Editorial

Introduction to the Special Issue

The manner in which the analysis of the passive construction has reshaped itself over the course of the development of contemporary linguistic theory provides insight into the evolution of the goals of the theory over this period, in particular its quest for ever greater generality in its characterization of the organizational principles underpinning linguistic cognition in humans. The analysis of the passive has passed from the status of a specific construction in the American structuralist tradition to the output of a specific transformational rule in early transformational grammar, to an epiphenomenon of the interaction of independent principles in more recent studies. This Special Issue contains four papers representing differing contemporary perspectives on the nature of the passive construction in English and other languages. To contextualize the contribution these papers make to linguistic theory, we survey below the historical trajectory of that theory and assess the extent to which these contributions represent a genuine departure from earlier treatments of the origin of the passive and its relation to other constructions.

In his seminal treatise titled *A Set of Postulates for the Science of Language*, Bloomfield (1926) defines the notion 'grammatical construction' as in (1), where a 'form' is any linguistic expression, a 'non-minimum form' is a non-morpheme, i.e. a word or phrase, and the 'stimulus-reaction features' of a form constitute its meaning.

(1) ''Different non-minimum forms may be alike or partly alike as to the order of the constituent forms and as to stimulus-reaction features corresponding to this order. . . Such recurrent sames of order are *constructions*; the corresponding stimulus-reaction features are *constructional meanings*'' (p. 157f).

Thus, sentences such as *The rice was eaten by the child, The bell was rung by the messenger, The cart was pulled by the horse*, etc. share the similarity that the first constituent represents what Bloomfield calls the 'goal' (i.e. 'theme') of the action represented by the second constituent. Bloomfield (1933 and elsewhere) terms this construction the 'goal-action' construction in contrast to the 'actor-action' construction representing the active. Bloomfield acknowledges a broader similarity in the form of differing sentence types such as active and passive that he calls the 'subject–predicate' construction. A construction in this account is essentially a pairing of a string of syntactic positions with an attribution of functional meaning (actor, predicate, etc.) to each of those positions. Wells (1947) remarks explicitly that constructions may be superimposed upon one another, and that ''there is no conflict in this, because the meaning of the one construction is [in the examples he mentions] compatible with the meaning of the other, and sometimes a part of it'' (p. 95).

The similarity in format between active and passive sentences stands in greater relief in Harris's (1946) brief but powerful phrase structure grammar of English, which mentions neither the passive construction in particular nor the term 'construction' at all. Harris's lack of attention to constructional meaning is attributable to the narrowness of his objective, which is to create ''a formalized procedure for describing utterances directly in terms of sequences of morphemes [i.e. constituents] rather than of single morphemes. It thus covers an important part of what is usually included under syntax'' (p. 161). Harris thus articulates a primary ambition of the generative-transformational tradition, which is to deductively characterize which strings of morphemes of the language constitute grammatical sentences and other expressions of the language and which do not. Because of its focus on predicting grammaticality, Harris's grammar requires no special rule for passive sentences, since these display the syntactic format of sentences with adjectival predicates, on the assumption that passive participles are adjectives, which substitution tests seem to confirm (cf. *Mary is rich/admired* or *the cold/cooked carrots*). Harris attributes the English passive participle forming suffix *-en* and its allomorph *-ed* to the category he terms *Va*, which is the category of morphemes that combine with a verb to derive an adjective and that also includes the active participle forming *-ing* in his treatment (p. 169). As an adjective, the participle may fill the A^2 slot in the substitution rule in (2), where V_b is the category of the auxiliaries *be*, *appear*, *become* and others, V_e is the category of intransitive verb phrases, the superscript 1 represents a word-level category and the superscript 2 represents a phrase-level category (p. 173).

(2) $V_b^1 A^2 = $ *have* V_b^1 -*en* $A^2 = V_e^2$

This rule states that an expression such as *be admired* (which exemplifies the category sequence $V_b^1 A^2$) is interchangeable with (and therefore has the same syntactic category as) *have been admired* as well as with any intransitive verb phrase, such as *walk*. The three types of expression therefore have the same syntactic category, namely that of verb phrase.

Harris's grammar reduces the notion of 'passive construction' to the effect of a particular lexical item of the language, the formative -*en*, which converts a verb into an adjective. The form of passive sentences is otherwise governed by general conditions on the form of adjectival predicates. While Harris offers a non-construction specific treatment of the passive, in that there is no passive construction in Harris's phrase structure grammar, his emphasis on the constructional similarity between actives and passives—that both show the subject + predicate format—does not capture the salient constructional difference that Bloomfield observes, that the subject bears a different constructional meaning in the active as in the passive. Chomsky (1957) describes the problem as in (4), in reference to the simple phrase structure grammar in (3) (his (13), p. 26).

