

Discourse-Oriented Tense-Aspect Research in SLA

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ABSTRACT

This paper critically reviews those studies which have approached the phenomenon of second language acquisition of tense and aspect from a discourse perspective, in hopes of diagnosing the current state of the field and helping to take further steps in the future. First, early discourse-oriented research in the 1980s is reviewed, followed by the assessment of concept-oriented research in Europe. Further developments of discourse-oriented research in the 1990s are discussed in detail, with special reference to Bardovi-Harlig and Andersen's studies. Examination of non-narrative discourse as well as more varied narratives is suggested for future research in order to discover the role of discourse type in second language tense-aspect distribution and analyze more varied tense-aspect use by the learners.

Key Words: second language acquisition, discourse, tense, aspect

I. Introduction

Acquisition of tense and aspect by second language (L2) learners has always been one of the central issues in second language acquisition (SLA) research. Since the beginning of the 1980s, researchers have shifted their focus from a sentence-level to a discourse-level account, attempting to characterize the underlying semantic system of interlanguage which gives rise to surface forms. Godfrey (1980), for example, examined the errors of tense use made by learners of English as a second language

(ESL) from a discourse-level perspective, proposing that patterns of tense marking in interlanguage are influenced by discourse-level constraints on tense continuity.

Subsequent discourse-oriented studies in L2 tended to follow mature language studies of tense-aspect in narratives (e.g., Dahl, 1984; Givón, 1982; Hopper, 1979), investigating the distribution of tense-aspect morphology with respect to the structure of the narrative. They have specifically focused on the dichotomy of the story-line (i.e., foreground) and the supporting material (i.e., background) of narratives. The foreground clauses narrate main events, whereas background clauses elaborate, comment on, or evaluate the main events in the foreground.¹⁾ The results of cross-linguistic studies indicate that speakers of many languages employ tense and aspect marking to "mark out a main route through the narrative and divert in some way those parts of the narrative that are not strictly relevant to this route" (Hopper, 1979: 239). Prompted by this finding, several studies in the eighties examined L2 learners' narratives and found that there exists a correlation between the learners' use of tense-aspect morphology and grounding of narratives (e.g., Flashner, 1982, 1989; Kumpf, 1981, 1984; Rothstein, 1985). This may mean that L2 learners' interlanguage follows linguistic universals in the same way natural languages do and thus has theoretical significance.

In parallel with this line of discourse-oriented research in Northern America, in Europe, a new discourse-pragmatic approach called "concept-oriented" has emerged. Concept-oriented approach identifies a particular semantic concept such as TIME, and investigates the way this concept is expressed by the learner through various linguistic devices and how it is changed over time. This is in contrast with "form-to-function" studies (Sato,

1) Reflecting this differential function, the foreground clauses typically report completed punctual events in the order of the events they report while the background clauses often present ongoing, durative/repetitive/habitual events out of sequence with respect to the foreground or to other background events.

1990) in Northern America, which identifies a form first and then investigates the distribution of the form in learners' speech in order to find out its function in the learners' interlanguage system.²⁾ With the difference in their theoretical and methodological approaches, concept-oriented and form-to-function studies have complemented each other in revealing the way L2 learners acquire and use temporal/aspectual system of the target language.

In the 1990s, studies with a relatively large number of subjects have confirmed and expanded on the results of earlier studies, which have been mainly case studies, giving birth to "discourse hypothesis" (Bardovi-Harlig, 1994). There have also been attempts to incorporate the findings concerning the correlation between tense-aspect verbal morphology and the lexical aspectual semantics of verbs into discourse-functional frameworks (e.g., Andersen & Shirai, 1994; Bardovi-Harlig, 1998).

The aim of this paper is to critically review those studies which have approached the phenomenon of SLA of tense and aspect from a discourse perspective, in hopes of diagnosing the current state of the field, thereby helping to take further steps in the future.

II. Early Discourse-Oriented Research in the 1980s

A. Kumpf's Studies

Kumpf (1984) is commonly cited as one of the earliest studies which suggested a relationship between L2 learners' use of verbal morphology and discourse structure. She examined the tense-aspect system developed by a Japanese learner of English, Tomiko. Tomiko was an untutored learner, whose interlanguage had been fossilized at a low level, even after a 28 year-long stay

2) Bardovi-Harlig (1999) further divides the form-to-function studies into two groups according to the function that they investigate, as markers of lexical aspect or discourse organization.

in the US. Kumpf found that in Tomiko's system completed action in the foreground is expressed with the base form, whereas the background is marked in various ways. Most verbs were marked for tense, especially the stative verbs ("I was scared"); active verbs were marked for habitual (e.g., "every weekend drinkin, watchin TV") and continuous aspect (e.g., "wind was blowin"), and irregularly for tense. On the basis of this finding, Kumpf made two arguments: (1) the foreground and background distinction plays a role in the verb marking such that marked forms occur in the background but not in the foreground; (2) the more stative the verb, the more likely it is to be tensed. Following Givón (1982), she goes on to suggest that Tomiko's tense-aspect system is universal, since it shows the primacy of aspect over tense.

