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Author(s): Matthew L. Juge

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A Mechanism of Semantic Change in Passive Constructions*

Matthew L. Juge

University of California, Berkeley

1 Introduction

The study of semantic change has focused primarily on the development of meaning of lexemes and, to a lesser degree, those of sub-lexical morphemes. In this paper I explore a mechanism of semantic change in constructions which consist of an auxiliary verb and a main verb.

The problem which I investigate in this paper is the change of periphrastic passive constructions in a number of Romance and Germanic languages from perfect to present. In short, in the older forms of these languages, a periphrasis consisting of an inflected form of the verb TO BE plus the past participle encoded the passive voice in the perfect, pluperfect, and future perfect tenses. In some of the languages under consideration, this construction came to encode the passive in the present, imperfect, and future. In this paper I present the hypothesis that this change was motivated by the semantics of a class of verbs which I describe as non-resultant stative verbs. This paper represents the initial stage in an ongoing research project in which I hope that the results of text research will corroborate my hypothesis. If this additional research bears out the proposal presented in this paper, it will establish the existence of a previously undescribed mechanism of semantic change in periphrastic constructions, namely change by the attribution of semantic properties of lexical items to constructions in which those lexical items participate.

2 Background

Traditionally, treatments of the development of periphrastic constructions in the Romance languages have emphasized syntactic and morphological considerations, with relatively little attention paid to semantic issues. When semantics is treated, there is a tendency to discuss only the semantics of the auxiliary; even Benveniste (1968) focuses more on the auxiliary than on the main verb. Treatments dealing specifically with the periphrastic passive have either ignored semantics altogether or offered explanations which are not semantically plausible. The problematic development treated here is the shift from perfect to non-perfect tense in periphrastic passive constructions in the Romance and Germanic languages. I hypothesize that the participation of non-resultant stative predicates—that is, verbs which describe a largely static event which is not the direct result of a previous event and which requires constant maintenance for continuation, such as TO LOVE—in this construction encouraged the shift from perfect to non-perfect tense.

3 The problem—shift from perfect to non-perfect tense

In this paper I consider evidence from a number of languages belonging to the Italic and Germanic branches of the Indo-European family, namely, Latin, Portuguese, Spanish, Catalan, French, and Italian on the one hand and English and Dutch on the other. I have chosen to focus on these members of these branches because the other languages which I consider to be major representatives of these

branches (Romanian, German, and the Scandinavian languages) do not display the relevant phenomena¹.

All of the languages under consideration possess passive constructions which consist of the verb TO BE plus a past participle. In Latin and the older Germanic languages, the perfect tense of the passive called for the auxiliary to be inflected for the present tense (Ex. 1).

1 Lat. non es ... ab his uisus
 neg be-pres.ind.2s by this.mp.abl see-ppcpl-ms
 ‘You have not been seen by these [men].’ (Cic. *Inv.* I.87)

Note that the auxiliary is morphologically present tense while the periphrasis as a whole is perfect tense. Similarly, in the pluperfect and future perfect tenses, the auxiliary is inflected for the imperfect and future, respectively. Thus the tense of the construction is essentially perfect relative to that of the tense encoded in the morphology of the auxiliary verb. The same relationship was found in the older Germanic languages (including Old English) and obtains in Modern Dutch as well (Ex. 2). In these languages, the passive voice is expressed by other means in the non-perfect tenses.

2 Du. Het brood is gebakken
 the bread be.pres.ind.3s bake-ppcpl
 ‘The bread has been baked’

This situation contrasts with that found in the modern Romance languages and in Modern English, where the tense of the periphrastic passive construction is identical to the morphological tense of the auxiliary. Consider Example 3 from Spanish.

3 Sp. las puertas son abiertas (a las seis de
 the.fp door-fp be.pres.ind.3p open-ppcpl-fs at the.fp six of
 la mañana)
 the.fs morning-fs
 ‘The doors are opened (at six in the morning).’

The type of perfect passive constructions shown in Latin and Dutch is generally believed to have developed from resultative constructions in the present tense (Bybee *et al.* 1994, Vincent 1988). In fact, in these two languages, the periphrasis with TO BE plus a past participle is ambiguous between a perfect passive reading and a present resultative reading. Example 4 from Latin can be interpreted as either a future resultative or a future perfect passive.