(3)   (i)   Sentence → NP + VP
        (ii)   NP → T + N
        (iii)   VP → Verb + NP
        (iv)   T → the
        (v)   N → man, ball, etc.
        (vi)   Verb → hit, took, etc.

(4)   "[I]n elaborating [(3)] into a fully-fledged grammar we will have to place many restrictions on the choice of *V* in terms of subject and object in order to permit such sentences as: *John admires sincerity*, *sincerity frightens John*, *John plays golf*, *John drinks wine*, while excluding the 'inverse' non-sentences *sincerity admires John, John frightens sincerity, golf plays John, wine drinks John*. But this whole network of restrictions fails completely when we choose *be* + *en* as part of the auxiliary verb... If we try to include passives directly in the grammar [(3)], we shall have to restate all of these restrictions in the opposite order for the case in which *be* + *en* is chosen as part of the auxiliary verb" (p. 42f).

Chomsky thus maintains that characterizations of grammaticality in terms of immediate constituency alone fail to acknowledge what in Bloomfield's terms is a recurrent same between active sentences and their passive counterparts: just those selectional criteria that accrue to the object of the active verb accrue to the subject of the passive verb. This fact underlies the endemic intuition that, as Jespersen (1954) puts it, "what in the active is an object, is made the subject in the passive" (p. 299). Accordingly, Chomsky postulates a transformational rule that derives the passive from the active, replacing the subject of the active with the object of the active in the passive. This rule, shown in (5) (Chomsky's rule 12, p. 112), inserts both the passive auxiliary *be* and the participial morphology -*en*, which associates with the main verb by virtue of a separate transformation, as well as the preposition *by* that introduces the agent in passives (its optionality is not reflected in this rule).

(5)   Structural analysis: NP — Aux — V — NP
                              $X_1 — X_2 —$ $X_3 — X_4$
        Structural change: $X_4 — X_2$ + *be* + *en* — X_3 — *by* + X_1

The transformational rule in (5) represents a construction-specific analysis of passive, since it has the sole purpose of deriving sentences with the passive format, but goes a step further than Bloomfield in explicitly characterizing each passive sentence as a derivative of the corresponding active.

A significant development bearing on the correct analysis of passive is Wasow's (1977) observation that in a certain respect, Chomsky and Harris are both right. Wasow observes that some passive participles show properties of active verb phrases, for example that they assign case to an object (e.g. *be given $10*) and resist placement in positions that select adjectives, such as complement of raising verbs such as *seem* (hence *John seems given $10*). Yet, other passive participles may occur in these positions and others reserved for adjectives, such as the prenominal position (*The island seems uninhabited*; *the uninhabited island*). Wasow therefore distinguishes between what he calls 'lexical' passives, that are formed in the lexicon, and 'transformational' passives, now usually called 'verbal' passives, that are formed in the syntax. Demotion of the external theta role of a lexical passive adjective takes place in the lexicon. Its syntactic external

argument is a theme and its syntax is purely active, as in Harris's analysis. Transformational passives are syntactically verbs, and their subject is promoted from object position by movement in the syntax. Lexical participles have a uniformly stative semantics reflecting their adjectivehood. Transformational participles project the aspectual type of the underlying verb, and therefore are commonly eventive.

Refinements in the theory of syntax subsequent to Chomsky's contribution of a transformational component to the theory of immediate constituents have sought to identify broad syntactic principles underlying constructional relatedness in general. The role of construction-specific transformations in characterizing cross-constructional relatedness such as the relation of passive to active has diminished in the course of these developments. Chomsky and Lasnik (1977) sketch a theory of syntax in which a single general movement rule they call 'Move-NP' ('Move-α' in Chomsky, 1980) interacts with constraints on representations at various interface levels that exclude a portion of the output of the phrase structure rules. They maintain, for example, that the representation in (6a) (their (8), p. 432) is a possible output of the phrase structure component, in which the subject position is not expanded, but violates a condition on LF, since it has unbound variable (an empty category) in subject position. The rule Move-NP moves the object to subject position (6b), generating an empty category in object position that is bound by its antecedent.