One of the most serious limitations of Kumpf's (1984) study is the small size of the database that she used for claiming "universality." Not only did she examine a single learner, but she analyzed a relatively small sample of the learner's speech (i.e., 250 clauses). Another problem with the claim that stative verbs are more likely to get tensing than (completive) active verbs is that the majority of the stative verbs in the data are in fact copulas. Among statives showing tense, which constitutes 58.8% (40n) of all statives, 83% (33n) are copulas. Stative verbs marked by regular past tense marker '-ed' occurred only three times (8%), which raises the issue of the representative status of copula as stative verbs in learners' tense-aspect system. Furthermore, the number of copulas in the data was multiplied by counting all the repetitions of the same verb type or even the same utterance.

In fact, Kumpf (1984) has been severely criticized by Wolfram (1985, 1989). Wolfram's criticism is based on the observation that, irrespective of the presence of higher-level constraints such as discourse structure, there clearly exist "surface-level" constraints that systematically affect the incidence of tense marking. In a series of studies (Wolfram 1985, 1989;

Wolfram & Hatfield, 1986), Wolfram examined the phenomenon of variation in tense marking with 16 (or 32 in later studies) Vietnamese subjects. He found that phonological saliency plays a significant role in guiding the distribution of past morphology in the subjects' interlanguage. The surface-level constraints that he identified include: (1) the distinction between regular and irregular verbs; (2) the shape of the suffix on the regular verb; (3) the following phonological environment; (4) the type of irregular formation; and (5) the relative frequency of the verb form.³⁾ This systematic variability was found not only in spoken language but also in writing (Wolfram & Hatfield, 1986).

Wolfram attempted to replicate Kumpf's (1984) findings with one of his Vietnamese subjects, but found that the pattern of tense marking did not resemble that reported by Kumpf, where foreground clauses are not marked for tense, but background clauses show various markings. On the contrary, the results indicated that tense marking is more frequent for foreground than background clauses in the Vietnamese learner's English speech. The variable nature of tense marking in both foreground and background could only be accounted for by distinguishing between regular and different kinds of irregular forms. Based on this result, Wolfram argues strongly against the discourse-based account of Kumpf (1984).⁴⁾

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- 3) Irregular verbs tend to show greater tense marking than regular verbs. Among regular verbs, the likelihood of tense marking decreases in the following order: (i) syllabic past [Id] (i.e., *treated* or *raided*) (ii) singleton consonant [d] (i.e., *stayed* or *freed*) (iii) clusters (i.e., *missed* or *raised*), which themselves are more likely to be marked before a vowel (i.e., *missed it*) than before a consonant (i.e., *missed me*). The likelihood of tense marking among irregular verbs is determined by "principle of saliency" (Wolfram, 1985: 247), according to which marking is more likely when the past tense form is phonetically more distant from the nonpast.
- 4) There are also other researchers who argue, like Wolfram, that the level of local constraints must be taken into account as one factor influencing the expression of temporality (Bayley, 1991; Véronique, 1987). They also point out, however, that grammatical aspect of the verb and/or the level of information organization such as background-foreground distinction cannot be dispensed with, either.

It is not the case, however, that Wolfram entirely denies the need for and value of discourse-functional perspectives in studying tense/aspect in SLA: "it should not be taken as a rejection of the consideration of deeper or higher level organization in interlanguage tense marking. But the focus on higher level considerations cannot afford to ignore the obvious surface constraints and, at least, control for them in the examination of discourse" (Wolfram, 1985: 252). As he advises, future studies of discourse approach to SLA of tense and aspect will have to take into account the kinds of surface constraints described by him in order to provide a valid, empirically based account of tense-aspect system in interlanguage.

Kumpf's later study (1986), which examined the structure of narratives of six L2 learners of English, shows that there have been important changes in her view on tense-aspect system in interlanguage. In fact, the six subjects include Tomiko, who served as the subject for the 1984 study, and Kumpf (1986) provides a modified version of the analysis of Tomiko's temporal system. First, Kumpf argues, much like Wolfram, that verbal morphology of Tomiko's temporal system has been shaped by perceptual salience of input. That is, tense marking appears only in free morphemes (e.g., copula) and the less salient '-ed' ending is not found. Second, she admits that stative verbs other than copula are unmarked for tense, thereby denying her previous claim that "the more stative a verb, the more likely it's tensing." The shift in viewpoint has taken place at a more general level as well. Kumpf (1986) reaches the conclusion that it is unproductive to consider interlanguage temporal/aspectual systems in terms of universals, as presented in the approach of Givón, since her data did not fit well with Givón's description of the universals. She suggests instead that the influence of other mechanisms such as input and first language (L1) transfer may be greater than that of cognitive or pragmatic universal, or it may be that Givón's definition of the universals is incorrect.

B. Subsequent Studies in the 1980s

Together with Kumpf (1984), Flashner (1989) is generally taken as one of the earliest discourse-functional studies in the field of SLA of tense-aspect. Flashner studied three Russian speakers learning English, with a special attention to the relation between the narrative structure and verb morphology. The results of analyzing a total of 1205 clauses showed that all three speakers have a basic system consisting of the opposition pair, past and nonpast. However, this system was aspectual in its nature. Past forms marked perfective actions, whereas nonpast (usually the base form of the verb) indicated the imperfective contexts. Furthermore, these two forms correlated with grounding of narratives, i.e., the past form with foregrounding and the base form with background, respectively. Noting that this finding contrasts that of Kumpf (1984), Flashner attributes this discrepancy to transfer from the native language, Russian, in the case of her subjects.

