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Source: *Language*, Vol. 54, No. 2 (Jun., 1978), pp. 289-299

Published by: [Linguistic Society of America](#)

Stable URL: <http://www.jstor.org/stable/412948>

Accessed: 05-03-2016 12:28 UTC

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## ON THE UNDERLYING TENSE OF DEVERBATIVES

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This paper argues against syntactic derivation of deverbatives from forms marked for tense. It is shown, first, that Khalkha Mongolian deverbatives have categories completely different from those of finite verbs; second, that the facts of the English perfect are falsified by such derivation; and, third, that neutralization of underlying tense in Greek deverbatives results in a paradox involving primacy relations. It is concluded that deverbatives need not be marked for tense underlyingly, since tense is a 'main clause phenomenon' serving pragmatic functions of discourse. The surface actualization of underlying categories depends in part on such pragmatic functions.

English, like other languages, has two distinct sets of words based on verb roots: surface verbs, which function as predicatives bearing overt finite tense endings; and deverbatives, which have mainly nominal and adjectival functions, and bear non-finite endings, if any.

It has generally been assumed by transformational grammarians that English deverbatives are transformationally derived from full clauses. Thus Stockwell et al. (1973:502-99) detail a long series of proposals, by themselves and others, for the derivation of sentences containing infinitives (*go, to go*), indirect questions (*whether to go, where to go*), nominalizations (*going, his going*), and other deverbatives. Common to all these proposals is the analysis of deverbatives as surface actualizations of underlying clauses.<sup>1</sup> It is also common to most of these proposals to assume that deverbatives are derived from clauses which contain tensed verb forms or their equivalents.<sup>2</sup> Transformational treatments of deverbatives in other languages have often followed the treatment of English in this regard.<sup>3</sup>

This assumption is based on the initial plausibility of such an account, which has its analogs even in traditional grammars,<sup>4</sup> and on the requirement for economy in grammatical descriptions. If deverbatives were not assigned a clausal source, the description of their internal structures would require a complex set of rules largely

<sup>1</sup> Chomsky (1957:113), e.g., analyses nominalization as involving the insertion of complementizers into full clauses. Lakoff (1969:76 ff.) follows Chomsky as well as Rosenbaum (1967:1 ff., 5 ff.) in treating English and Latin deverbatives as originating in such full clauses. (Cf. also the discussion in Stockwell et al., 581 ff.)

<sup>2</sup> I shall discuss below, however, a theory developed by Chomsky in which this is not the case.

<sup>3</sup> Thus, in discussing Swahili, Christie (1973:137) states: 'It has been proposed (a) that a homogeneous and satisfactory analysis of *-ku-* can be given for the constructions discussed, if *-ku-* is in each case treated as the infinitive; (b) that the origin of the infinitive is an embedded sentence.' On pp. 131-2, Christie explicitly shows this embedded sentence as tensed. In discussing Turkish, Underhill (1972:87) states: 'Here it appears that the participle suffix (*-en*) replaces the tense suffix (*-er*) of the underlying sentence' (cf. the Mongolian examples below). Regarding Hindi, Sinha (1973:160) is not explicit on the point, but his examples suggest the sort of treatment under discussion here. There are a number of such treatments for European languages (cf. Ruwet 1968:292 ff., Hartung 1966:54).

<sup>4</sup> This is a possible reading, e.g., of Jespersen's assertion (1931:88) that 'The perfect infinitive ... corresponds ... notionally to the preterite and pluperfect as well as the perfect. Thus *He may have seen her* is equal to *Perhaps he saw her* or *Perhaps he has seen her* ...'

duplicating those of clause structure; and since deverbatives are of limited distribution, further rules for their external syntax would be needed, at least in part duplicating those for sentential embeddings.

A strictly de-finite treatment is, however, not a logical necessity. The question of whether *dying* in *He's afraid of dying* is the reflex of an underlying full clause is quite separate from the question of what the tense (if any) on the main verb of that clause might be. Even in a model with a context-sensitive phrase structure, there might be some reason to propose a desentential source for deverbatives; but the absolute identity of all underlying sentential types would not be required. In other words, a theory is unnecessarily strong if it requires underlying sententials to bear tense markers which are, at least roughly, in a one-to-one correspondence with the surface finite tense endings.