(6)   a. $[_{S'} [_{S} [_{NP} e] [_{VP}$ was $[_{AP}$ en $[_{VP} [_{V}$ hit$] [_{NP}$ Bill $]]]]]]$
       b. $[_{S'} [_{S} [_{NP}$ Bill$] [_{VP}$ was $[_{AP}$ en $[_{VP} [_{V}$ hit$] [_{NP}$ e $]]]]]]$

Chomsky and Lasnik do not remark on the role of the participial morpheme *-en* in the failure to expand the subject position in (6a). This matter is treated in detail by Jaeggli (1986) and by Baker et al. (1989), who claim that *-en* itself receives both the external theta role and the accusative case assigned by the verb. The object moves to the subject position to receive case, thus satisfying an output filter requiring every nominal constituent to bear case in the surface structure (Chomsky, 1981). These analyses posit a non-construction specific analysis of the passive that reduces the recurrent same in the relation of passive to active to syntactic promotion of object to subject (as opposed to the postulation of distinct active and passive constructions) and that reduces the motivation for promotion to properties of the lexical item *-en* (as opposed to a triggering rule that inserts *-en*, as in (5)).

More recently, another approach to the passive has been explored that is sometimes called the 'flavors-of-*v*' approach (Folli and Harley, 2005). For instance, paying heed to the observation that neither unaccusatives nor passives project an agent as external argument and to the idea that the external argument is not an argument of the verb proper (Marantz, 1984) but the specifier of a functional head that takes the VP as an argument (Kratzer, 1996), Embick (1997, 2004a) argues that what distinguishes passives from unaccusatives is the presence of a semantic feature in this functional head (*v* for Embick). This feature, which he terms [AG], lends the passive an agentive interpretation – or 'flavor' – and is missing in unaccusatives. In passives, the agent role of the predicate is saturated by the feature [AG], whence, like unaccusatives, passives do not display an agentive external argument.

Building on such accounts, Kallulli (2007) argues for the existence of two syntactic primitives in *v*, namely *act* and *cause*, to which she attributes the various differences between passive and anticausatives in terms of their (in)ability to combine with *by-* and *from*-phrases, purpose clauses, and agent-oriented adverbs. More specifically, she proposes that *v* can bear a [+act] feature ('actor-initiated' verbs), a [+cause] feature (change of state verbs), both (actor-initiated caused change of state), or neither (unaccusatives of the 'arrive' type as opposed to those of the 'die' type). In addition, adapting Embick (1997, 2004a), *v* may also have a [−external argument] feature, which has the effect of preventing an overt DP from being merged in Spec of *v*P. Assuming that features are privative, the picture in Table 1 emerges.

Flavors-of-*v* based approaches do not attribute distinct syntactic structures to active, passive and unaccusative predicates, but rather they attribute different feature content to the heads comprising the predicate. In this respect they differ from configuration-based approaches, that derive the distinct surface syntax of active, passive and unaccusative predicates from distinct underlying structures. Approaches to the passive may therefore be broadly categorized as either feature based or configurational. In feature-based approaches, a syntactic head with different features or feature values can accommodate arguments with various functional meanings, as in Table 1. Under configurational approaches, the structural position or configuration of an argument determines its functional meaning. According to Burzio (1986), Baker (1988), Baker, Johnson and Roberts (1989) and others, for example, the theme role is associated uniquely with the complement of V configuration. In Hale and Keyser (1994), an agent appears in the specifier of a VP that takes a lexical VP complement, while a theme appears in the specifier of a lexical VP that takes an AP or PP complement. Configurational approaches to grammatical function changing operations are guided by the hypothesis that specific theta roles are associated with specific syntactic positions, known as the Uniformity of Theta Assignment Hypothesis (UTAH), due to Baker (1988). Collins (2005) proposes an analysis of the passive that conforms strongly to the UTAH. In his analysis, the agent is base generated in the passive in the same position as in the active, in the specifier of *v*P. It is subordinated in that position to the head *by* (in English), which is not a preposition in his analysis but the spell out of a head he terms 'Voice' (7a).

Table 1
Features in v^0 and argument expression and interpretation.

	Features in v^0	
a.	[+ act]	*Ben ate the apple.*
b.	[+ act] [− external argument]	*The apple was eaten (by Ben).*
c.	[cause]	*The pressure cracked the window.*
d.	[+ cause] [− external argument]	*The window cracked (from the presssure).*
e.	[+ cause] [+ act]	*John cleaned the table.*
f.	[+ cause] [+ act] [− external argument]	*The table was cleaned (by John).*
g.	[− external argument]	*John arrived.*

Unlike the theta role-assigning Voice head in analyses such as Kratzer's (1996, 2000), Collins' Voice attracts a participial phrase PartP containing VP around the agent in [spec,*v*P], inverting the hierarchical order of the two arguments (7b). In turn, the theme, not the agent, undergoes promotion to subject out of the raised PartP. This strongly configurational analysis attributes exactly the same thematic structure to the passive as to the active.

