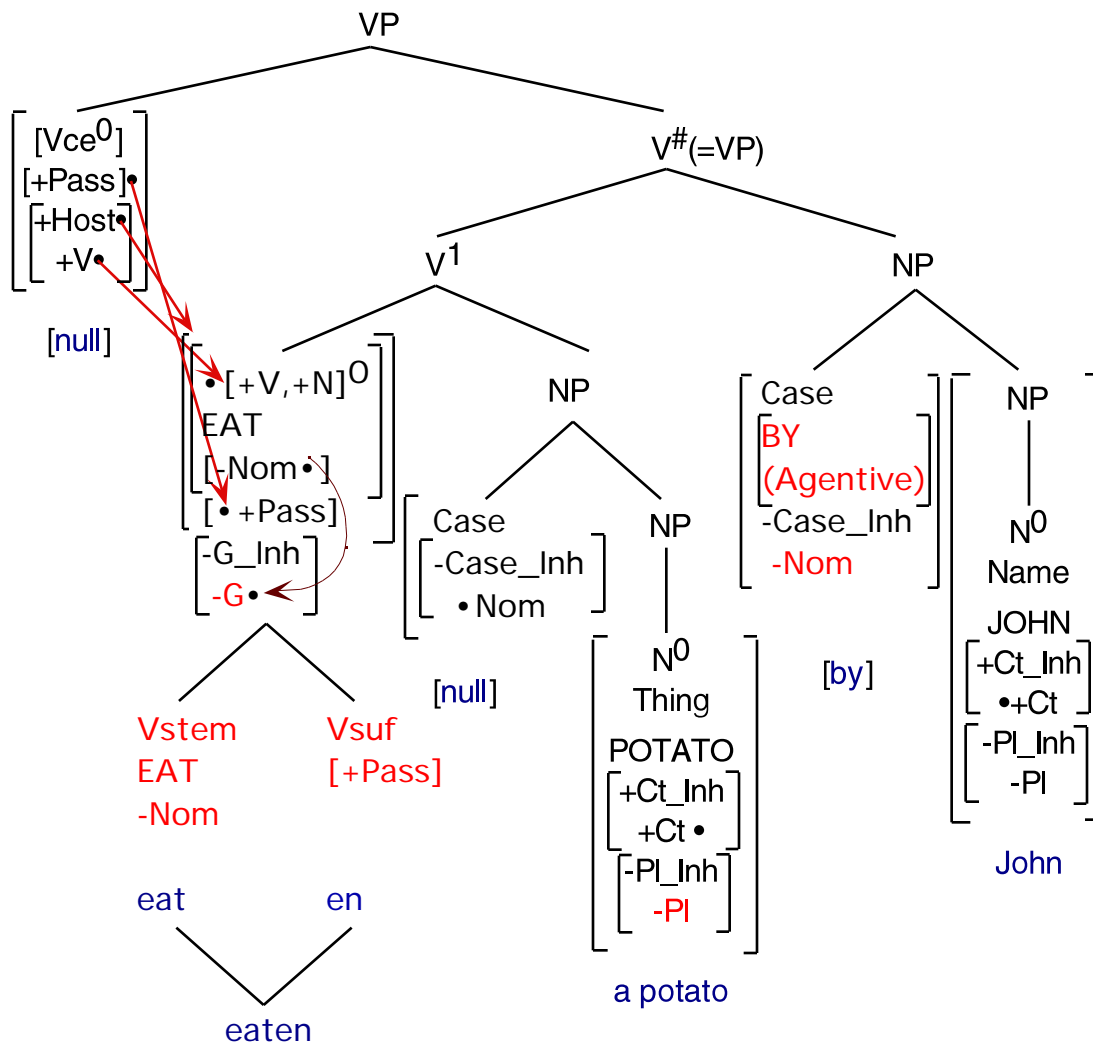
Note that there is another reading of (15) where *by* can be modified by a degree word. In this reading, *by* means 'next to.'

(13) The potato was eaten right next-to John.

This means that (11) is ambiguous: John is either the agent or the object of the locative preposition *by*. Only context can determine the correct meaning here, though there seems to be a preferential reading the passive voice reading here.

Diagram (17) shows the *r* morpheme {BY}. If it is true that all phonetic insertion occurs last, then {BY} isn't spelled out as *by* at this stage. Note that {BY} has no semantic content and hence no propositional form *BY, since {BY} is a dummy morpheme.

(14)



Note that the verb EAT is irregular. It forms a suffix in the passive-perfect form, but not in the present tense, which does not split. The passive-perfect form is irregular being spelled out as the suffix *-en*. Note also that the personal name *John* is inherently singular. This is true for all names, except for the referring to a family: the Jones, the Smiths, the Hamps, and so forth.