1. An examination of non-Indo-European grammar reveals that, for many languages, it is by no means so intuitively satisfying to derive deverbatives from tensed finites as it is in English. Often the deverbatives are morphologically unrelated to finites, thus obviating the type of argument which rests on the 'tense system' membership of such IE deverbatives as, say, the Greek aorist infinitive;<sup>5</sup> furthermore, they may be marked for categories which are completely different in meaning and function from those of finite verbs. A noteworthy example is the verb system of modern Khalkha Mongolian.

Khalkha has four complete sets of verb endings: imperative, gerundial, participial, and finite.<sup>6</sup> These are all suffixal, but have no morphological relationship to one another; no forms are shared across the sets, and there is nothing corresponding to the IE stem system for tenses. The finite verb takes endings referring to a set of temporal and attitudinal aspectual distinctions. Thus the past tense form *irev* 'came' in 1a contrasts with the non-past *irne* in 1b; but *irlee* in 1c refers to an event witnessed or otherwise vouched for by the speaker, whatever its time:

- (1) a. *Ta xaanaas irev?*  
 You where-from came  
 'Where did you come from?' (Hangin 1968:10, 17).  
 b. *Bi margaaš xar'j irne*  
 I tomorrow returning come  
 'I'll come back tomorrow' (Street, 121).  
 c. *Ceren orj irlee*  
 entering come/came  
 'Tseren came in.'

<sup>5</sup> The Greek conjugational endings are added to stems, which can differ partly or completely from the root. Usually these stems are associated with tenses, so that we can speak of a 'present' stem used with the present (and imperfect) tense endings. Such stems are also used with non-finite endings; on this basis we can speak of a 'present' as opposed to 'perfect' infinitive. However, such stems are an IE idiosyncrasy. Thus, in Mongolian, any conjugational ending can be added to any root or stem, the stems having syntactic and semantic functions (e.g. *bol*- 'become', *bolg*- 'cause to become, make', *bolčix*- 'become suddenly and/or completely').

<sup>6</sup> See Street 1963, Poppe 1951. Note that Poppe distinguishes two sub-classes of the imperatives, 'hortatives' and 'modals', making five classes in all. (Unattributed examples are from elicitation done by Ruth Mittelholtz and myself with Mr. Yidamjab Meng. Some of the glosses have been added by me.)

These categories play little if any role in the semantics of the participial or gerundial endings, which mark modal or temporal aspectual distinctions. Participial forms are used in relative clauses (2a, 3c),<sup>7</sup> in nominalizations (2b), and as predicatives with explicit or implicit copulas (2c). The perfect participle (2b, 3c) contrasts with the imperfect participle (2a) in aspect:

- (2) a. *irex jil*  
coming year  
'the year which is to come'.  
b. *Bi irsnees xojš, ter nadad neg nom ögöv*  
I having-come-from after he me-to a book gave  
'After I came in, he gave me a book'.  
c. ... *bi end jijig tergentej irsen*  
I here small carriage-with having-come (am)  
'I have my carriage here' (Sodov 1967:345).

The gerundial forms mark aspectual distinctions, and correspond for the most part to English clauses headed by subordinating conjunctions. Thus *ireed* means 'having come' or 'when one had come'; *irmegc* 'immediately on one's coming' or 'as soon as one comes' etc. These forms have an adverbial function, as in 3; but some can also be used with an auxiliary, as in 4, to form 'complex tenses', i.e. to mark additional temporal and aspectual distinctions:

- (3) a. *Bazarov bucaj ireed, šireend suuļ cajgaa jaaran*  
returning having-come table-at sitting tea-own hurrying  
*uuļ exlev*  
drinking began  
'Bazarov came back, sat down at the table, and began hastily drinking tea' (Sodov, 352).  
b. *Bagšijg irtel bid end xüleeļ bajna*  
teacher-ACC come-until we here waiting are  
'We are waiting here until our teacher comes' (Luvsanvandan 1966:327).  
c. ... *[nisex] ongočnoos buuļ irmegc, Ĵonson guajg*  
flying boat-from descending come-as-soon-as Mr.-ACC  
*tosč irsen bololtoj neg xün ... gene*  
meeting having-come seeming a man says  
'as soon as Mr. Johnson came down from the plane, a man who looked as though he'd come to meet Mr. Johnson said ...' (Street, 225).

<sup>7</sup> Mongolian relative clauses resemble reduced relative clauses when the subject, being the identical term, is deleted. Real reduced clauses involve a lost copula; e.g.,

- (a) *morin teregtej xümүүs*  
horse wagon-with people  
'people with horse-[drawn] wagons' (Street, 198).

Cf. a sentence like:

- (b) *Ter xün olon mor'toj*  
that man many horse-with  
'That man has a lot of horses' (Street, 198).