(7) a. [$_{VoiceP}$ [$_{Voice'}$ by$_{Voice}$ [$_{vP}$ John [$_{PartP}$ -en [$_{VP}$ write the book]]]]]
     b. [$_{VoiceP}$ [$_{PartP}$ writt$_j$-en [$_{VP}$ t_j the book]]$_i$ [$_{Voice'}$ by$_{Voice}$ [vP John t_i]]]

The articles in this Special Issue illustrate this contemporary diversity of perspectives on the passive. Paul Kiparsky's contribution marries a lexical analysis similar to Harris's approach to output filters in the Optimality Theory framework. Heidi Harley presents a flavors-of-*v* type analysis of the interaction of causativity, benefactivity and passive in Hiaki (Uto-Aztecan). Joseph Emonds' contribution applies a variation on the flavors-of-*v* approach to the analysis of what he calls 'indirect passives' in English, in which properties of the construction are determined by the functional auxiliaries involved. Peter Hallman's contribution extends Collins' strongly configurational analysis of the passive to adjectival passives. These four articles are described individually in more detail below.

Paul Kiparsky's article surveys typological variation in passive constructions in a variety of languages and presents an analysis of this variation in the framework of Lexical Decomposition Grammar. According to this analysis, the behavior and repertoire of passive constructions in a given language are the result of language-specific rankings of a universal set of output filters, including filters requiring a sentence to have a thematic subject (blocking expletives), requiring the subject to bear the most prominent theta role, requiring the subject to be nominative, and requiring preservation of lexical case. The constraint ranking for actives and passives is the same in a given language. Passives are distinguished only by existential binding of the external argument of the verb, which is accomplished by the passive morpheme in the lexicon. There are therefore no passive-specific rules of grammar in this treatment, but rather the very same phrase structure generalizations and output filters that govern the form of active sentences govern the form of passives as well. In this respect, Kiparsky's analysis bears a strong resemblance to Harris's phrase structure analysis of passive sentences. The two analyses have in common that there are no passive-specific phrase structure rules or other grammatical mechanisms, and that there is no derivational relationship between the active and the passive. But Kiparsky's analysis corrects a deficiency of Harris's analysis in that it contains a thematic component, and therefore an account of the constructional meaning of the passive. The output filter that requires the subject to bear the most prominent theta-role, which is the theme in passives, since the external theta role is existentially bound in the lexicon and therefore not projected in the syntax, ensures that the subject of a passive sentence is interpreted as having the highest internal theta role. Kiparsky also claims that a careful reading of Baker, Johnson and Roberts (1989) reveals several construction specific rules, and that flavors of *v* analyses represent a return to a construction-specific analysis of the passive. Kiparsky concludes that the generative transformational approach does not achieve its own goals as well as the lexical decomposition approach advanced in his paper in this volume.

Heidi Harley's article argues for the existence of two distinct functional heads in the verbal domain, which have often been equated with each other: *v*, which verbalizes and introduces the notion of a (caused) event, and Voice, which adds an agent or causer argument. On the basis of a detailed analysis of morphological facts in Hiaki (Uto-Aztecan), Harley departs from the received view that *v* verbalizes and introduces a caused event; she argues instead that *v* also introduces

a causing event, but not an agent argument. The basic observation concerns a morphological puzzle in Hiaki, in which a benefactee is introduced higher than the causative morphology that is expected to introduce the agent, but yet the agent is introduced higher than the benefactee. Harley's conclusion that the agent is introduced in a projection distinct from the one that introduces causativizing/transitivizing morphology, namely a Voice head that may have an active or a passive value and introduces or suppresses the agent accordingly, is thus a clear demonstration that agentivity and causativity need not be packed together in one head syntactically. The fact that passive voice marking appears outside causative and verbalizing affixes, rather than replacing these affixes, is further evidence for the distinctness of *v* and Voice. The fact that the feature content of the Voice head modulates the projection of an external argument characterizes Harley's analysis as a flavor of *v* type transformational analysis of the relation of passive to active. Harley also documents another significant property in the context of passives in Hiaki, namely the systematic use of two distinct affixes for 'direct' and 'indirect' passives, which is a rarity among languages with synthetic passives.