4 Lat. cena ... erit cocta
 dinner-fs.nom be.fut.ind.3s cook-ppcpl-fs.nom
 ‘The dinner will be cooked’/‘The dinner will have been cooked’ (Pl. *Cas.* 781)

The distinction which I wish to draw between resultative constructions and passive constructions lies largely in a difference in stativity. Resultative constructions indicate that, at the reference time, the point in time to which the verb refers, the subject is in a state which is the result of an event occurring prior to the

reference time. For example, in sentence (4) above, the resultative interpretation asserts that in the future the dinner will be in the state of having been cooked. This interpretation is stative because it describes a state rather than a dynamic activity, that is, one which is not internally consistent. This stative situation contrasts with an action like painting, which, with various component behaviors such as applying paint to the brush and then making brush strokes, is a dynamic activity. Dynamic activities may further be divided into telic and atelic predicates; this distinction focuses on whether an event has an inherent endpoint. Thus, a predicate such as *to paint a picture* has by its nature an end and is telic, while *to paint pictures* is atelic.

Returning now to Example 4, the passive reading contrasts with the resultative interpretation in a number of important ways. The first difference is that whereas the resultative emphasizes the state resulting from an event, the passive focuses on the event itself. This difference correlates with the difference in the tense of the two interpretations. Viewed as a resultative, the sentence is in the future tense, while a passive interpretation of the sentence correlates with the future perfect tense. The reader will note that I have just referred to the future perfect as a tense; I have chosen to follow the tradition of classical grammarians and refer to the perfect, pluperfect, and future perfect as tenses. This is done primarily for convenience, as I agree with Comrie that the perfect is neither a tense (1985: 32) nor an aspect (1976: 52) in the same sense that, for example, the future is a tense and the progressive is an aspect. Comrie instead describes the perfect as a verbal category which indicates a relationship between two points in time (1976: 52).

With this usage of the term *tense*, then, the passive interpretation of the TO BE plus past participle construction exemplified above in Latin differs from the tense of the resultative reading and in the relationship between the tense of the construction and the morphology of the auxiliary. This difference is the result of the process by which the periphrastic passive originated in Latin and Germanic. As I stated earlier, the consensus is that passive constructions consisting of the auxiliary TO BE and a past participle develop from resultative constructions consisting of the same elements. The scenario is as follows.

A past participle from a transitive predicate is used along with a copula in a resultative construction to indicate that the subject is in a state resulting from the indicated activity which occurred prior to the reference time. Take for example sentence (5) below.

5 The glass is broken.

The conditions under which this is true are also often consistent with the assertion of sentence (6).

6 The glass has been broken.

At this point I would like to discuss briefly the nature of the participle, as this is a factor in the correlation between the resultative and the passive. The participle has perfective reference and its valence consists of the theme of the verb to which it is related. For example, a transitive verb such as TO PAINT has two valence elements which can be described as the agent and the theme; thus the element to which the participle refers is the thing painted and is passive. On the other hand, when a verb has only one valence element, such as TO GO, the participle refers to that element, in this case the individual going, and is active. Despite the traditional name ("perfect passive participle"), I suggest that the participle is not inherently

passive or active. Rather, it is active when the verb is intransitive and passive when the verb is transitive.² Thus resultatives used with transitive predicates have as their subjects themes, or patients, and are therefore quite similar to passives.

The difference in tense (present resultative vs. perfect passive) is the result of the difference in emphasis on state (resultative) or on event (passive). Pragmatic and contextual factors are often consistent with both meanings and can lead to reanalysis via inferential reasoning, as described by Bybee et al. (1994) and Hopper and Traugott (1993), among others. The change in the construction comes about because there is a degree of ambiguity in the meaning of the utterance, which leaves the hearer free to slightly reinterpret the expression. In this case, the emphasis shifts from state to action, and the former resultative construction receives a passive interpretation; because the perfect relates a present condition to a prior event, the present resultative gives rise to a perfect passive.

The periphrasis generally retains a resultative meaning along with the passive, with the result that given utterances often have two readings, as in Dutch *Het brood is gebakken* 'The bread is baked'/'The bread has been baked' and Latin (Ex. 4). This type of construction preceded that found currently in Romance and English, and is attested in the history of Finnish as well, to cite an example outside the Indo-European family (Harris and Campbell 1995: 91).

