Two Conceptions of VoiceP
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Abstract: In this note, I compare two distinct conceptions of VoiceP. On one conception, the external argument is projected (externally merged) into Spec VoiceP (Kratzer 1996). On the other conception, VoiceP plays no role in the projection of arguments, but determines how the arguments are realized in various A-positions. I dub these two theories the Projection Theory and the Realization Theory respectively. I present several reasons for preferring the Realization Theory.

Keywords: VoiceP, passive, external argument, *by*-phrase, implicit arguments

1.   Introduction

In recent literature on argument structure, the VoiceP projection plays two distinct and incompatible roles. I will call the two theories the *Projection Theory* and the *Realization Theory*. On the projection theory, due to Kratzer 1996, VoiceP plays a central role in projecting the external argument of an active clause, see (1). On this theory, the external argument is externally merged as a specifier of VoiceP.
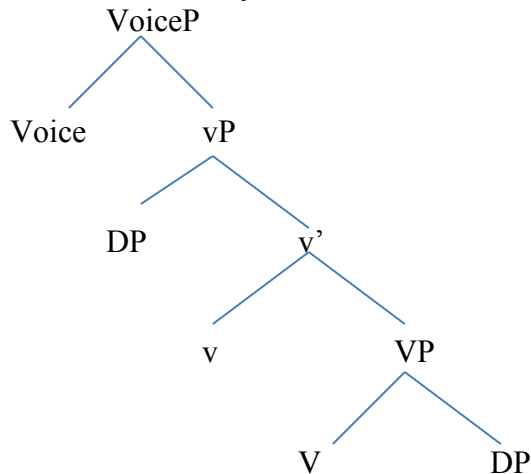
(1)   Projection Theory
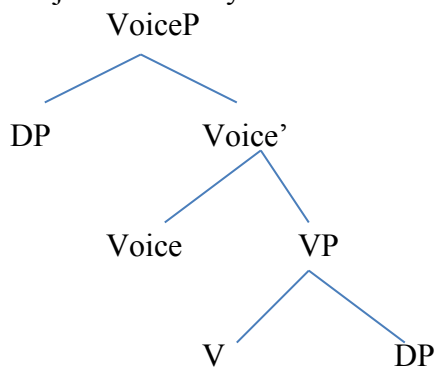
On the other theory, VoiceP has nothing to do with the external Merge positions of arguments. The external argument is not externally merged into Spec VoiceP, but rather it is externally merged into the specifier of vP (see Chomsky 1995). On the Realization Theory, VoiceP plays a role in how arguments are realized in A-positions (such as Spec TP). For example, in Collins 2005, the presence of VoiceP makes it possible for the object of the active to move to Spec TP, and be realized as the subject of the passive.

The Realization Theory is illustrated in (2) below:

(2)   Realization Theory

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                    VoiceP
                   /      \
              Voice        vP
                          /  \
                        DP    v'
                             /  \
                            v    VP
                                /  \
                               V    DP
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I summarize these two theories below:

(3)   a.   Projection Theory:
                VoiceP plays a role in the projection (external Merge) of arguments.
                In particular, the external argument of the active is merged into Spec VoiceP.
        b.   Realization Theory:
                VoiceP plays no role in the projection (external Merge) of arguments.
                Rather, VoiceP determines A-positions of arguments.

In this paper, which focusses on the passive in English for the most part, I will argue for the Realization Theory over the Projection Theory.

2.   What is grammatical voice?

It is not the purpose of this paper to give a survey of grammatical voice, or to offer a unified theory of constructions characterized as voice. But as a starting point, I adopt Doron's (2015: 749) characterization that "Voice (diathesis) alternations are particular alternations, typically marked as part of the verb's morphology, in the assignment of grammatical functions to the verb's arguments."

In the Principles and Parameters tradition, grammatical functions are normally characterized in terms of A-positions: Spec TP, complement of the verb, etc. So I reformulate the characterization of voice alternations as follow:

(4)   Voice alternations are typically marked as part of the verb's morphology and determine the realization of the verb's arguments in A-positions.

There are problems with this simple characterization. For example, in ECM constructions, the object is not an argument of the verb but can undergo passive: *John was believed to be nice*. I put such problems aside, as (4) is sufficient for the purposes of this paper.

Under such a characterization are found phenomena like the passive (including impersonal passives), antipassive, inversion (e.g., in Algonquian), and various kinds of middles.