Another difference between the two studies, which is not unrelated to the difference just discussed, is that, in contrast to Kumpf (1984), Flashner (1989) found that stative verbs tend to be unmarked for past, irrespective of grounding. For example, in the narratives of one subject, 16 stative verbs occurred in foreground, and 13 (81%) of them were in the base form; in background, all except one (out of 114 stative verbs) occurred in the base form. This result conforms to the "aspect hypothesis" (Andersen & Shirai, 1994), according to which statives are least likely to be marked for past tense among the four semantic types of verbs (i.e., achievement, accomplishment, activity, and stative).⁵⁾ As regards the verbs which appear in the past even in

5) The aspect hypothesis is based on a theory of lexical aspect, which refers to the inherent temporal composition of verbs/predicates. It is Vendler (1957) who originally proposed four semantic categories of verbs. States are stable situations that do not change without any additional energy (e.g., *like*, *possess*). Activities are dynamic and durative situations that can terminate or stop at any time (e.g., *run*, *walk*). Accomplishments are also dynamic and durative, but they have a natural final end point, resulting in a change of state (i.e., telic) (e.g.,

the background, Flashner interprets them as signaling emphasis. It also seems to be the case, however, that those verbs are mostly punctual (e.g., *died*, *injured*), suggesting that the inherent aspectual meaning of the verbs is one factor responsible for them to be marked for past.

Among the early studies which have investigated the role of discourse context in the learners' use of verb morphology is Rothstein (1985), who studied the temporal system of a native Hebrew learner of English. Following Labov's (1972) categorization of oral narrative, Rothstein examined the learner's use of verb inflection in the context of narrative discourse. She found that two significant sections of the learner's narratives, i.e., orientation and complicating action, which corresponds to background and foreground, respectively, differed both in the type and variety of verb forms used. The background showed more diversity in verb forms, while the foreground indicated a greater number of inflected past irregular verbs.⁶⁾ Although a number of irregular verbs occurred in the orientation, the majority (80%, 31 out of 39) were in the base form. Rothstein concludes from these results that the role of discourse is significant in the choice and use of verb inflection by the learner. In addition, in contrast to Kumpf (1984), and in line with Flashner (1982, 1989), Rothstein found that the more stative the verb, the later it is used in inflected forms.

As will become clear in the following sections, the results of Flashner (1982, 1989) and Rothstein (1985) were confirmed, and that of Kumpf (1984) was disconfirmed, by later studies (e.g., Bardovi-Harlig, 1992, 1995, 1998; Housen, 1994; Huang, 1993). These later studies also showed that learners from various native language backgrounds exhibited the same pattern, i.e., high use

make a chair, walk to school). Achievements are instantaneous (i.e., punctual) situations that result in a change of state (e.g., *reach the top, win the race*).

6) Regular verbs were not included in the analysis, since past regular morpheme '-ed' was one of the morphemes that were not significantly evident in the subject's interlanguage.

of past/perfective in the foreground, which disregards the influence of L1 transfer suggested by Flashner.

III. Concept-Oriented Research in Europe

In parallel with the movement in Northern America toward the discourse-functional approaches to the SLA of tense and aspect, in Europe, an approach called "concept-oriented" was proposed by several researchers. In the concept-oriented approach, a learner's need to express a conceptual domain (e.g., TIME, SPACE) is taken as the starting point, and the analysis is focused on how the learner expresses sub-components of this domain at a given time, and how it changes over time. The European Science Foundation (ESF) project, which investigated the SLA of adult immigrants in five European countries, adopted this approach. As part of the ESF project, Dietrich et al. (1995) studied the organization of temporality in the untutored SLA of adult learners.⁷⁾ They claim that the entire process of SLA of temporality can be divided into three major steps: stage A (pre-basic varieties), stage B (Basic variety), and stage C (further development).⁸⁾ This process signifies a sequence from pragmatic to lexical to grammatical devices. Their work has contributed to "broaden the concept of temporality in SLA research from the

7) The database consisted of the recordings of 22 speakers made at least 3 times over an average of 18 months. The discourse genre of the data includes personal narratives, conversational sequences and film retellings.

8) In Stage A, learners rely exclusively on lexical and/or pragmatic means such as temporal adverbials, calendric expressions, and "the principle of natural order." In Stage B, the learners' utterances typically consist of uninflected verbs, their arguments and, optionally, adverbials. It is argued that there is neither tense nor aspect marking at this stage, and that the learners only specify some time span, its temporal position, duration and/or frequency, to which they relate the situation to be described. Regarding Stage C, the authors indicate several developmental order relations: e.g., form preceding function, tense marking preceding aspect marking, irregular morphology preceding regular morphology.

emphasis on the morphological system found in early SLA work to include other linguistic and pragmatic means," providing "a rich description of the role of time adverbials, discourse organization, and morphology, as well as their interaction" (Bardovi-Harlig, 1999b: 347).

