

INTRODUCTION. We offer a new approach to the syntax of Voice by developing the strongest possible theory of VoiceP: that is, we assume any and all structural differences among actives, passives, and middles can be directly reduced to *featural* differences on Voice⁰. In particular, we argue that the featural makeup of Voice⁰ is responsible for two major structural effects distinguishing the voices: the presence/absence of an external argument (à la Kratzer 1996) and the presence/absence of smuggling (à la Collins 2005). The interaction of these features straightforwardly generates the three familiar voices – active, passive, and middle – as well as what seems to be a fourth “voice”: raising & unaccusative constructions.

KRATZER’S VOICEP. Kratzer (1996) argues convincingly that external arguments are introduced in a high verbal projection, VoiceP, and are thus “severed” from the verb. Subsequent work shows VoiceP to be distinct from (and higher than) *vP* on the basis of e.g. causation ([7], [5], [9], a.o.). In developing a theory of VoiceP, Kratzer is almost entirely concerned with argument structure; she stops short of encoding any specific syntactic properties of voice in VoiceP (only noting that the “choice of name is not arbitrary,” and briefly sketching how Case checking and argument selection might distinguish active from non-active voice).

EXTENDING KRATZER’S VOICEP. Kratzer notes that eventive and stative verbs in the active voice take external arguments that are distinct from one another. This leads her to posit two varieties of active Voice⁰: *eventive* active Voice⁰, which introduces the Agent external argument (1a), and *stative* active Voice⁰, which introduces a Holder/Experiencer external argument (1b):

- (1) a. John_{Agent} [VoiceP_{eventive} ~~John_{Agent}~~ bought a house]
 b. John_{Holder} [VoiceP_{stative} ~~John_{Holder}~~ owns a house]

Given the selectional power of Voice⁰ over external arguments, it should be logically possible to have a Voice⁰ which selects for no external argument whatsoever. This, we argue, is precisely the case for the middle Voice⁰. This captures the fact that middles disallow any syntactic expression of an external argument (see e.g. [10], [2], [8], and [3]):

- (2) a. John sells ripe apples. (Active)
 b. Ripe apples_{*i*} are sold *e_i* (by John). (Passive)
 c. Ripe apples_{*i*} sell *e_i* (*{by/for/with} John). (Middle)

Thus, middles are similar to passives in that the surface subject is an underlying object, but differ crucially with passives in that they disallow syntactic expression of an external argument.

Turning now to passives, we show that their properties can be reduced to a single Voice⁰, as well. This passive Voice⁰ selects for an external argument, similar to actives, but this external argument famously does not surface in subject position. Instead, like middles, an underlying internal argument occupies the surface subject position. This property of passives can also be captured in our analysis: the passive Voice⁰ triggers an operation to overcome this apparent violation of minimality, such as smuggling of *vP* (à la Collins 2005, though no part of our analysis crucially relies on this), in addition to handling the external argument. This approach to the passive has the advantage of capturing *vP* adverb facts that e.g. Collins cannot (he predicts (3b)):

- (3) a. The apples were [_{PartP} sold [_{vP} quickly *e_i*]] by [_{VoiceP} John [~~PartP sold quickly *e_i*]]]
 b. *The apples were [_{PartP} sold [_{VP} *e_i*]] by [_{vP} quickly [_{vP} John [~~PartP sold *e_i*]]]~~~~

There we can show that Voice⁰ is responsible for distinguishing the syntax of all voice phenomena, including actives, middles and passives.

A TYPOLOGY. Voice⁰'s ability introduce an external argument can be thought of as the positive setting of a binary parameter [\pm external argument]. Likewise, Collins' passive-voice-driven smuggling operation to overcome minimality can also be thought of as a parameter related to voice,

in this case [\pm smuggled vP]. (We do not assert these “parameters” to be linguistic primitives; instead we use them as descriptive terms for describing syntactic phenomena.)

To sum up the facts for English, active voice has an external argument, but involves no smuggling; passive voice has an external argument, but involves smuggling; and middle voice has no external argument. Recent work also suggests that middle voice involves smuggling, though its consequences are not always so apparent as they are in passives ([1]). However, there are middles that exhibit apparent minimality violations overcome just passives:

(4) This futon [_{vP} sleeps] five people [~~vP~~ sleep].

As such, we predict a typology of voices which captures our descriptions of active, passive and middle voices, and which may be cross-linguistically extendable. It does, however, predict another Voice⁰ that is not among the traditional set of voices.

	+ external argument	- external argument
(5) - smuggled vP	Active	
+ smuggled vP	Passive	Middle

This empty cell seems to describe unaccusative and raising constructions: there neither an external argument, nor an obvious smuggled vP; instead, the closest argument (which happens to be an internal argument) is attracted to subject position, as normal. We tentatively term the voice described by this cell as the raising voice. Thus we predict that there may be some languages in which the raising voice has distinct (or perhaps absent) voice morphology, just as some languages morphologically distinguish each of the other three voices.

FURTHER EXTENSION. Idioms seem to provide possible further evidence of the connection between voice and the introduction of external arguments. Consider the generalization in (6) that we propose for English:

- (6) If an idiom lexicalizes its clausal external argument, then its voice is also lexicalized.
- (7) a. The shit hit the fan. [lexicalized ext. arg., active voice]
 b. #The fan was hit (by the shit). [lexicalized ext. arg., passive voice]
- (8) a. John has been bitten (#by the lovebug). [lexicalized ext. arg., passive voice]
 b. ?#The lovebug has bitten John. [lexicalized ext. arg., active voice]
- (9) a. John will give the devil his due. [non-lexicalized ext. arg., active voice]
 b. The devil was given his due (by John). [non-lexicalized ext. arg., passive voice]

If this generalization proves to be true cross-linguistically, should provide compelling evidence that voice and external arguments are inextricably linked. Moreover, such a generalization will have strong influence over the way in which idioms are analyzed.

CONCLUSION. We have presented an analysis for voice in which all voices are syntactically determined by the head of VoiceP. This analysis makes strong predictions about other voices and the strong connection between voice, VoiceP and external arguments.

Selected References

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