The L2 Acquisition of Tense-Aspect Morphology

Edited by Rafael Salaberry Yasuhiro Shirai

The L2 Acquisition of Tense–Aspect Morphology

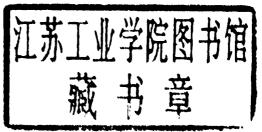
Edited by

Rafael Salaberry

Rice University

Yasuhiro Shirai

Cornell University



John Benjamins Publishing Company Amsterdam/Philadelphia



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI 239.48-1984.

Library of Congress Cataloging-in-Publication Data

The L2 Acquisition of Tense-Aspect Morphology / edited by Rafael Salaberry and Yas Shirai.

p. cm. (Language Acquisition & Language Disorders, ISSN 0925-0123; v. 27)

"This volume grew out of a colloquium on 'Description and explanation in L2 acquisition of tense-aspect morphology...' organized by the editors of this volume at the 21st Annual Meeting of AAAl (American Association for Applied Linguistics) held at Stamford, CT, in March 1999"

Includes bibliographical references and indexes.

1. Second language acquisition. 2. Grammar, Comparative and general--Tense. 3. general--Morphology. I. Salaberry, Rafael. II. Shirai, Yasuhiro, 1957- III. American Association for Applied Linguistics. IV. Series.

P118.2 .L17 2002

418-dc21

2002021517

ISBN 90 272 2495 1 (Eur.) / 1 58811 217 9 (US) (Hb; alk. paper)

© 2002 – John Benjamins B.V.

No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Co. · P.O. Box 36224 · 1020 ME Amsterdam · The Netherlands John Benjamins North America · P.O. Box 27519 · Philadelphia PA 19118-0519 · USA

Acknowledgments

No volume of this nature can be successfully brought to light without the trust, the expertise, and the work of many people. First of all, we would like to thank all the participants in the colloquium we organized at the Annual Meeting of the American Association for Applied Linguistics in 1999 for having provided the dialogic foundation for this volume. Our deepest thanks go to Roger Andersen, Kathleen Bardovi-Harlig, Patricia Duff, Alex Housen, Duan Duan Li, Silvina Montrul, Andreas Rohde, Roumyana Slabakova, and Richard Weist. We are also very thankful to the researchers who believed in our project and who so graciously agreed to contribute their time and expertise towards writing additional papers that were instrumental in making this volume a true reflection of the status of the field in the area of the acquisition of tense and aspect. We are very thankful to Maria Kihlstedt, Colette Noyau, Anna Giacalone Ramat, Sonia Rocca, and Eva Wiberg. We greatly appreciate the cooperation and responsiveness of all authors throughout the long process of preparing the chapters. We would also like to thank the anonymous reviewers who contributed with their expertise and useful suggestions to improve the quality and presentation of the chapters in this volume. Finally, we would like to thank the people at Benjamins. First, we are grateful to the editors of the series, Harald Clahsen and Lydia White for their trust in the value of our proposal and for supporting this project. We also owe our most sincere gratitude to Kees Vaes and his editorial team for their help throughout the editorial process.

Rafael Salaberry, Houston, TX Yasuhiro Shirai, Ithaca, NY

Contributors

Roger Andersen, University of California, Los Angeles, USA Kathleen Bardovi-Harlig, Indiana University, USA Patricia Duff, University of British Columbia, Canada Anna Giacalone-Ramat, Università di Pavia, Italy Alex Housen, Vrije Universiteit Brussel, Belgium María Kihlstedt, Université Paris-X - Nanterre, France Duanduan Li, Columbia University, USA Colette Noyau, Université Paris-X - Nanterre, France Sonia Rocca, Istituto Comprensivo, Italy Andreas Rohde, Kiel University, Germany Rafael Salaberry, Rice University, USA Yasuhiro Shirai, Cornell University, USA Roumyana Slabakova, University of Iowa, USA Silvina Montrul, University of Illinois, USA Richard Weist, SUNY College of Fredonia, USA Eva Wiberg, Lunds Universitet, Sweden