Because of their formal and semantic similarities, it will be useful to clarify the distinction between resultatives and perfects, with particular emphasis on transitive predicates. Resultatives with transitive predicates differ from perfect passives primarily in that resultatives focus on the state while perfect passives emphasize the action creating the state. This difference results in a number of distributional and combinatorial distinctions between the constructions.

present resultatives (stative) vs. perfect passives (dynamic) in English

- | | |
|--|---------------------|
| 7 The house is painted (*many times). | present resultative |
| 8 The house has been painted (many times). | perfect passive |
| 9 The house is still painted. | present resultative |
| 10 *The house has still been painted. ³ | perfect passive |

The examples above illustrate two points: first, repetition, which is a phenomenon associated with events or actions, conflicts with a construction expressing a state (7-8) and is therefore incompatible with the resultative. Second, persistence or continuation is a characteristic of states and thus conflicts with expressions of actions or events (9-10) such as the passive. On this point Bybee et al. (1994: 63) remark, "The difference between resultative, passive, and anterior [i.e., perfect—MJ] is that only resultative consistently signals that the state persists at reference time."

The developments described so far are those which account for the situation found in classical Latin and modern Dutch. As I stated above, the scenario in these two languages differs from that in Romance⁴ and English primarily in the relationship between the tense encoded morphologically on the auxiliary verb and the tense of the periphrastic passive as a whole. In Latin and Dutch, the periphrasis is perfect tense when the auxiliary is morphologically present tense; in Romance and English, on the other hand, the periphrasis is present tense when the auxiliary is morphologically present tense. The situation in Romance and English represents

a further development from the type of situation found in Latin and Dutch; it is this shift from perfect to present which I now address.

4 Previous research

The only substantive treatment of the shift from perfect to present in the passive of which I am aware is that of Vincent, which focuses on Romance. Vincent (1988a) appeals to the influence of the developing periphrastic active perfect construction found in Late Latin, which, like the passive with TO BE, developed from a resultative construction (REFS); the perfect active periphrasis consisted of a form of the verb *habere* 'to have' plus the past participle. When the auxiliary was present tense, the construction as a whole was perfect tense. Vincent explains the influence of the perfect active periphrasis on the perfect passive periphrasis as follows (1988: 58):

by providing a model in which the auxiliary verb gives expression to the appropriate categories of tense, mood, etc., HABEO CANTATUM ensures that CANTATUM EST should be interpreted as a present imperfective, not perfective.

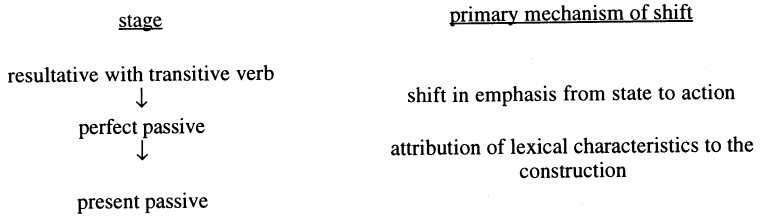
Vincent's claim here is that the active perfect periphrasis in the form *habeo cantatum* 'I have sung' influenced the passive perfect periphrasis in the form *cantatum est* 'It has been sung' with regard to the correlation between the morphology of the auxiliary and the grammatical information present in the construction. That is, Vincent claims that the tense, aspect, etc., of the phrase *habeo cantatum* match that of *habeo*; this is incorrect, however. Just as in English, the auxiliary is morphologically present tense (*habeo*) when the phrase is semantically perfect tense (*habeo cantatum*). Thus, if the pattern of the active periphrasis had applied to the passive periphrasis, the passive construction would have retained its perfect tense reference. Of course, this is not the case; in Romance and English, the tense shifted from perfect to present.

11	Lat.	a	habeo	cantatum	b	cantatum	est
			have-1s.pres	sing-ppcpl-n.sg		sing-ppcpl-n.sg	be-3sg.pres
			'I have sung'			'it has been sung'	

5 The instant analysis

The course of development which I propose is schematized in Figure 1 below. On this analysis, resultatives of transitive verbs develop into perfect passives; subsequently, due to the participation of certain types of predicates, the construction is reinterpreted as a present rather than a perfect.