In discussing the acquisition of Swedish by two Spanish- and two Finnish-speaking learners, Dietrich et al. (1995) made a claim on the function of verbal morphology with respect to grounding in narratives. The claim is that past tense forms (i.e., preterite) appear in background first in order to distinguish it from the foreground. According to these researchers, "tense marking is at first selective and occurs where it has a clear function... the plot events initially are not marked for past, only the background situations are" (*ibid*, p. 254). The reason for this, they argue, is that, compared with foreground events, background situations are not temporally constrained and thus need to be marked for tense. There are, however, some problems with their analysis. The most serious one is the lack of any quantitative information supporting their claim.⁹⁾ The reader is thus left to accept their argument without any empirical evidence. The only quantitative data that they provide shows the distribution of all inflectional forms of a single verb (*ta* 'take') over the three film retellings by a Finnish learner; even here, the distribution of the forms across grounding is not provided, making it impossible to check the validity of their claim on the discourse function of past form for marking background. In addition, there is a potential complication in interpreting the learner's use of past versus base form in Swedish. In Spoken colloquial Swedish, the past V-de can be shortened into V-a, which is the same form as the base for verbs of the most productive verb class (*ibid*, p. 212). It is not clear then whether the use of V-a should be seen as the past or the base form, even though the researchers regard them as the base. It is possible that at least some of the V-a forms that occur in the

9) The concept-oriented studies typically employ an almost exclusively qualitative research methodology.

foreground are, in fact, shortened past forms instead of base forms.

As may have been noticed, Dietrich et al. (1995) is in agreement with Kumpf (1984) in that both argue for the functional distribution of tense marking in interlanguage, in which past form marks background, and nonpast form, foreground. As already pointed out, however, Kumpf's (1986) reanalysis of the 1984 study indicated that the results of her earlier study were distorted by the saliency and frequency of the copula, which frequently appeared in the background. It is not clear whether this is also the case with Dietrich et al.'s study, since there is no information available on the rates of the use of past forms in background versus foreground, nor on the relative frequency of copula and lexical verbs in the past tense. Considering that a number of other studies based on the quantified data reported the opposite findings, i.e., a greater use of the past form in the foreground than in the background, it seems necessary that the claim made by Dietrich et al. (1995) should be re-considered with "solid empirical evidence" provided: "Citing isolated examples will not suffice; quantification is indispensable in this case" (Meisel, 1987: 220).

Besides Dietrich et al. (1995), there are several individual studies done by the researchers who either participated in the ESF project (Noyau, 1990; Véronique, 1987, etc.), or share with them the concept-oriented approach (Meisel, 1987; Trévisé, 1987; von Stutterheim, 1990, etc.). Like Dietrich et al. (1995), some of these studies (e.g., Véronique, 1987) have reported findings that do not coincide with those of other discourse-oriented studies, but they are not reliable due to the inherent problems in their analyses and/or interpretations, including the lack of quantification. The concept-oriented studies, however, have made a valuable contribution to this field by showing that L2 learners, especially in the early stages of acquisition, employ various means other than verbal morphology to express temporality in L2, such as temporal adverbials and calendric expressions as well

as discourse organization principles, and that learners sometimes use L2 verbal morphology in a non-nativelike, but still systematic, way.¹⁰⁾

IV. Further Developments of Discourse-Oriented Research in the 1990s

A. Bardovi-Harlig's Discourse Hypothesis

Bardovi-Harlig has conducted a series of studies (1992, 1995, 1998), in which she investigated the relation between narrative structure and verbal morphology. In the earliest study (1992), she proposed that the use of tense by ESL learners can best be understood from the perspective of narrative structure. This study used the database which consists of both oral and written narratives elicited from 16 intermediate learners of various L1 backgrounds by means of a story-retell task. For the analysis, verbal morphology in past time contexts was divided into two categories, i.e., past and nonpast, and the rates of the use of each category were calculated separately for the background and foreground of each narrative. The results showed that nine of the sixteen learners showed "discourse-sensitive tense use," employing simple past tense in the foreground and nonpast in the background, whereas the remaining seven learners showed "discourse-neutral" use of tense without significantly different

10) For example, Trévisé (1987) shows that verbal morphology is not the only means that learners rely on in order to distinguish background from foreground of their narratives. One learner signaled the shift from the main event line to a backgrounded comment by means of a shift from the first person plural to third person pronoun. Besides, references to places, determiners, persons, and lexical semantics of verbs were also important for this purpose. On the other hand, von Stutterheim (1991) reports that her subjects created a form "*to be* + infinitive" as a marker of "unboundedness" in a descriptive piece of text, while using the participle perfect form to mark "boundedness" in narrative portion of text. This suggests that learners may develop their own ways of explicitly marking aspectual distinctions, whether they are native-like or not.

rates of appropriate use of past tense in foreground and background.

The results of this study are compatible with those of some previous studies, which have been case studies (e.g., Flashner 1982, 1989). Bardovi-Harlig (1992) fails to make a strong argument, however, since only 56% of the learners were found to use tense in order to distinguish between foreground and background. One serious drawback of this study is concerned with the methodology used, i.e., a story-retell task. This task, in which subjects first listen to a story and then retell it, is not appropriate in eliciting narratives from L2 learners, whose listening proficiency in L2 may vary.

Recognizing some of the problems in her earlier study, Bardovi-Harlig (1995) attempted to clarify the relationship between L2 proficiency and the influence of narrative structure in tense-aspect distinction. This study is quite different from the earlier one in terms of methodology. One difference concerns the narrative elicitation technique. Whereas the 1992 study used a story-retell task, the 1995 study, adopting the method used in the ESF project, uses a film retell of an 8-minute excerpt from the silent film *Modern Times*, thereby avoiding problems resulting from listening comprehension. In addition, the learners' proficiency level was determined by different criteria, i.e., by the instructional level in an intensive English program in the earlier study, and according to the percentage of appropriate use of past tense (separately for written and oral narratives) in the later study.