Abbreviations used in glosses

ACC	accusative
ASP	aspect
CL	classifier
F	feminine
FUT	future
GEN	genitive
GER	gerund
IMP	imperfective
INF	ìnfinitive
IO	indirect object
LOC	locative
M	masculine
NEG	negation
NOM	nominative
NPAST	nonpast
NVIR	non-virile
PART	partitive
PASS-PROSS	passato prossimo
PASS-REM	passato remoto
PAST	past
PC	passé composé
PFV	perfective
PL	plural
POL	polite form
PP	past participle
PRES	present
PROG	progressive
PRET	preterit
Q	question
REFL	reflexive
SG	singular
TOP	topic
1	first person
2	second person
3	third person

Table of contents

nowledgments	VII
tributors	IX
reviations used in glosses	x
L2 acquisition of tense-aspect morphology Rafael Salaberry & Yasuhiro Shirai	1
The first language acquisition of tense and aspect: A review Richard Weist	21
The dimensions of pastness Roger Andersen	79
Temporal relations in learner varieties: Grammaticalization and discourse construction Colette Noyau	107
Analyzing aspect Kathleen Bardovi-Harlig	129
The development of tense-aspect in English as a second language and the variable influence of inherent aspect Alex Housen	155
The aspect hypothesis in naturalistic L2 acquisition: What uninflected and non-target-like verb forms in early interlanguage tell us Andreas Rohde	199
How do learners acquire the classical three categories of temporality? Evidence from L2 Italian Anna Giacalone-Ramat	221
Lexical aspect in child second language acquisition of temporal morpholo A bidirectional study Sonia Rocca	gy: 249
Information structure in dialogic future plans: A study of Italian native speakers and Swedish preadvanced and advanced learners of Italian Eva Wiberg	285
	tributors reviations used in glosses L2 acquisition of tense-aspect morphology Rafael Salaberry & Yasuhiro Shirai The first language acquisition of tense and aspect: A review Richard Weist The dimensions of pastness Roger Andersen Temporal relations in learner varieties: Grammaticalization and discourse construction Colette Noyau Analyzing aspect Kathleen Bardovi-Harlig The development of tense-aspect in English as a second language and the variable influence of inherent aspect Alex Housen The aspect hypothesis in naturalistic L2 acquisition: What uninflected and non-target-like verb forms in early interlanguage tell us Andreas Rohde How do learners acquire the classical three categories of temporality? Evidence from L2 Italian Anna Giacalone-Ramat Lexical aspect in child second language acquisition of temporal morpholo A bidirectional study Sonia Rocca Information structure in dialogic future plans: A study of Italian native speakers and Swedish preadvanced and advanced learners of Italian

11.	11. Reference to past events in dialogue: The acquisition of tense and aspect	
	advanced learners of French María Kihlstedt	323
12.	On viewpoint aspect interpretation and its L2 acquisition: A UG perspective Roumyana Slabakova & Silvina Montrul	363
13.	Tense and aspect in the selection of Spanish past tense verbal morphology Rafael Salaberry	397
14.	The acquisition and use of perfective aspect in Mandarin Patricia Duff & Duanduan Li	417
15.	The prototype hypothesis of tense-aspect acquisition in second language $Yasuhiro\ Shirai$	455
	lex of names lex of subjects	479 483