The passive in English contains at least one interesting detail. The agent argument is a secondary complement. Secondary complements are always optional, unlike primary complements. This means that the agent may be omitted:

(15) The potato was eaten.

The problem is how to represent this in the grammatical propositional form. Perhaps this is a good time to discuss this a little further. The grammatical proposition may be what Chomskyites call Logical Form. It represents the logical structure of the grammar. This is distinct from the semantic component. The semantic component is where true semantics lies. This is where the truth and falseness of a proposition lies. The speaker knows whether a proposition is true or false. He projects (maps) a message into the grammar (see grammar). The grammar determines which grammatical proposition the grammar must contain. The message is filtered into this system. We have been starting with Logical Form (the grammatical propositions). LF determines the grammatical categories that exist in the language, such as mood, tense, and voice in the verb and number in the noun.

There are many transitive verbs that require both a subject (agent or experiencer) and a direct object (theme or patient). In the active voice, the agent or experiencer may be omitted in the grammar. But they are implied. The implication is in the semantics. In (18), for example, the theme is required, but the agent is optional. In semantics there is always an agent, even if it is unknown what the agent is. The agent is sometimes called an external argument. This we call a secondary complement. Thus the grammar of English which arguments can or must be stated in which voice.

The situation becomes more complex in examples of the following sort:

- (16) a. Mary was run over by a car.
- b. Mary was run over with a car.
- c. A car ran over Mary.
- d. Someone ran over Mary with a car.

(16a) implies that there is no perceivable or known agent. The car could have slipped its brakes. There is no perceivable agent. (16b) implies that there is an agent, but the agent is not expressed. Either the speaker does not know who the agent is or he does not wish to divulge the identity of the driver of the car. If the external argument in the active voice is not an agent (16c), then the agent is simply not denoted. *Someone* in (16d) gives us the same amount of pragmatic information as the lack of an overt agent in (22)--someone does imply a human agent, which is not explicit in (22). Pragmatically, only a human can drive a car and

run over someone. If a dog knocks the gear selector into neutral and the car starts to roll and runs over Mary, do we say that *the dog* is the agent? Perhaps so. If so, then (16b) and (16d) are not exactly synonymous but an agent is implied in both cases.

How do we mark implicit arguments? Let us mark it 'X' in the following way:

(17) <agent: X>

Note we could write someone as

(18) <agent: [+Human]>.

(18) seems to match information content of someone when it is an agent. Thus we can mark voice and the propositional content of (21) through (24) as:

- (19) a. [+Pass] RUN OVER <patient: MARY> <instrument: CAR>
b. [+Pass] RUN OVER <patient: MARY> <instrument: CAR> <agent: X>
c. [-Pass] RUN OVER <patient: MARY> <instrument: CAR>
d. [-Pass] RUN OVER <patient: MARY> <instrument: CAR> <agent: X>
e. [-Pass] RUN OVER <patient: MARY> <instrument: CAR> <agent: [+Human]>

Compare (19c), (19d), and (19e). In all three the [-Nom] (accusative) Case-form is assigned to MARY. No Case is assigned to CAR or to the agent argument. In the active voice is targeted by prom. Hence, the features of CAR must be copied to the prom position (the subject) in (19c). What about (19d) and (19e). The theta hierarchy also plays a role here. The theta-role highest on the hierarchy is raised and adjoined to the subject position, where it is assigned the nominative Case. However, a small problem arises. 'agent:X' implies an agent but one not assigned a phonetic content. The grammar of English demands a phonetic subject (with certain predictable exceptions to be covered in more advanced syntax):

(20) *Ran over Mary with a car.

(32) Fails. In (29) CAR is raised and it is phonetic:

(21) A car ran over Mary.

The instrument in (19d) cannot raise in the presence of an agent. When the instrument is raised, no agent is implied. There is no syntactic solution for (20) as it stands. *With a car* is an intermediate complement; intermediate complements can not be targeted. The agent is targeted in the active voice even if it is implied. However, the subject NP must have phonetic content, with a few exceptions which do not apply here.

We propose that ‘agent:[+Human]’ is spelled out as *someone* or *somebody*. In (19e) the agent is raised since it is higher in the hierarchy than the instrument:

- (22) a. [+Human] RUN-OVER-[+Past] MARY CAR.
b. Someone ran over Mary with a car.

If the instrument is raised, we get the following ungrammatical sentence:

- (23) *A car ran over Mary with someone.

Of course, a car and someone could have run over Mary (another reading where someone is concomittive), but this reading makes no sense, pragmatically.

This page last updated 24 SE 03