These improvements in methodology led to more significant results. Bardovi-Harlig (1995) found that the simple past appears first in the foreground and the rates of simple past use remains higher in the foreground than in the background in both oral and written narratives at all proficiency levels. At the lowest level, learners used base forms more frequently than the past even in the foreground, but at the intermediate level simple past

became the dominant verb form of the foreground. Bardovi-Harlig (1995) thus suggests a developmental pattern in the L2 learners' use of tense-aspect marker with respect to the narrative structure. At the beginning stage of development, learners favor nonpast in both foreground and background; later, they mark foreground with past and use various forms in the background; with further development, they move towards a more native like distribution. Bardovi-Harlig also suggests that proficiency can account for some of the differences reported in the previous studies. For example, Kumpf's (1984) subject, Tomiko, may have been a low-level learner who had not yet reached the stage where past form establishes itself in the foreground, but had already acquired the use of tensed copula in the background.

Building on the 1995 study, Bardovi-Harlig (1998) examined not only narrative structure but also lexical aspect of the predicate. The main aim of the study was to compare the influence of narrative structure and lexical aspect on the use of tense-aspect morphology by the learners, and in so doing to compare two hypotheses in SLA research of tense and aspect: i.e., aspect hypothesis and discourse hypothesis. According to the aspect hypothesis, "first and second language learners will initially be influenced by the inherent semantic aspect of verbs or predicates in the acquisition of tense and aspect markers associated with or affixed to these verbs" (Andersen & Shirai 1994: 133).¹¹⁾ On the other hand, the discourse hypothesis proposes that "learners use emerging verbal morphology to distinguish foreground from background in narratives" (Bardovi-Harlig 1994: 43) Since the foreground-background dichotomy tends to correlate with the telic-atelic distinction, as Bardovi-Harlig points out, the two hypotheses are often indistinguishable. Bardovi-Harlig argues, however, that they can be distinguished when telicity and grounding do not coincide

11) The aspect hypothesis is supported by a number of studies. For a comprehensive review of such studies as well as the hypothesis itself, see Bardovi-Harlig (2000).

with each other (i.e., atelic predicates in the foreground or telic predicates in the background). She thus hypothesizes that if foreground predicates are marked in the simple past tense regardless of their semantic aspectual class, it will confirm the discourse hypothesis; on the other hand, if telic verbs, regardless of grounding, are inflected for the simple past, then it will support the aspect hypothesis.

The results, while confirming both the aspect hypothesis and the discourse hypothesis when they are considered separately, showed some difference between punctual verbs (i.e., achievements) and non-stative, durative verbs (i.e., activities and accomplishments) with respect to their tense-aspect marking in foreground versus background. For easy comparison and discussion, the results are summarized in the following table.

INFLECTION	Simple Past				Progressive			
MODE (narrative)	Oral		Written		Oral		Written	
GROUNDING	FG	BG	FG	BG	FG	BG	FG	BG
Activity	20% (25.5)	15% (16)	52% (78)	10% (7)	20% (25.5)	41% (44)	13% (20)	67% (49)
Accomplishment	44% (118)	30% (14)	70% (124)	35% (10)	4% (10)	26% (12)	4% (6)	28% (8)
Achievement	64% (356)	69% (68)	74% (427)	70% (60)	1% (4)	3% (3)	1% (4)	5% (4)

(Raw counts are given in parentheses)

<Table 1> Distribution of Lexical Aspectual Class¹²⁾

12) This table is based on Tables 7, 9, and 10 in Bardovi-Harlig (1998). Statives are not included in this table, as in the original tables. Bardovi-Harlig reports that in her data the majority of stative verbs in the past tense were copulas (75% in the written sample and 89% in the oral sample). She regards the tensing of the copula as unrepresentative of the tense marking of other statives, and thus eliminates it from the class of statives, which results in a too small number of statives to be analyzed along with other aspectual classes.

Table 1 reveals the heavy influence of aspectual class on the distribution of tense–aspect markers in ways predicted by the aspect hypothesis. Irrespective of narrative mode (oral vs. written) and grounding (foreground vs. background), achievement receives past marking most frequently, followed by accomplishment, and then by activity. With progressive marking, the order is reversed: activity is most likely to be marked for progressive, with accomplishment showing greater use of progressive than accomplishment. On the other hand, grounding shows its influence as well. For all aspectual classes in both oral and written narratives, the general tendency is that past marking is preferred in foreground, and progressive marking, in background. However, there seems to be a difference between achievement and the other two aspectual classes (i.e., accomplishment and activity) in the degree of correlation with grounding. Achievement, in fact, appears to be inflected without much regard to grounding, whereas accomplishment and activity are much more likely to receive past marking in the foreground than in the background, and progressive marking in the background than in the foreground. This result is the basis on which Bardovi-Harlig (1998: 501) claims that "lexical aspect and narrative structure conspire to shape the distribution of TA morphology in interlanguage."