CHAPTER 1

L2 acquisition of tense-aspect morphology

Rafael Salaberry and Yasuhiro Shirai

Introduction

This volume grew out of a Colloquium on "Description and explanation in L2 acquisition of tense-aspect morphology: Complementary perspectives" organized by the editors of this volume at the 21st Annual Meeting of AAAL (American Association for Applied Linguistics) held at Stamford, CT, in March 1999. We asked the presenters to update, revise and expand their papers, and we also invited additional contributions, in an effort to present complementary, multiple perspectives on the analysis of the development of tense and aspect in L2. Indeed, databased studies included in this volume deal with a wide variety of languages — English, Spanish, Italian, French, Chinese and Japanese. On the other hand, theoretical frameworks range from generative grammar to functional-typological linguistics. Several studies focus on the issues related to the Aspect Hypothesis, but other issues such as the acquisition of a future marker are also addressed. The papers submitted for inclusion in the volume went through a rigorous review process and we believe the final product represents a state-of-the-art of the field, which builds on, and goes beyond the recent comprehensive reviews on this topic (Bardovi-Harlig 2000; Li & Shirai 2000). To provide as comprehensive a view as possible, the present volume also includes a chapter that offers a substantive review of first language acquisition of tense-aspect morphology. Additionally, in the present chapter, we have outlined some theoretical and methodological issues that may serve as relevant preliminary reading for the chapters included in this volume. In sum, we believe that this volume will make significant contributions to our understanding of how L2 learners acquire tense-aspect morphology. Most important, we hope this volume will serve as a foundation for future studies in this area, and for theory building in second language acquisition in general.

Tense and aspect

Tense and aspect are semantic notions concerning temporality encoded implicitly and explicitly on the verb. Tense is a deictic category that places a situation in time with respect to some other time, usually the moment of speech. Aspect "concerns the different perspectives which a speaker can take and express with regard to the temporal course of some event, action, process, etc." (Klein 1994: 16). Aspect can be expressed lexically by the inherent lexical semantics of the verb and its interaction with direct and indirect arguments and adjuncts or morphosyntactically through verbal endings or periphrastic constructions (Dowty 1986; Smith 1991; Tenny 1994; Verkuyl 1994). The latter is traditionally called grammatical aspect (or viewpoint aspect) and the former is called lexical aspect (Andersen 1986) or situation type (Smith 1991).¹

Within the purview of lexical aspect, Vendler (1957) classified verbal predicates into four semantic types: states, activities, accomplishments and achievements. The following are some examples of verbs typically associated with specific lexical aspectual categories: states (be, have, love), activities (walk, run, laugh), accomplishments (run a mile, paint a house, build a bridge), and achievements (reach the peak, break a stick, notice something). Because the classification of verbs according to inherent lexical aspectual values is dependent on the verb constellation (i.e., internal arguments, external arguments and adjuncts) it is not necessarily true that any verb type will always be assigned to any given category of lexical aspect. For instance, the verbal predicate "to feel dizzy" may be classified as an achievement in the phrase "Suddenly she felt dizzy", but as a state in the phrase "All afternoon she felt dizzy." The reason is that the specific adverbial phrase changes the telicity of the verb, thereby, changing its composite value of lexical aspect. The classification of verb types can also be made in terms of three basic semantic dimensions: dynamicity, durativity and telicity (Comrie 1976; Andersen 1989; Smith 1991). Of Vendler's four classes, only achievements are non-durative (i.e., punctual). On the other hand, dynamicity contrasts stative versus dynamic (nonstative) verbs (i.e., activities, accomplishments and achievements). Finally, in terms of telicity, states and activities are atelic (no inherent endpoint) whereas accomplishments and achievements are telic.

Smith (1991) distinguishes situation aspect (verb + arguments + adverbials) from viewpoint aspect. While situation aspect constitutes a covert category of grammar instantiated in all languages, viewpoint aspect refers to the partial or full view of a particular situation type as marked by an overt grammatical morpheme. That is, aspect is also expressed morphosyntactically on the verb by inflectional morphemes (e.g., Preterite and Imperfect in Spanish) or periphrastic expressions (e.g., progressive aspect in English) to indicate the internal temporal constituency