The phenomena traditionally characterized as voice phenomena may have very different syntactic analyses. But whatever the analysis, the following terminological assumption should be adhered to:

(5)   Terminological Assumption
       Any theory of VoiceP must play a crucial role in accounts of voice phenomena (e.g., passive, inversion, middle). Equivalently, if a projection XP plays no role in accounting for voice phenomena, then it should not be called VoiceP.

This is a standard position on terminology in the field of generative syntax. A theory of FocP plays a role in the accounts of focus. A theory of AspP plays a role in accounts of verbal aspect. A theory of NumP plays a role in accounts of number in the DP. If the VoiceP of some theory played no role in voice phenomena, it would not be advisable to label the relevant projection VoiceP.

3.   Kratzer 1996

Kratzer develops her proposals about VoiceP within the neo-Davidsonian conception of event semantics. In particular, she suggests that the Voice head for agent has the following denotation:

(6)   Agent*= $\lambda x_e \lambda e_s[Agent(x)(e)]$

However, Kratzer 1996 presents no arguments at all that the functional head VoiceP has anything to do with voice phenomena, which seems to be explicitly acknowledged on page 120: "I will call it VOICE. This choice of name is not arbitrary. Kratzer (forthcoming) argues that Voice is truly at the heart of a theory of voice." In other words, there is no indication in Kratzer 1996 of how the VoiceP plays a role in the passive, middle, inverse voice, etc. And so Kratzer's paper fails the Terminological Assumption (5) above.

But later authors do provide analyses that implicate VoiceP in voice phenomena. Perhaps the first such analysis is that of Pylkkänen (2008: 26), who claims that there are an active Voice head and a passive Voice head: "The inability of depictives to modify an implicit external argument is predicted, as long as we assume that passive Voice makes the external argument syntactically unavailable. In (35), I assume that passive Voice existentially closes off the external argument." Consider the following diagram (based on (35) of Pylkkänen 2008: 26):

(7)   VoiceP

         Voice_Pass   VP

                        V   DP
                       eat
   the meat
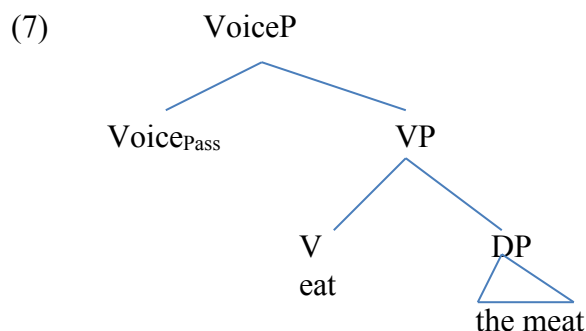
So in Pylkkänen's system there are two Voice heads: an active Voice head whose Spec contains the external argument and a passive Voice head that does not project a specifier. If Pylkkänen's analysis is right, it provides striking confirmation for Kratzer's basic idea that the external agument is projected in Spec VoiceP. Here is the reasoning: If the external argument is projected in Spec VoiceP, then it could be the case that the projection of the external argument varies with the flavor of the Voice head (active or passive).

Unfortunately, the analysis in (7) is not correct. There is data discussed in Collins 2018b (and many other sources) that shows that the implicit argument of a passive can bind a reflexive pronoun:

(8)   a.   Such privileges should be kept to oneself.
                (Baker, Johnson and Roberts 1989: 228, Roberts 1987: 162))
        b.   Damaging testimony is always given about oneself in secret trials.
                (Roberts 1987: 162)

These sentences are predicted to be unacceptable by Pylkkanen's theory in (7), because the reflexive pronouns have no antecedents. Rather, it seems that in the short passive there must be a null pro in Spec VoiceP that binds the reflexive.

(9)   VoiceP

        DP   Voice'
        pro

                Voice   VP
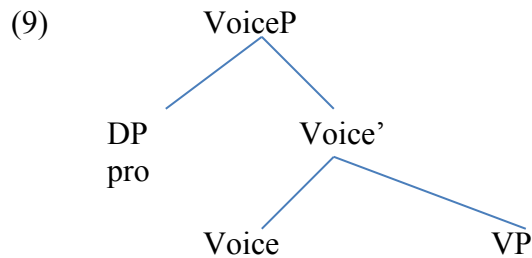
But then the external argument in the passive is projected in the same way as the external argument in the active, both are projected in Spec VoiceP. In other words, given (9) it is unclear that there is any distinction at all between the active and the passive VoiceP in English. And if there is no distinction, then there is no support from the English passive for the idea that the external argument is projected in Spec VoiceP.