The discourse hypothesis proposed by Bardovi-Harlig through a series of her studies, while providing an important insight into the nature of interlanguage tense–aspect use, has some limitations. First of all, the so-called "discourse" hypothesis is not so much discourse as "narrative" hypothesis. Since the hypothesis as well as the analysis of data is based exclusively on the grounding of narratives, it cannot readily be applied to other important genres of discourse such as conversation. Secondly, the kind of the narratives analyzed in her studies is quite limited in the sense that they are all elicited from a retell task. There is a reason to believe that personal narratives are different from elicited impersonal narratives in terms of the linguistic devices used, including tense–aspect marking (See e.g., Giacalone Ramat

& Banfi, 1990). Attempts should be made, therefore, to examine not only elicited but also natural (i.e., conversational) narratives in order to make the findings more generalizable and to reach a better understanding of tense–aspect use by learners. Thirdly, Bardovi-Harlig (1998), in making the argument regarding the interaction between lexical aspect and narrative structure, fails to give full credit to discourse–pragmatic function of tense–aspect that it deserves. She considers the association between tense–aspect marking and lexical aspect of the predicates, on the one hand, and the association between tense–aspect marking and grounding on the other hand, as if they were two separate phenomena. However, they may in fact be closely related with one another, in the sense that both types of associations are motivated by discourse–pragmatic functions (Andersen & Shirai, 1994). If this is the case, it may not be necessary to distinguish "sensitivity to aspectual category" from "sensitivity to discourse," as Bardovi-Harlig (1998) does, since both are derived from the same root, i.e., the communicative need of the speaker.

B. Discourse Motivation Framework (Andersen & Shirai, 1994)

A comprehensive framework which establishes discourse function as a motivating factor for the use of tense–aspect morphology by learners (and nonlearners) has been proposed by Andersen and Shirai (1994). Most significantly, Andersen and Shirai (1994) provide a reinterpretation of the aspect hypothesis, which assumes the correspondence between inherent semantic aspect and verbal morphology in learners' early use of tense–aspect marking, from a discourse–pragmatic perspective. They focus on and offer an explanation for the observed tendency ("distributional bias") for both nonnative and adult native speakers to conform, in more absolute and relative terms, respectively, to the primacy of inherent semantic aspect in their use of tense–aspect markers, tending to associate past/perfective marker with achievement and accomplishment, and progressive marker with activity verbs. Andersen and Shirai account for learners' early conservative use of verb morphology by means of some cognitive operating principles and the notion of

prototypicality, repeating the argument made in their other works (Andersen, 1989a, 1989b, 1990, 1993; Andersen & Shirai, 1996). According to this account, learners are guided by the Relevance Principle to search for a grammatical morpheme most relevant to the meaning of the verb, thus initially using verb morphemes as aspect markers. They are also guided by the Congruence Principle to choose the morpheme whose aspectual meaning is most congruent with the aspectual meaning of the verb. The One to One Principle has a reinforcing effect on this tendency by causing learners to initially assign only one meaning to one morpheme in their interlanguage. In order to make one-to-one form: meaning relations, however, learners must rely on prototypicality, and associate the most prototypical meaning of each inflection with the most prototypical members of each aspectual class of verbs.

Andersen and Shirai (1994), taking a further step, argue that these principles are followed by native speakers as well, and, more importantly, that they are motivated by discourse function: "All of these principles follow naturally from the speakers' (both learners and nonlearners) communicative need to distinguish reference to the main point/goal of talk from supporting information" (p. 152). It is thus the information the speaker wants to convey that motivates the choice of the verb and of the inflection. If the speaker wants to convey the notion that an event has an endpoint, for example, he/she will choose both a verb (e.g., achievement) and an inflection (e.g., past/perfective marker) which have the same notion as part of their meanings, the result being that the meanings of the verb and of the inflection are typically congruent with each other. This is the reason, they argue, for the observed similarities in the distribution of tense-aspect markers in the speech of learners and of native speakers.

Given the similarities between learners and nonlearners in their use of tense-aspect markers, what constitutes the real difference between them, or rather, the real advantage of the nonlearners over the learners? Andersen (1994) pursued an

answer to this question by comparing native and nonnative Spanish speaker's use of verbal morphemes of tense-aspect. He compared earlier and later uses (with two years of gap) of Spanish tense-aspect markers by two English-speaking children with uses by a peer Spanish native speaker, and found evidence supporting the Congruence Principle for both. The two nonnative speakers, however, were limited in their use of tense-aspect markers in Spanish in that they used PRETERIT (i.e., perfective) primarily with punctual and telic events, while using the IMPERFECT (i.e., imperfective) primarily for stative verbs. In contrast, the native speaker used the PRETERIT, not only for single or a series of events, but also to present states and activities as completed events, and a closed period as a single completed event. Similarly, the native speaker used the IMPERFECT to present events as states or activities and, habitual situations as a state, as well as for simple states and activities. In other words, both nonnative and native speakers tended to inflect stative verbs as IMPERFECTS and event verbs as PRETERITS, but only the native speaker was able to go beyond the prototypical associations, exploiting the inflections to convey his own perspective. According to Andersen (1994), "the insider's advantage," referring to the real virtuosity in adult native speaker speech, is "the ability to *disassociate* the temporal and aspectual inflections/auxiliaries from the prototypical instances that define them, and use them to present situations *as if* they were states, activities, events by virtue of the inflection or auxiliary [emphasis in original]" (p. 2).