of a situation. Perfective aspect is concerned with the beginning and end of a situation and is thus "bounded". Imperfective aspect, being "unbounded," focuses on the internal structure of the situation instead, viewing it as ongoing, with no specific endpoint. Notice that grammatical aspect makes reference to complete versus ongoing situations. However, while telicity is used to describe the aspectual nature of events at the lexical level, the notion of "boundedness" (Depraetre 1993), which is also related to endpoints, is relevant to describe the properties of grammatical aspect. Furthermore, viewpoint aspect is not categorical, i.e. it is based on the speaker's choice. Comrie (1976: 4) points out that "it is quite possible for the same speaker to refer to the same situation once with a perfective form, then with an imperfective, without in any way being self-contradictory." For instance, Comrie explains that reading may be used with the progressive or the simple past to refer to the same event: John read that book yesterday; while he was reading it, the postman came.² Furthermore, verbal morphology may override the lexical aspectual value of verb phrases. While the use of telic predicates (lexical aspect) tends to correlate with the use of perfective (grammatical aspect) and atelic with imperfective endings (i.e., prototypical, unmarked combinations), it is possible for the verbal morphology encoding perfective aspect to appear with stative verbs and the imperfective form with achievements. Smith (1991: 12) argues that "the speaker expresses a given aspectual meaning according to the grammar of the language and the conventions of use for that language." To summarize, the lexical value of aspect is composed of the inherent semantic value of the interaction between the verb and its arguments, as well as other elements that are not arguments of the verb proper, such as adverbials. Linguistic tests are often used to decide whether predicates are telic or atelic, or stative or non-stative, etc. In addition, the expression of viewpoint through verbal morphology contributes to aspectual interpretations, adding another layer of analysis.

Theoretical approaches

In the short time-span dedicated to the research of tense-aspect development in L2 acquisition, there have been several theoretical approaches to the analysis of this phenomenon. The first coherent theoretical proposal was the one provided by Roger Andersen based on the pioneering work of Vendler, Weist, and others: the Aspect Hypothesis. Andersen esentially claimed that the selection and use of perfective/past marking is initially restricted to the marking of telic predicates (i.e., achievements and accomplishments). In contrast, imperfective marking is initially restricted to marking atelic predicates (states and activities), whereas progressive marking is restricted to marking dynamic and atelic predicates (i.e. activities).

This form-meaning association has received much attention in the literature both in L1 and L2 (see Li & Shirai 2000, Salaberry 2000; Weist, Chapter 2) and many empirical studies have been carried out to uncover the nature of this form-meaning correlation.

Several studies of L1 and L2 acquisition indicate that the learners' interpretation of verbal morphology appears to be correlated to lexical aspect rather than tense in itself. There is still much disagreement, however, at the level of both description and explanation. Many of the chapters in this volume directly address the validity of this hypothesis from theoretical, empirical, and methodological viewpoints (see in particular chapters by Weist, Andersen, Bardovi-Harlig, Housen, Rohde, Giacalone-Ramat, Salaberry, Rocca, and Shirai). What will become apparent after reading these chapters is that a simple form-meaning correlation is only part of the larger picture conditioned by various factors - L1 transfer, input data and its processing, formation of prototypes, discourse functions, instructional variables, cognitive/universal constraints, and perhaps many more. As Shirai and Kurono (1998) pointed out, it is important to understand why so many studies follow the acquisitional pattern predicted by the hypothesis, and why some studies do not (see also Andersen, Chapter 3). For example, Giacalone-Ramat (Chapter 9) points out that some recent studies have uncovered some discrepancies with the proposed tenets of the Aspect Hypothesis. In order to solve this dilemma, she proposes two courses of action: (1) to analyze in more detail the possible effect that particular features of the native language may have on the processing and development of the target language, and (2) to emphasize the notion of prototypicality as the main phenomenon that makes the aspect hypothesis valid, which is in line with proposals by Andersen and Shirai (Andersen 1991; Shirai 1991; Andersen & Shirai 1994, 1996; Andersen this volume; Shirai this volume). It is interesting to note that Giacalone-Ramat suggests that prototypical semantic notions may be correlated with the frequency with which some forms may be reflected in language use (cf. The Distributional Bias Hypothesis, Andersen 1993; Andersen & Shirai 1994). Giacalone-Ramat proposes that the analysis of L2 developmental data of verbal morphology be done from the perspective of a functional theoretical framework that combines universal semantic cognitive structures (the relevance of lexical aspect, learning strategies) as well as language specific factors (e.g., L1 transfer, morphological typology of the language). Similarly, Andersen (Chapter 3) advocates the use of multiple perspectives for the analysis of learners developmental data, and discoursefunctional linguistics as a framework of analysis of learner data. Andersen claims that a multiple factor approach is an attempt to look at complex phenomena as complex phenomena without too much simplification (see also Shirai's spreading activation model: Chapter 15). Of course it is important not to forget the effects of potential interactions among various factors at the level of interpretations.