Figure 1—The semantic development of periphrastic passives with TO BE



5.1 Semantic parameters

The lexical semantics of the main verb can affect the interpretation of a construction. The semantic parameters which seem to play a role in the developments under consideration here are stativity, telicity, and resultancy. The first deals with the internal structure of the predicate. Stative verbs, such as KNOW, LOVE, BE LOCATED, are internally consistent and tend to last indefinitely; dynamic verbs, such as WRITE, SING, MOVE, indicate situations in which some type of change or action takes place.

stative vs. dynamic predicates in English

- | | |
|---|---------|
| 12 Now I <i>understand</i> the explanation. | stative |
| 13 The guitar <i>is</i> midnight blue. | stative |
| 14 It is widely <i>known</i> that Michael <i>is loved</i> by all. | stative |
| 15 Paul <i>is playing</i> the "Moonlight" sonata. | dynamic |
| 16 The cat <i>is purring</i> quite loudly. | dynamic |
| 17 The house <i>is being painted</i> green. | dynamic |

Stativity plays a clear role in the present tense in English, where present predicates used to describe a current state of affairs (rather than a general situation) show a formal distinction which depends on the stativity of the predicate. Stative predicates take the simple form of the verb (12-14), while dynamic predicates take the progressive (15-17).

A telic predicate has an inherent endpoint, while an atelic predicate does not. Statives are by nature atelic; dynamic predicates may be telic (*sing a song*) or atelic (*sing bass*). Resultancy is a characteristic of certain statives which are related to dynamic predicates; KNOW is a resultant stative, because knowing is generally preceded by learning⁵. In the following examples a perfect form of the verb TO SEE is used to indicate a present state of knowledge, where one path to knowledge is effectively telescoped into reference to the dynamic data-gathering process and is represented as completed, with resultant learning and knowledge (cf. Sweetser 1990: 33).

shift from perfect to non-perfect in active forms—resultant stative predicates

- | | | |
|--------------|-------------|----------|
| 18 Gk. ο~ da | Goth. wait | 'I know' |
| see.perf-1s | see.pret.1s | |

- 19 Eng. I ('ve) got three books
 1sg (aux) obtain 3 book-p
 'I have three books'

Non-resultant statives, such as LOVE, do not have a direct relation to dynamic predicates in this way. although certainly there are sometimes events which contribute to the ultimate situation. The most important characteristic of these verbs is this: for the effect on the theme to last, the action of the predicate must continue. Like HOLD, MAINTAIN, and ADMIRE, LOVE is this type of predicate. A person must continue to receive love for the effect to continue, whereas a painted house will remain painted indefinitely. Jespersen indicated the special nature of this type of predicate when he asked (1964: 67) "[I]s *love* an activity or a state?"

An additional factor here is the fact that, because these predicates are stative, they are atelic, i.e., without inherent endpoints. As such, these verbs differ from telic predicates such as PAINT in that an instance of a non-resultant stative verb in a resultative construction differs substantially from an instance of the same predicate in a perfect passive construction. Consider Examples 20 through 23.

- 20 The house is painted.
 21 The house has been painted.
 22 Sammy is loved.
 23 Sammy has been loved.

Because PAINT is a telic predicate, the fact that the house is in a painted state is indicative of a prior completed act of painting. LOVE, on the other hand, is atelic and must continue for the effect on the patient to hold. Thus a resultative interpretation of (22) does not imply (23), as was the case with (20) and (21). If Sammy currently shows the effect of being loved (i.e., he is in a loved state), then the loving cannot have already ceased. In painting one can reach a point at which the painting is complete and the desired effect on the house is achieved. Certainly the same does not hold for love; there is no point at which a person has loved someone so that no more loving is required for the continuation of the effect. The same is true of other non-resultant statives such as ADMIRE and MAINTAIN.

This incongruity between the present resultative and perfect passive with non-resultant stative predicates encourages the listener to interpret an example such as (24) as present rather than perfect tense. If the listener does interpret this type of utterance as a present passive, then she may (subconsciously) view this present tense reading as an exception based on certain lexemes. The listener may also, however, reinterpret the whole construction as inherently indicating present tense. This would then provide us with the shift from perfect tense to non-perfect tense which this paper seeks to account for.