The Discourse Motivation framework can account for most of the important findings of the previous studies in a coherent way. First, as already discussed, a number of discourse-oriented studies have found that L2 learners tend to use past form in the foreground, while using nonpast, especially base form, in the background (Flashner, 1982, 1989; Rothstein, 1985; Bardovi-Harlig, 1992, 1995, 1998; Huang, 1993; Housen, 1994, etc.). This is so because learners choose the inflection most appropriate to their communicative purposes. In order to report central, goal-oriented

completed events (e.g., foreground events), they will choose past or perfective markers, whose prototypical meaning is "completed action" (Andersen & Shirai, 1994). In contrast, they will not choose to explicitly mark stative unbounded situations (e.g., background situations), which contribute less to their communicative goals, and thus leave them unmarked.

Second, it has also been observed that telic verbs tend to occur in foreground, and statives in background. According to the Discourse Motivation framework, speakers choose not only a verb inflection but also a verb on the basis of their communicative need. Since verbs appropriate for reporting the completed event are achievement or accomplishment, whose inherent aspectual meaning includes 'telicity,' they will typically appear in the foreground; statives or activities, due to their atelic nature, are more appropriate for reporting background information, and therefore typically found in the background.

Third, learners' differential use of tense-aspect markers according to their proficiency level (Bardovi-Harlig, 1995, 1998) can be accounted for in terms of the extension of prototypical meanings and functions accompanied by increase in proficiency. According to the prototype account, learners initially restrict the use of each inflection to the most prototypical meaning,¹³⁾ and associate the inflection with the most prototypical members of each lexical aspectual class of verbs. With further development of L2, however, they increasingly expand the inflections to less prototypical verbs of the same class and then to other classes.¹⁴⁾

13) The prototypical meanings for each inflection are as follows (Andersen & Shirai, 1994: 148):

- "action in progress at that moment" for progressives
- "completed action" for past and perfective marking
- "continued existence" for present marking

14) This expansion reflects a change in what the speakers are choosing to mark explicitly (Andersen & Shirai, 1994). For example, the range of what is explicitly marked in reporting past situations is expanded from a real, realized unitary bounded event (i.e., foreground event) to include not only states but also typical or habitual or repeated events

Therefore, the higher the proficiency level of the learner, the higher the rates of use of past marker with the more prototypical achievements and accomplishments as well as with the less prototypical stative and activities, as reported in Bardovi-Harlig (1998).

Fourth, Bardovi-Harlig (1998) found that some achievements and accomplishments occur in the background of learners' narratives, while activities sometimes occur in the foreground. She takes them as problematic cases for the argued association between aspectual class and discourse function (i.e., achievement or accomplishment with foregrounding, and stative or activity with backgrounding). However, these associations should only be regarded as "typical" cases.¹⁵⁾ In fact, this is true with the findings of Bardovi-Harlig (1998), where over 84% of all occurrences of achievements and accomplishments are in the foreground in both oral and written narratives, whereas activities appear in the background relatively frequently (46% in the oral, and 33% in the written narratives). As already noted, in the Discourse Motivation framework, both native and nonnative speakers are assumed to have the same communicative need which motivates the choice of verbs as well as of inflection, and as a result, exhibit similar distributional biases in their use of tense-aspect markers. The fact that this holds true with choice of verbs across grounding in narratives can be illustrated by comparing the two tables below. Table 2 is from Reynolds (1994), who examined 25 native speaker written retell narratives, using the same method and procedure with Bardovi-Harlig (1995, 1998). Table 3 is from Bardovi-Harlig (1998):

(e.g., background situations). Thus, the higher the proficiency level of the learner, the higher the rates of use of past inflection in the background as well as in the foreground.

15) Hopper (1979), in his discussion of L1 phenomena, similarly emphasizes that the correlation between punctual-nonpunctual verbs and foreground-background distinction is by no means a requirement (p. 224).

	In Foreground		In Background	
	N	%	N	%
Statives	3	5.0%	57	95.0%
Activities	82	65.6%	43	34.4%
Accomplishments	132	83.5%	26	16.5%
Achievements	259	87.2%	38	12.8%

<Table 2> Distribution in Written Native Speaker Narratives¹⁶⁾

	In Foreground		In Background	
	N	%	N	%
Statives ¹⁷⁾	17.5	7.4%	218.5	92.6%
Activities	150	67%	73	33%
Accomplishments	177	86%	29	14%
Achievements	577	87%	86	13%

<Table 3> Distribution in Written Non-Native Speaker Narratives

As can be noticed in the tables above, there is a remarkable similarity in the choice of verbs between native and nonnative speakers depending on whether the verb is used in foreground or in background. Achievement (NS: 87.2%; NNS: 87%) or accomplishment (NS: 83.5%; NNS: 86%) verbs are preferred in foreground, whereas stative verbs (NS: 95.0%; NNS: 92.6%) are preferred in background. Activities tend to appear in foreground (NS: 65.6%; NNS: 67%) more frequently than in background (NS: 34.4%; NNS: 33%). However, this should not misrepresent the

16) Table 2 here is based on Table 1 in Reynolds (1994). I excluded the aspectual class 'ACC/ACH' in the original table, which represents a category that is ambiguous between accomplishment and achievement. ACC/ACH occurred in the foreground in 89.3% of the time (25n), and 10.7% in the background (3n).