A complementary perspective is provided by studies carried out within the purview of a generative approach. For instance, Slabakova and Montrul (Chapter 12) argue that if we make a principled distinction between lexical and functional categories — as advocated in phrase structure representations of grammar functional categories and their feature specifications are to be considered the locus of all cross-linguistic differences. It follows that grammatical aspect (e.g., Spanish Preterite/Imperfect) represents a UG-constrained phenomenon. Slabakova and Montrul claim further that viewpoint aspect falls within the range of UG phenomena (contra Coppieters 1987) and is encoded in a functional category OuterAspP where the features [+/-bounded] are checked overtly through Preterite/Imperfect morphology. Following Giorgi and Pianesi (1997) they state that this functional category is not instantiated in English. The question that arises — within the aforementioned perspective — is whether learners who master the Preterite/Imperfect morphology have also acquired the semantic properties of this functional category. A crucial theoretical assumption of the approach adopted by Slabakova and Montrul is that if and when learners show evidence of use of the relevant target language inflectional morphology (in this case Spanish Preterite-Imperfect) they will also have demonstrated knowledge about the semantic properties associated with the required functional projection of Spanish past tense aspect. In other words, "if learners have acquired a specific functional projection, they will have knowledge both of the inflectional morphology (or other closed-class lexical items) and the conceptual-interpretive properties (i.e., semantics) associated with this projection." In more general terms, Slabakova and Montrul claim that it is the mapping between syntactic structures and semantic interpretation (mediated by UG principles and constraints) that guides the development of interlanguage grammars.

Methodological issues

The reader will notice that the papers in this volume reflect not only a variety of theoretical perspectives, but also several methodological differences as well. These research design contrasts are unavoidable as each study deals with specific factors isolated from a very complex phenomenon that spans syntactic, morphological, semantic and even pragmatic levels of analysis. The reader should approach the chapters with several caveats in mind in order to understand potentially contradictory results from one study to the next. For that purpose, in this section we alert the reader to some potential sources of discrepancy among the findings in the chapters that make up this volume.

We start off with potential variation in the operational classification of lexical aspectual classes. As briefly discussed above, the concept of a division of verbal

predicates into lexical aspectual classes (e.g., Vendler's states, activities, accomplishments and achievements) has been adopted by researchers from a wide variety of backgrounds: from syntacticians (e.g., Tenny 1994) to semanticists (e.g., Dowty 1979) to philosophers (e.g., Verkuyl 1989). Temporality, however, is not only encoded in the lexical semantics of the verbal predicate, but in components beyond the head of the verb phrase such as particles (e.g., to eat vs. to eat up), adverbials (e.g., Suddenly I was asleep), etc. As a consequence, it is important to distinguish the combined effects of each of the elements that make up the temporal framework of verb phrases. Since aspect is such a complex phenomenon, it is not surprising that linguists cannot agree on the system of verbal semantic classification in one language, not to mention in different languages. Although the linguistic tests first introduced by Weist et al. (1984) have refined the classification method greatly, they still are only an operationalization of a theoretical construct. For example, in some studies, the construct of states is defined by asking the question 'Does the predicate have a habitual interpretation in simple present tense?' but the classification is not foolproof, as can be seen in the reliability of classification of some studies (e.g. Shirai & Andersen 1995). Furthermore, researchers use different systems (e.g., 3, 4, 5, or 6-way classifications) depending on the objectives of the study and relevant methodological considerations. For instance, whereas Salaberry (Chapter 13) uses a three-way classification system, Shirai (Chapter 15) uses a four-way classification system. The difference is given by the decision to discriminate telic events into accomplishments and achievements or not. Another important source of discrepancy among studies is the effect of cross-linguistic differences. That is, the specific selection of L1-L2 combinations may generate specific findings that may not correlate to findings that would be obtained should we analyze a different L1-L2 pairing. For instance, morphological transparency together with saliency of morphological endings may be what triggers the early emergence of tense-aspect marking in some Romance languages compared to English in which such transparency and saliency are not as pronounced as in, for instance, L2 Italian or L2 Spanish. Indeed, Noyau (Chapter 4) analyzed the specific interaction between the typological make-up of the native and target language. Noyau argues that for a given population of learners (let us say L1 English speakers), Italian appears to be more transparent than, for instance, French with regards to the identification of semantic concepts such as temporality in verb inflectional paradigms. Additionally, Noyau claims that some semantic concepts may also be more transparent or, otherwise, more cognitively processable than others. She provides the example of French again, where the difficulty to acquire the Imparfait is compounded by the fact that this temporal marker conveys so many semantic nuances (including modality). Finally, Rohde (Chapter 7) also argues that the particular combination of L1 and L2 that he studied (L1 German and L2 English) results in specific patterns of development in verb morphology.