- 24 Sp. Nuno es amado
 Nuno BE.3s.pres LOVE-ppp.ms
 'Nuno is loved'

At this point I would like to note that I do not believe that a tense change of the type described here is a necessary development; on the contrary, I am aware of no reason to assume that a system such as that found in Dutch (or Latin, for that matter) is inherently unstable. I merely argue that, if such a change does occur, the

process will be as I have set forth herein. As I stated at the outset, this proposed path of development is hypothetical and awaits verification via detailed text research.

5.2 Further developments

After the shift in reference from perfect to present in a passive construction formed with TO BE + past participle, the verbal system has in effect a gap in that a means of expressing a perfect passive has ceased to serve this function exclusively. There are a number of possible outcomes of such a situation. The first is that the language may retain both the older perfect reference and the newer non-perfect, thus leaving the language with an ambiguous form which does not distinguish perfect from non-perfect in the passive. I am not aware of a language in which this has occurred.

The second possibility is that the language may develop another perfect passive construction out of some other linguistic material. For instance, Jones explains (1988: 340) that in Sardinian the passive with *essere* 'to be' is not commonly used and is believed by some to a borrowing from Italian; in the perfect, the negative passive may be expressed by the construction TO BE + *kene* 'without' + participle, as in (20) (from Jones 1988: 340).

20 Sard. sa pe~a es' kene mandikata
 the.fs meat-fs be.3s.pres.ind without eat-ppcpl-fs
 'The meat has not been eaten.'

Jones does not provide discussion of this construction and does not indicate whether it has an affirmative analogue. He does explain that the more common means of expressing passive meaning is with the reflexive *si*. Since Sardinian does not seem to have ever used the TO BE passive extensively, the TO BE + *kene* + participle construction does not really constitute a replacement of the type I am discussing here⁶; it does, however, illustrate one example of a possible source for such a replacement.

Finally, a language may simply use the perfect forms of TO BE as the auxiliary in the perfect passive. This has been the strategy of all the languages considered here in which the perfect-to-non-perfect shift occurred. Thus in English, for example, *is* is the 3s form of the passive auxiliary in the present tense and *has been* is the 3s form for the perfect tense.

In summary, a resultative construction with a transitive verb develops a perfect passive interpretation; this in turn becomes a present passive construction, with the subsequent creation of a new perfect passive construction consisting of TO BE inflected for the perfect plus the past participle. Figure 2 illustrates this path of development schematically with examples from Latin and Spanish.

Figure 2—development of Spanish passives

stage		example			development	
I	present resultative	Lat.	est BE.3s	apertus open.ppcpl-ms.nom	'it is open'	
II	perfect passive	Lat.	est BE.3s	apertus open.ppcpl-ms.nom	'it has been opened'	shift in emphasis from state to action
III	present passive	Sp.	es BE.3s	abierto open.ppcpl-ms	'it is opened'	attribution of lexical characteristics to the construction
IV	perfect passive	Sp.	ha HAVE.3s	sido BE.ppcpl-ms	'it has been opened'	analogical extension of passive construction
				abierto open.ppcpl-ms		

5.3 Blocking

Now let us examine the role of these competing means of passive formation in the development of these passive constructions with TO BE. I earlier addressed the stability of a system in which a copula inflected for the present tense serves as the auxiliary in a perfect passive construction. It seems that one possible reason for the retention of perfect meaning in a passive construction with TO BE + participle is that the presence of a distinct present passive construction might discourage or prevent a present reading of the TO BE passive. For example, perhaps the Latin form *amatus est* kept the meaning 'he has been loved' during the classical period because the form *amatur* 'he is loved' in a sense blocked the interpretation of *amatus est* as a present form. If this is correct, then we would expect to find that a present interpretation of the periphrastic passive did not arise until the loss of the synthetic passive⁷. This question too awaits further exploration by text research.

6 Directions for further research

This analysis predicts that a number of factors should stand out to the text researcher seeking to verify this hypothesis. The first data to be found are the first instances in which a construction with TO BE + participle is unambiguously non-perfect passive—neither resultative nor perfect passive—when the auxiliary is morphologically present tense. Particular attention should be paid to the types of predicates found in these early uses: this theory predicts that atelic non-resultant stative predicates will be the 'leaders' of the change. Further development should include gradual generalization of the imperfective reference to all instances of the construction. A second potential indicator of the shift is the use of perfect tense forms of the auxiliary in the construction. Finally, text research should also provide additional data needed to clarify the issue of possible semantic blocking as described above.