17) Since Bardovi-Harlig (1998) only provides the combined totals for statives, without distinguishing between written and oral narratives (i.e., 35 in the foreground and 437 in the background), I divided each into half and used the latter as an approximate count for comparison purposes here.

whole picture of the speakers' choice of verbs with respect to grounding. When the distribution of aspectual class is calculated within each of foreground and background, over 80% of the foreground is accounted for by either achievement (NS: 51.7%; NNS: 62.6%) or accomplishment (NS: 26.3%; NNS: 19.2%), while activity accounting only for about 16% (NS: 16.4%; NNS: 16.3%), with statives appearing minimally (NS: 0.6%; NNS: 1.9%). On the other hand, in the background, statives constituted the largest part (NS: 34.1%; NNS: 53.8%), with activities and achievements appearing with relatively similar frequencies (NS: 25.7% vs. 22.8%; NNS: 18.0% vs. 21.2%), followed by accomplishments (NS: 15.6%; NNS: 7.1%).¹⁸⁾ The overriding tendency for both native and nonnative speakers seems clear: i.e., to choose either achievement or accomplishment in foreground, and statives, in background. This observed similarity in their choice of verbs can be attributed to the similar way of organizing information in ongoing discourse.

On the other hand, "atypical" cases of verb choice may be explained in terms of the learners' extending their conservative use of tense-aspect morpheme beyond the prototypical associations, so that they can eventually impose their own perspectives on the situation. For example, activities which are not typically associated with past marker nor with foreground, may sometimes appear in the foreground and be marked explicitly, if they are relevant to the speaker's communicative goals in the given context. See the following example from a learner's narrative (Bardovi-Harlig, 1998: 487).

*and uh, and cried, and chased her, and the employer caught
and but Chaplin said, ...*

In this utterance, the learner is marking the activity verb *chase*

18) The unexpected high rates of achievements in the background may be accounted for by the fact that some of achievements can be used as "punctual activities" (Lee, 1991, also cited in Andersen & Shirai, 1994), or iteratives, which are compatible with background.

with the past marker, probably because s/he feels a need to mark it explicitly in this particular context. Note that even though *chase* is an activity verb with no inherent endpoint, in the particular situation that the learner is describing, it has an endpoint, which is reached by *caught* in the next clause. The learner might have felt the need to mark "activity," at least in part, for this reason.¹⁹⁾

The current section has focused on the studies by the two researchers, i.e., Bardovi-Harlig and Andersen, in recognition of their significance in this field of research. Many other researchers, however, have also examined the distribution of tense-aspect verbal morphology in terms of narrative structure (and lexical aspect sometimes) since the 1990's (Comajoan, 2002, 2005; Clachar, 2002; Housen, 1994, 1998; Lafford, 1996; Shibata, 2000; Tajika, 1999, etc.). These studies of interlanguage narratives collectively demonstrate that tense-aspect morphology is differentially distributed according to grounding.

V. Concluding Remarks

The present review demonstrates that "discourse is a central influence on the distribution of tense-aspect morphology" (Bardovi-Harlig, 2000: 335). As can be noticed in the discussion so far, however, most of the "discourse" studies in the area of SLA of tense-aspect have tended to limit their focus on narratives. Furthermore, many studies used only elicited narratives as the database (e.g., the ESF project and several studies by Bardovi-Harlig), the justification being that the analyst has control over what the learner is trying to convey and the extent of avoidance in relating certain events and relations. Narratives elicited from a retell task may allow the researcher to see how the learner specifies the succession of events and the

19) Andersen and Shirai (1994: 148) give a similar example of *run* versus *ran*, explaining that learners can use the past form *ran* in order to convey the notion that the situation referred to by the activity verb *run* is completed.

temporal relations among them; however, learners have no need to anchor events in relation to the speech time, nor to refer to anterior or future events. Perhaps more importantly, they are not likely to be personally involved in re-telling the stories. As Noyau (1990) points out, personal conversational narratives, where speakers have motivation to relate past events, future plans, anterior events, or current states, have a richer temporal structure than elicited impersonal narratives. Compared with the latter, the former seems to show more frequent occurrences of verb morphology for certain semantic meanings, for example, habitual, perfect/anterior, and irrealis (e.g., Flashner, 1982, 1989), which attests to the need to look at personal rather than impersonal narratives in order to examine tense-aspect system of L2 learners. Since the results obtained from the analysis of narratives may not be generalized to other genres of discourse (von Stutterheim, 1991), it is also necessary that SLA research of tense-aspect should extend its domain of inquiry beyond narratives. In other words, future work in this area needs to investigate the influence of discourse type on L2 tense-aspect distribution (See e.g., Bardovi-Harlig, 1999a; Salaberry, 2003). Bardovi-Harlig (2000: 431) suggests, for example, that examining grounding in descriptive texts would not only provide an opportunity to test whether learners use tense-aspect morphology to distinguish the main point of a text from the background in various discourse types but also to study the use and spread of the imperfective.

One final point worth mentioning is that discourse-oriented tense-aspect research in SLA should pay attention not only to nonnative but also native speakers' use of tense-aspect in discourse. There exist only few studies which have examined native discourse in comparison with nonnative speaker discourse (e.g., Andersen, 1994; Huang, 1993). Following Andersen's advice, SLA researchers should "study real speech by native speakers and real speech by nonnative speakers to fully understand what the nonnative speakers are learning and how far they have to go" (1994: 24).

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