Another potential source of discrepancy among studies is the identification and selection of developmental stages to be analyzed. For instance, Giacalone Ramat's (Chapter 9) review of previous data reveals that the Imperfect is acquired only after the Present and Passato Prossimo have already become part of the learner's L2 morphological system. Additionally, she claims that the first uses of the imperfective occur with the copula essere. The imperfective is then marked on modal verbs (potere, volere), and eventually used with all other verbs. It is also important to analyze what happens with near-native speakers as Kihlstedt did (Chapter 11). Indeed, in her study a developmental difference seemed to exist between learners who restricted their use of French Imparfait to states and those who extended it to dynamic verbs. This factor correlated with other features, such as use of non-target like base forms, use of pluperfect and lexical variation. At the discourse level, short narratives and the marking of temporal moves between past events by specific syntactic and morphological means (pluperfect, narrative present) were observed only at a more advanced level and in the native data. Idiosyncratic morphology appeared in contexts of aspecto-temporal and/or syntactic complexity: in subordinate clauses involving two time spans in the past as well as in contexts where the actual time of the event only partly overlapped with the time spoken about. Kihlstedt's analysis focused on the impact of text type (dialogues), potential L1 influence and gains in discourse autonomy at 'post-basic' stages.

Finally, another methodological factor that needs to be considered is the contrast between L1 and L2 acquisition. For instance, the aspect hypothesis is often associated with four predictions concerning form-meaning association (Shirai 1991; Andersen and Shirai 1996), although the fourth one may be restricted to L1 acquisition processes only: (1) past/perfective form with telic verbs, (2) imperfective form with atelic verbs, (3) progressive form with activity verbs, (4) progressive form with dynamic verbs only (i.e. lack of overgeneralization). In the present volume, Rocca (Chapter 8) echoes the previous theoretical distinction and claims that studies of child SLA are crucial to integrate the findings from L1 and L2 acquisition of tense-aspect morphology. In her chapter, Rocca analyzes bi-directional longitudinal data: L1-Italian children learning English in England compared with L1-English children learning Italian in Italy. The aim of her study was to compare and integrate the role of universal factors with the role of language transfer. The chapters by Rohde and Housen also investigate child L2 acquisition of English.

Organization of chapters

The chapters that make up this volume have been organized into two separate sections. The first section comprises the chapters that present an overview of the research field that deals with various tense-aspect phenomena in language acquisition (chapters by Weist, Andersen, Noyau and Bardovi-Harlig). The second section comprises the chapters that provide an analysis of specific empirical data that was used to substantiate various theoretical perspectives previously advocated in this volume or the general research literature.