- (4) a. *Ter orj irj bajna*  
           he entering coming is  
           ‘He is on his way in’ (Street, 145).  
    b. *Bagš ireed bajna*  
           teacher having-come is  
           ‘The teacher has already come’ (Street, 75).

To a certain extent, there is correspondence between the categories in the finite, gerundial, and participial sets. Syntactic phenomena show that each set contains a pair of contrasting perfect and non-perfect (imperfect) forms, as shown in Table 1.

	FINITE	GERUNDIAL	PARTICIPIAL
‘Imperfect’	-ne	-j	-ex
‘Perfect’	-ev	-eed	-sen

TABLE 1.

Thus, under negation, the finite indicative forms are replaced by the corresponding participles plus the ending -*güj* ‘without, -less’. Thus 5a becomes 5b, and 6a becomes 6b:

- (5) a. *Bi irne* ‘I’m coming; I’ll come; I come.’  
       b. *Bi irexgüj* ‘I’m not coming; I won’t come.’  
 (6) a. *Bi irev* ‘I came.’  
       b. *Bi irsengüj* ‘I didn’t come.’

In relative clauses and nominalizations, the same correspondences hold. It is also normal, in the colloquial language, to replace the past indicative (except in questions) with a predicative perfect participle, with or without a copula. Thus when someone asks 1a, the answer could be:

- (7) *Bi xotoos irsen* ‘I came from the city.’

However, except in the above cases, there simply are no semantic correspondences among the endings of the three sets. To begin with, only four indicative forms are commonly used (Poppe, 79 ff.), namely those in -*ne* (5a), -*ev* (6a), -*lee* (1c), and -*j(ee)*. But five participles are in common use (Poppe, 81), those in -*ex* (5b), -*sen* (6b), -*ee*, -*deg* (8b), and -*meer*. While some of these correspond to indicatives, others have no such correlates. Thus 8a is not synonymous with 8b:

- (8) a. *Ter üdijn xooloo gertee idene*  
           he noon-GEN meal-own home-at-own eats  
           ‘He eats his lunch at home.’  
    b. *Ter üdijn xooloo gertee iddeg*  
   eats-usually  
           ‘He usually eats his lunch at home.’

Furthermore, at least ten gerunds are commonly used (Poppe, 84 ff.), in -*j* (4a), -*eed* (4b), -*n* (3a), -*vel* (9a), -*vč* (9b), -*megc* (3c), -*xeer*, -*tel* (3b), -*xleer*, and -*seer*. These refer for the most part to temporal aspectual relations, e.g. ‘until’ or ‘as soon as’, as well as logical relations, e.g. ‘if’ (9a) or ‘even though’ (9b):

- (9) a. *Xarin cegee bajval ...*  
       but kumiss be-if  
       ‘But if there was kumiss ...’ (Street, 224).  
   b. *Bi medevč čamd xelj ögöxgüj*  
       I know-even-though you-to telling-to-give-not  
       ‘Even if I know, I will not tell you’ (Hangin, 129).

The only way one might attempt to derive the three sets from a common source would be to have the non-finite endings incorporate additional aspectual material, along with the underlying tenses. But there are several problems with this approach—even leaving aside the question of the complex tenses, which might be treated as syntactic idioms. There is no morphological or syntactic evidence as to what material might be incorporated into the various morphemes, since the gerunds and participles are disjoint sets from each other and from the indicatives—and since Khalkha lacks any lexical items corresponding to subordinating conjunctions or aspectual adverbs (‘usually’, ‘thereupon’ etc.), the functions of which are precisely those fulfilled by the verb forms in question.

On the semantic level, any effort to derive the participial or gerundial endings from indicative verb endings is doomed to failure. The only non-indicatives which refer in any way to time are those shown in Table 1; all the others are perfectly neutral as to time. Moreover, the indicatives themselves are not expressive purely of tenses; cf. 1c. Finding a set of semantic categories for all three sets is difficult or impossible.

2. The unpleasant consequences of assuming that deverbatives derive from finites could be obviated, however, by assuming that underlying clauses which are to appear on the surface as deverbatives should contain markings ONLY for the aspectual oppositions found in deverbatives. Chomsky 1965, 1970 presents precisely such a theory. Through he assumes a sentential source for deverbatives, he allows English ‘Aux’ to be completely rewritten as ‘Aspect’, i.e. as ‘perfect’ or ‘progressive’ or both (1965:107, 1970:187, 216). This approach would avoid the problems raised above by Mongolian in regard to the purported underlying tense of deverbatives. It is, however, inadequate for English deverbatives.