One of the most well worked out analyses of the passive in the VoiceP framework is Bruening 2013. In his theory, there is no difference between an active and a passive Voice head, they have exactly the same syntactic and semantic features. Bruening assumes that "…passive is a head (Pass) that selects a projection of Voice that has not yet projected its external argument. I notate this [S: Voice(S:N)]. That is, Pass selects for a Voice with an unchecked [S:N] feature. This means that the complement of Pass is an unsaturated Voice projection…" (pg. 22). So in the passive, Spec VoiceP remains unfilled, but the Voice head has exactly the same features as in the active. Therefore, there is no difference between passive and active Voice heads for Bruening.

The suprising consequence of Bruening's analysis is that even though he adopts Kratzer's VoiceP framework, the VoiceP itself plays no essential role in the analysis of the English passive voice. Rather, all the work is done by PassP, which "…selects for a Voice with an unchecked [S:N] feature." Clearly this situation represents a failure of Terminological Assumption in (5). There is no reason internal to Bruening's analysis of the passive that the head that introduces the external

argument should be called Voice. Similar remarks hold of the closely related theories of Legate 2014 and Alexiadou et. al. 2014.

Consider next Alexiadou et. al. (2015), who adopt the VoiceP framework to analyze various voice related phenomena, including the passive and anti-causatives in German and Greek. My discussion here closely follows that of Angelopoulos, Collins and Terzi 2018. Alexiadou et. al. 2015 propose that the non-active voice morphology in Greek marks the absence of Spec VoiceP: "…we propose that a Voice head is spelled out with non-active morphology in Greek, if it lacks a specifier. In other words, the common property shared by passives and marked anticausatives in languages of this type is the lack of a syntactically projected external argument in Spec VoiceP." (pg. 101)

But Angelopoulos, Collins and Terzi 2018 show that the *by*-phrase in the Greek passive behaves like the external argument in the passive in its ability to bind reflexives. And so, the *by*-phrase in the passive is in a theta-position. Therefore, they conclude that the external argument in the passive and the active are projected in the same position (for them, Spec vP). From this, it follows that the presence of non-active voice is not sensitive to whether or not there is a syntactically projected external argument. But if the distribution of non-active voice is independent of the projection of an external argument, there can be no support for Kratzer's theory from Greek.

Yet another influential paper using the VoiceP framework is Harley 2013, who argues that for Hiaki "…the external-argument introducing projection VoiceP…must be distinct from the verbalizing head…" (pg. 34). Harley (2013: 50) notes that in applicatives of causatives, the word order is the following:

(10)   ni'i-tua-ria
        fly-caus-appl

She assumes that the caus head is a flavor of little v. Now if cause itelf introduces the causer, then because of the order of suffixes in (10), one would expect the applied DP to be higher than the causer DP, but it is not (as Harley shows). Rather, the causer subject is higher than the applied object. Therefore, it follows that (a) the caus head does not introduce the matrix causer subject and (b) there is another head, called Voice, which introduces the matrix causer subject. As Harley (2013: 55) summarizes: "The Mirror Principle problems posed by the interaction of the applicative and causative in Hiaki require that the head that introduces causative morphology and semantics be distinct from the head that introduces external arguments; that is, vP is not VoiceP."

Harley (2013: 52) then claims that "…Voice should be the locus of Voice morphology – passive morphemes included." If the proposed head, introducing the causer in examples like (10), was also the locus of passive morphology, that would be strong support for Kratzer's (1996) program. As Harley (2013: 53) notes: "If the external argument is introduced separately by Voice, however, then passive Voice morphology can embed a causative v without requiring the presence of an external argument." And in the diagrams (40) and (41) of Harley's paper, passive VoiceP is clearly shown with no specifier.
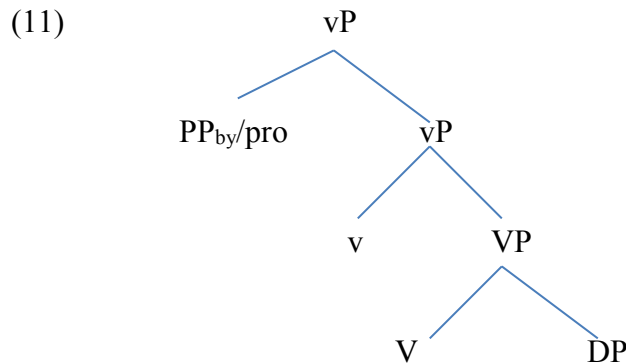
This logic seems very similar to Pylkkänen's account of the English passive presented above. And just like with Pylkkänen's account one can ask if there really is no syntactically present