Starting from the observation that the set of auxiliaries deriving passive constructions in English is larger than the traditional view has it, including *have*, *get*, *want*, *need*, *see* and *hear*, in addition to *be*, Joseph Emonds' article contributes several empirical and theoretical claims about these 'indirect passives', which are so-called on analogy to indirect passives in languages like Japanese. On the one hand, Emonds provides strong arguments that indirect passives are not reduced relatives, null operator constructions, adjectival passives, or (surface) small clauses. Drawing in particular on insightful observations such as the impossibility of cyclic passivization and others, he presents arguments against indirect passive auxiliaries as being main verbs embedding a passive small clause. Emonds additionally addresses the challenging question of how it comes about that both verbal and adjectival participles exhibit identical morphology while differing in interpretation, with verbal passives showing hallmarks of eventive predicates while adjectival passives are uniformly stative. He claims that observations including the fact that participles bear agreement inflection in many languages, a typical adjectival property, indicate that participles are uniformly adjectival in category. The interpretive difference relates to when in the derivation the passive morphology, which is stativizing, is inserted. According to Emonds' analysis, the passive morphology has the option of being inserted late, after the phase containing the position it is inserted into is sent to LF. In this case, the resulting structure is interpreted as a verbal passive, since the stativizing morphology is not present in LF. If the passive morphology is inserted earlier, it is sent with its phase to LF, and the resulting structure is interpreted as an adjectival participle. Emonds posits that the complement of the auxiliaries used to derive indirect passives (except for 'be') carries eventuality features, deriving the fact that stative verbs are barred from these constructions. Noteworthy in this context is the productive licensing of *by*-phrases in indirect passives as opposed to their striking marginality in adjectival passives, a fact that also speaks against Fox and Grodzinsky's (1998) view, according to which the participle involved in indirect passives is actually an adjectival passive.

Peter Hallman's article investigates the mechanism of externalization of the internal theta role in passives in detail, with particular attention to a difference in the manner of externalization in verbal and adjectival passives. Evidence presented by Emonds (2000) and Embick (2004b) indicates that both verbal and resultant state adjectival passives are formed in the syntax. In both cases, the internal argument is syntactically projected and promoted to subject position by movement, in contrast to analyses like Harris's, Wasow's or Kiparsky's, in which the internal theta role is externalized in the lexicon and the element bearing that theta role enters the derivation as an external argument. Hallman presents novel evidence indicating that subjects of adjectival participles do not originate in a predicate internal position, supporting the non-transformational view but paradoxically incompatible with Emonds' and Embick's evidence. He consequently develops an analysis reconciling these two bodies of conflicting evidence, in which every verb phrase (active or passive) has a topic quantifier that binds a position held in the predicate by a null pronominal. The same conditions govern this binding chain as govern movement chains, and the effect of the passivizing morphology on the relation of the topic quantifier to a theta position is the same in verbal and adjectival passives. As in Embick's analysis, the difference between verbal and adjectival passives relates to the insertion point of the passive morphology in the syntax. An insertion point below the topic quantifier derives an adjectival passive while an insertion point above the topic quantifier derives a verbal passive. In this respect, Hallman's analysis resembles Emonds' article in this volume as well, where adjectival passives are derived by early insertion of the passive morphology, corresponding to a low position in the syntax and Hallman's and Embick's analyses, and verbal passives are derived by late insertion of the passive morphology, corresponding to a high position in the syntax in Hallman's and Embick's analyses.

The preceding discussion shows that the proper analytical treatment of the passive is still subject to substantial debate. This Special Issue highlights some core issues regarding the morphosyntactic and semantic composition of the passive. The specific contributions to this Special Issue differ in many ways, including the extent to which the agent is present or represented in the structure, the relation of passivization to the structure of the lexicon, the syntax of the linking of the subject to a theta role in passives in terms of movement or non-movement, etc., but they all seek a minimal, non-construction specific characterization of the passive. In this sense, they converge in that language-specific properties of the passive are seen as the result of the language's morphological inventory and its vocabulary. Under this view, passive constructions in diverse languages have properties predictable from the active syntax of the language and lexical

properties of the passive morpheme. Furthermore, the contributions by Emonds and Hallman dealing with adjectival passives treat them similarly to verbal passives, in that both are formed in the syntax. Finally, the papers discussed introduce novel as well as neglected data, at the same time they reconsider from new perspectives well-known data and previously drawn generalizations that have been recalcitrant to analysis.

Acknowledgments

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