Introductory chapters

Chapter 2 by Weist reviews the acquisition of tense-aspect morphology in first language acquisition. Since many of the chapters in this volume refer to the relationship between verb semantics and the development of tense-aspect morphology, on the heels of similar research in first language (e.g., Bronckart & Sinclair 1973; Antinucci & Miller 1976), it is important to have a comprehensive review of the relevant L1 literature as a background to the chapters on L2 acquisition. Weist presents a thorough review of wide coverage ranging from Tomasello's functionalcognitive approach to generative approaches by Wexler, Hyams, and Meisel, as well as the debate concerning the relationship between tense-aspect morphology and verb semantics and a more recent debate on regular vs. irregular morphology. Not only is the review comprehensive, but it also presents a synthetic discussion reviewing the strengths and limitations of each approach with an additional analysis of child language corpus. In sum, Weist compares L1 and L2 acquisition, suggesting that they are diametrically opposed if L2 learners are assumed to acquire tense before aspect (e.g. Dietrich et al 1995) given that in L1 acquisition it is often argued that aspect is acquired before tense. At the same time, he points out, both L1 and L2 learners show an acquisition pattern which is congruent with the Aspect Hypothesis. This indeed is an important theoretical and empirical issue that needs to be addressed by L2 researchers. In Chapter 3 Andersen updates his previous proposal with his Expanded Aspect Hypothesis. Elaborating on the developmental hierarchy proposed in Andersen and Shirai (1996), he posits six dimensions that form the basis of the prototypical past tense form; namely, verb semantics (i.e. inherent aspect), event types (unitary vs. repeated), realis/irrealis, pragmatic role (direct assertion vs. pragmatic softener), grounding (foreground vs. background), and discourse structure. In this chapter, Andersen urges other researchers to go beyond the description of how morphology develops in relation to verb semantics, and explore the important question of explaining how learners create form-meaning/ function relationships in their developing grammar. To do so, he argues that discourse-functional linguistic principles should be used as a framework for the analysis of the development of tense-aspect distinctions in L2s.

In Chapter 4 Noyau analyzes the contextual effects of discourse and related communication constraints that help to shape the developmental processes that guide the acquisition of tense-aspect marking. In particular Noyau claims that during the beginning stages of acquisition, speakers can and do mark temporality with means other than inflectional morphology. For instance, L2 speakers can make use of their basic lexical inventory (e.g., adverbials, interlocutor scaffolding, narrative sequences) to mark temporality. Noyau argues that the question that we should ask ourselves at this juncture is: what motivates learners to go beyond this (arguably, communicatively successful) initial stage and use redundant markers of temporality as exemplified in French Imparfait-Passé Composé? Noyau explains that learners are faced with two major problems: the identification of L2 forms that serve to mark specific semantic concepts and the connection between forms and their function in the target language. During this type of process, the learner will hence, develop lexical hypotheses (specific verbal endings are associated with specific verb types), semantic hypotheses (specific verbal endings are associated with specific temporal concepts) and discourse hypotheses (specific verbal endings are associated with specific discursive structures). Borrowing from Bates and MacWhinney's (1989) competition model, Noyau claims that learners go through a period of systematic uncertainty in which there is a simultaneous competition among different levels of analysis of the target language. Noyau substantiates her point with examples of the development of past tense in L2 French. For instance, she claims that when a past event is to appear in the background of a narrative, or, vice versa, when a stative is moved to the foreground of a narrative, learners have to make difficult choices to appropriately mark such temporal nuances. For instance, if, in the first case, the past event is marked with present tense, we may then conclude that the level of discourse structure prevailed over the one of semantic function (signaled through morphological means). Finally, in Chapter 5, Bardovi-Harlig focuses on a methodological factor. In the studies that have addressed the Aspect Hypothesis, there have been two major approaches in calculating form-meaning correlations — one that asks the question of which morphological form is correlated with which semantic types of verbs, and another one that asks which semantic types of verbs are marked by which morphological form. She called the former the across-category analysis, and the latter the within-category analysis. Through the reanalyses of Bardovi-Harlig (1998) and Salaberry (1999), she shows that the two calculation methods reveal different aspects of data, and that we need to be more cautious in interpreting the percentages provided by researchers. By reanalyzing Salaberry (1999), she argues that it does follow the developmental predictions made by the Aspect Hypothesis, even though Salaberry presented the data as a