external argument in the passive in Hiaki. Harley presents no relevant data. But if the relevant tests (e.g., reflexives, control, secondary predicates, etc.) showed that the external argument was projected in the passive, then both active Voice and passive Voice would involve a projected external argument. Such a conclusion would raise the possibility that the projection of arguments is identical in the active and passive in Hiaki, making Harely's use of VoiceP to project the external argument suspect (since the projection of the external argument would be independent of voice).

4. Collins 2005, 2018a,b

In Collins 2018a,b (and Collins 2005), VoiceP is needed in the syntax of passive constructions, but it has nothing to do with the projection of external arguments into theta-positions. Rather, VoiceP allows the direct object of the active to be moved to Spec TP of the passive, which is why I call it the Realization Theory (as opposed to the Projection Theory).

In the theory of Collins 2018a,b, the *by*-phrase occupies Spec vP in the passive. In the short passive, there is a null pro which occupies Spec vP. Therefore, the structure of the vP in the passive is as follows:

(11)

$$
\begin{array}{c}
\text{vP} \\
\diagdown \\
\text{PP}_{by}/\text{pro} \quad \text{vP} \\
\diagdown \\
\text{v} \quad \text{VP} \\
\diagdown \\
\text{V} \quad \text{DP}
\end{array}
$$

But if this vP were embedded under a finite TP (as the complement of T), there would be no way for the structure to be realized. English does not allow non-nominative subjects so the *by*-phrase could not move to Spec TP. And English is not a pro-drop language, which I assume entails that pro cannot appear in Spec TP (although pro may appear in other positions, such as Spec vP in the short passive, see Collins 2018b for discussion). Furthermore, the object DP could not raise to Spec TP, since vP is a strong phase (because it has a filled specifier). Furthermore, Spec vP is a filled A-position intervening between the object and Spec TP, and so movement of the object to Spec TP would violate Relativized Minimality.

Therefore, in the theory of Collins 2005, 2018a,b, the reason VoiceP is projected between TP and vP is to allow the object to move to Spec TP, while the subject stays in Spec vP. Collins assumes that the direct object is smuggled over Spec vP. I refer the reader to the sources for the details of the derivation.

The advantage of Collins' (2005, 2018a,b) theory is that the projection of arguments in the passive is identical to the projection of arguments in the active. This accounts for Chomsky's (1957) observation that the selectional restrictions in the active and passive are identical. It also accounts for the fact that the *by*-phrase in the passive can bind reflexive and reciprocal pronouns, as shown below (from Collins 2018a):

(12)   a.   The packages were sent by the children to each other.

b.   The pictures were painted by the children for each other.
c.   The packages were sent by the children to themselves.
d.   The pictures were painted by the children for themselves.

These properties are hard to account for unless one assumes that the projection of arguments in the passive and active are identical. But if one makes this identity assumption, then the projection of arguments is independent from the passive voice. And by the Terminological Assumption (5), the category projecting external arguments should not be called VoiceP.

I speculate that the primary function of voice (and hence VoiceP) is in the realization of arguments in A-positions (not in the projection of arguments). However, it is important to note that there might be ways that VoiceP operates different from those outlined in Collins 2005. I am not claiming that VoiceP is always involved in smuggling. What is important is that VoiceP has nothing to do with projecting an external argument, but is rather implicated in how the argumental DPs are realized in A-positions.

A more articulated theory of the syntax of various voice phenomena, and the role of VoiceP in those phenomena (under the Realization Theory) will have to await further research. A restrictive theory would start from the assumption that the arguments in all these constructions are projected in exactly the same way, as specified by UTAH. In other words, if there is an agent (either implicit or overt) in the active, passive, middle, impersonal or inverse, then that agent should be projected the same way in all the constructions. But if the agent is projected in the same way across all the difference voices, then it is a violation of (5) to claim that the agent is projected in Spec VoiceP.

5.   Conclusion

In this paper I compared two conceptions of VoiceP, the Projection Theory and the Realization Theory. I have discussed a number of analyses using Kratzer's 1996 framework. In each case, they either (a) violate the Terminological Assumption (5), or (b) are empirically inaccurate or incomplete. I have suggested the Realization Theory as an alternative way to think about voice.

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