7 Conclusion

In this paper I have argued that the development of non-perfect tense in earlier perfect passive constructions may have been triggered by the dynamic structure of certain types of predicates, namely non-resultant transitive statives such as TO LOVE. Because these predicates are not consistent with the resultative-like meaning of many other perfect passives, they can be interpreted as non-perfect

rather than perfect. That is, their non-resultant stative character encourages the reading that, if the theme is currently in the state predicated by the verb, the situation must be due to a continuing state of affairs rather than to a previously occurring action. The non-perfect reference of some lexemes can be attributed to the construction rather than to certain predicates participating in it, thus resulting in a non-perfect passive which is morphologically identical to the earlier perfect passive. This then allows for the creation of a new perfect passive by means of the use of the perfect form of the auxiliary. It is my hope that ongoing text research will corroborate this proposal.

If this analysis is correct, then it will establish the reassignment of semantic properties of lexical items to constructions as a mechanism of semantic change in constructions, especially periphrastic constructions.

Notes

- * This paper has benefited greatly from discussion with and comments from Jocelyn Ahlers, Andrew Dolbey, Suzanne Fleischman, Belén Flores, Susanne Gahl, Andrew Garrett, Zev Handel, Gary Holland, Dan Jurafsky, John McWhorter, Ju Namkung, Eve Sweetser, Elizabeth Traugott, and Natasha Warner, to all of whom I am very grateful. Any errors are of course my own responsibility.
- 1 Rumanian does make use of a passive construction with *a fi* 'to be' + past participle, but Mallinson attributes this to a nineteenth-century borrowing from French (1988: 418). The primary means of expression of passive meaning is with the reflexive *se*.
- 2 Such phrases as *well-read* present something of a problem for this analysis. Perhaps the solution is that the verb *to read* is in this instance treated as a one-valence verb and, as such, is very similar to *to travel*. Thus someone who likes to read may be well-read, just as a person fond of traveling may be well-traveled.
- 3 Example (11) is grammatical only with the reading that the speaker continues to contend that the house has been painted (presumably in contrast to the claim of the listener); in this case, *still* is used epistemically and does not relate to the main verb of the sentence (cf. Bybee et al 1994: 65).
- 4 For convenience, I am using the term *Romance* to refer only to the Romance languages under consideration, namely, Spanish, French, Portuguese, Italian, and Catalan.
- 5 Andrew Garrett correctly observes (personal communication) that some knowledge is not preceded by learning, such as how to breathe. Despite this fact, I believe that it is useful to categorize predicates as resultant or non-resultant even though the distinction, like many others in language, is not always clear-cut.
- 6 If such a replacement were to occur, it seems most likely that the perfect passive would be 'replaced' by an already existing construction. That is, what used to be an alternate means of expressing the perfect passive would become the primary (or only) means available. This is similar to what happened in the history of Rumanian, where, as the synthetic passive fell into disuse, the already existing passive-like use of reflexives in Late Latin increased, eventually becoming the primary means of conveying the effect of the passive.
- 7 I do not mean to imply that these two constructions could not coexist with essentially the same meaning; I merely intend to propose that a language could disallow the interpretation of a periphrastic passive as a present form because a present form already exists. Of course, what constitutes a blocking environment in one language does not necessarily apply to another. For instance, while *better* can be said to block **more well* in English, in Catalan *millor* 'better' and *més bé* lit. 'more well' are essentially interchangeable.

Abbreviations

1	first person	3	third person	<i>Cas.</i>	Casina
2	second person	abl	ablative	<i>Cic.</i>	Cicero

Du.	Dutch	m	masculine	pres	present
f	feminine	neg	negative	s	singular
fut	future	nom	nominative	Sard.	Sardinian
impf	imperfect	p	plural	Sp.	Spanish
ind	indicative	Pl.	Plautus	subj	subjunctive
Inv.	de Inuentione	plpf	pluperfect		
Lat.	Latin	ppcpl	past participle		

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