Corresponding to the past/non-past tenses of the finite, English deverbatives typically have perfect/imperfect oppositions: *having gone* vs. *going*, *to have gone* vs. *to go*, etc. In many TG treatments, no attempt has been made to relate the pairing of the deverbatives to that of the finites—nor has it been possible to do so. Thus Stockwell et al. (28) simply generate the perfect as a separate, underlying element of the auxiliary, coördinate with the progressive and separate from tense. The perfect deverbatives, however, receive their *have*’s as a reflex of the past tense. That is, they derive the perfect deverbatives by replacement of the auxiliary with a complementizer—and, in case the auxiliary contains a past tense, by insertion of the perfect *have* (547, 595). This treatment is similar to that given by many transformationalists. However, this does not explicate the relationship of the perfect deverbatives to perfect finites; furthermore, it relies on a relationship between the past tense and the perfect which, in terms of the Mongolian evidence, is both problematic and mysterious.

Chomsky’s theory avoids these pitfalls; but there are certain facts which the theory of Stockwell et al. handles better. Consider the sentences in 10. The complements in each of these are three-ways ambiguous, and presumably have sources similar to the quotations in 11:

- (10) a. John claimed not to have ever seen her before.  
      b. John denied having ever seen her before.
- (11) a. ‘I had never seen her before.’  
      b. ‘I have never seen her before.’  
      c. ‘I never saw her before.’

That is, each of the statements in 11, placed within the scope of *claim* or *deny*, results in 10a or 10b respectively. With a theory deriving deverbatives from tensed clauses we would assign three separate semantic interpretations to 10a or 10b; but with one in which the complements have only underlying aspect, it would be ad hoc to do so.<sup>8</sup>

3. In general, such neutralization poses a challenge to both theories. To see that this is not just a problem for grammars of English, let us consider another language in which neutralization is a considerable problem.

Classical Greek has seven morphologically marked tenses in its finite verb. As Goodwin notes (1892:8):

‘These tenses may express two relations. They may designate the time of an action as PRESENT, PAST, or FUTURE; and also its character as GOING ON, FINISHED, or simply TAKING PLACE. The latter relation is expressed by the tenses in all the moods and in the infinitive and the participle; the former is always expressed in the indicative, and to a certain extent ... in the dependent moods and the participle.’

Thus any two tenses can contrast in one or both of these ways: the present tense differs from the imperfect only in time, from the perfect only in aspect, from the aorist in both. In Table 2, six of the seven tenses are contrasted along these two dimensions.

	TIME		
	PAST	PRESENT	FUTURE
ASPECT			
Imperfective	imperfect	present	future
Perfective	pluperfect	perfect	future perfect

TABLE 2.

The aorist is a past tense, but contrasts with both the imperfect and pluperfect in aspect: it is the only tense which indicates ‘mere occurrence’. As such it has special functions which largely remove it from the scope of the six-tense system shown in Table 2.

<sup>8</sup> That surface sequences of tense and modals hide such ambiguities was first discussed by McCawley 1971. He developed a theory in which *have* is a reflex of an underlying past-tense predicate, thereby dealing with several problems discussed here. His theory is unacceptable, however, because he posits an infinitude of possible underlying sequences of past tenses—whereas English in fact allows only three in a row, and that rarely. His ad-hoc rule of *have*-deletion begs the question, since the problem involves the occurrence of sequences on the underlying level. However, his theory could be saved by a context-sensitive phrase-structure base.



In non-finites, the time distinctions shown in Table 2 are neutralized; furthermore, in non-indicative moods (except when they represent indicatives in indirect discourse), 'these distinctions of time disappear ..., and the tenses here differ only in their other character of denoting the CONTINUANCE, the COMPLETION, or simply the OCCURRENCE of an action' (Goodwin 1889:22). As a consequence, the imperfect and present collapse, as do the pluperfect and perfect, and these tenses are largely restricted to the indicative. If we ignore for the moment the future tenses, Greek deverbatives have nearly a three-tense system of present, aorist, and perfect. The distinction is purely aspectual, as Goodwin notes: 'The present and the aorist here differ only in this, that the present expresses an action in its DURATION, ... as GOING ON OR REPEATED, while the aorist expresses simply its OCCURRENCE, the time of the tenses being otherwise precisely the same.'

The perfect is very much a marked tense, and is used 'only when the completion of the action is to be emphasized.' As for future and future perfect, these are even more highly marked, and rarely occur in deverbatives, being replaced by the present and perfect respectively:

'The future is used in the dependent moods only in the optative and the infinitive, and in these it is never regular except in indirect discourse and kindred constructions ... In constructions out of indirect discourse the present and aorist infinitive can always refer to future time if the context requires it, so that the future infinitive is here rarely needed. Therefore, after verbs which naturally have a future action as their object but yet do not introduce indirect discourse, ... the present or aorist infinitive (not the future) is regularly used.'

Thus Greek neutralization not only eradicates time distinctions, it reduces the seven-tense system to three tenses.

This is very puzzling, and traditional grammarians have long sought to account not only for the Greek case, but also for analogous phenomena in other languages. A number of scholars have argued that tense is not in fact the basic category marked on the verb, if by 'tense' we mean time distinctions. Thus, in comparing the aspects of the older Semitic languages with the IE verb system, O'Leary (1923:235) notes that the Semitic 'tenses' mark *Aktionsarten* ['kinds of action'], not time per se, and he says: 'This is true also of the "tenses" of the Indo-European languages, where the present describes an enduring act or state, the aorist denotes the action or state simply without relation to duration, and the perfect deals with action as finished.'

The problem is compounded by a syntactic property of the Greek verb. Verbs governing a dependent mood take, under certain conditions, either the optative or subjunctive—depending not on function, but solely on the TENSE of the governing verb. That is, in these cases the two moods are only syntactically different: a 'primary' tense (referring to a non-past time) governs the subjunctive, whereas a 'secondary' tense (referring to past time) governs the optative under the same conditions. Goodwin (1889:57) contrasts these examples:

- (12) *Práttousin hà àn boulóntai* 'They do whatever they please' [subjunctive after present tense].
- (13) *Épratton hà boulointo* 'They did whatever they pleased' [optative after imperfect tense].



However, deverbatives have (in general) no inherent 'primacy'; they are neither inherently 'primary' nor 'secondary', and merely 'transmit' the primacy force of the verb governing them. Compare the following (Goodwin 1889:62):

- (14) *Phēsi poiēsein hó ti àn boulēsthe* 'He says he will do [fut. inf.] whatever you may wish' [subjunctive after primary, through infinitive].  
 (15) *Éphē poiēsein hó ti bouloisthe* 'He said he would do [fut. inf.] whatever you might wish' [optative after secondary, through the same infinitive].

Goodwin says this is because the deverbatives denote 'time which is relative to that of the leading verb', but this is more a descriptive statement than a precise explication.

In a theory in which infinitives derive from underlying finites, how can we account for this lack of inherent primacy? Presumably neutralization also causes loss of primacy. This means that primacy must somehow be defined AFTER neutralization (i.e. deverbative formation), which is a transformational process. But the fact that the gnomic aorist is a primary tense, while the historical present is a secondary tense (Goodwin 1889:7), strongly suggests that primacy is defined by semantic criteria, since there are no structural differences between, e.g., the ordinary present and the historical present. Again, if we assume that deverbatives are merely marked for aspect, it is understandable that they lack primacy, which depends on distinctions of time.

In a theory like Chomsky's, in which aspect (but not tense) is marked in the underlying structure of deverbatives, the primacy facts can be handled by making tense, which is absent in deverbatives, the controller for actualization of mood. But such a theory can offer no explanation for the facts of neutralization; it cannot relate deverbatives and their corresponding finites, except morphologically and accidentally.

What is required, then, is a theory in which deverbatives do not derive from underlying tenses, but in which they are nonetheless systematically linked to finite tenses. What I propose is that deverbatives indeed derive from underlying structures marked for oppositions of ASPECT, but not tense, and that all underlying predicates are so marked.<sup>9</sup> It is not the case that underlying tense oppositions are neutralized,

<sup>9</sup> After I submitted the present paper, it was pointed out to me that Langacker 1975 has made essentially the same proposal as I do here below, if from a different viewpoint. He states (376-7), in the context of a theory of functional 'strata', that the concept of an embedded sentence is incorrect, since the performative 'stratum' characteristic of the sentence is rarely embedded; however, a number of different such strata are present in embedded clauses, and these reflect a variety of functions which such embeddings fulfill. He gives the following examples:

- (31) b. The general said: 'The colonel is a dear.'  
 c. The general said that the colonel is a dear.

Regarding these, he says:

'The basic difference between 31b and c ... is the presence versus the absence of the performative stratum in the semantic representation of the subordinate clause. Tense-aspect-modality, the existential *be*, and objective content are all overtly present in the *that*-clause of 31c, but there is no semantic or syntactic reason to posit a performative proposition as part of the embedded structure.'

He continues:

'There is a marked contrast between the semantic implications of simple gerunds, illustrated in 32, and finite complement clauses, represented in 33:

but rather that tense oppositions, where they appear, are additional to the aspectual distinctions.

What independent justification is there for such a proposal? We must first observe that tense in all languages is primarily a category of independent, i.e. topmost, clauses. In non-topmost clauses, non-finite forms are typically found, and these are usually neutral as to tense (i.e. time) distinctions. When tense is found in non-topmost clauses it is within certain privileged enclaves, we might say—such as a direct quote or *that*-clause (e.g. after Greek *hóti* or before Mongolian *gej*). English has its privileged environments as well: subordinate clauses, relative clauses, and indirect questions (WH-clauses). These are precisely the sort of special environments in which other phenomena of topmost or main clauses may occur in embedded contexts. Hooper & Thompson 1973 and Green 1975 have discussed the occurrence of such ‘main clause phenomena’ (MCP) in embedded clauses, and they have argued persuasively that the occurrence of these MCP in privileged environments depends especially on pragmatic factors. It is clear from the distribution of finite tense endings that tense is among such MCP.

The time distinctions marked in surface tenses relate to the time of the speech act and to its function in regard to discourse pragmatics. McGilvray (MS) has developed a theory based on Reichenbach’s analysis of tense,<sup>10</sup> in which it is possible to start detailing such functions. For example, the reference point of a discourse can only be altered by the utterance of a tensed verb form. The distinctions in non-topmost clauses deal only with the relationship of the time of events to the reference point of the discourse, and there is no need to have full tense markings. In privileged environments, there is some pragmatic function to such marking; e.g., in a quoted context, the speaker may want to avoid taking responsibility for the quotation, which is someone else’s speech act. There is ample independent support for the notion that deverbatives derive from underlying predicates marked only for aspectual, not tense, distinctions; and the relationship of surface tenses to deverbatives can be attributed to the fact that surface finites actualize underlying aspectual distinctions as well as temporal ones. Thus, in the correspondences shown in Table 1, only the aspectual oppositions incorporated into the finites are actualized by the deverbative forms. The tense oppositions themselves (temporal and attitudinal) are not in fact present in underlying embedded clauses.

- 
- (32) a. Running is fun.  
       b. I disapprove of grandstanding.  
       c. He studies basket-making.  
 (33) a. That he may run is good.  
       b. I realize that he DOES often grandstand.  
       c. I believe that he makes baskets.

‘The gerunds in 32 are divorced from any predication of existence, and also from any specification of tense-aspect-modality.’

<sup>10</sup> Reichenbach 1947 shows how tenses can be defined in terms of reference point (R), speech act (S), and time of event (E). McGilvray shows that the R-S relation has pragmatic functions in discourse which are not shared by the R-E relation. A similar theory is being developed by Riddle (e.g. 1975); she argues that all surface tenses are assigned on the underlying level, and that pragmatic factors play a role in tense selection. Both McGilvray and Riddle are trying to give an account of the phenomena involved in the exceptions to sequence-of-tense rules.

In Indo-European languages, the relationships between finite and non-finite forms, such as the English perfect infinitive and perfect tense, are ascribable to their incorporating a common aspectual element. Only under certain conditions is the tense system laid over such aspectual elements, and then only in pragmatically privileged positions.<sup>11</sup> TG treatments of deverbatives as having tensed sources can, then, no longer be taken automatically as universal models.

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<sup>11</sup> It is not the purpose of this paper to offer theories or evidence as to precisely how tense and aspect interrelate, or as to how their syntax is affected by discourse, pragmatic, and semantic factors. A number of plausible accounts are possible from the data presented here. To a large extent, such accounts must depend on one's general view of the relationship between inter- and intra-sentential syntax. For example, it is possible that tense is entirely a mapping of discourse factors, in which case the placement of a particular tense within a structure in a given discourse might be context-sensitive—or, alternatively, such factors might play a role in a filtering condition which would mark sentences with certain tenses as deviant within certain contexts. For subordinate tenses, at least, Riddle (6) would seem to argue for the former position; McGilvray (16), in discussing the 'appropriate use of a verb', could be read as taking the latter position.

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[Received 4 June 1977.]