

Christiane Schöneberger

Grammar Growth in Child Second Language German

Investigating DP Development
in an Immersion Setting



PETER LANG
EDITION

1 Introduction

Language learning and success in the acquisition of a second language are topics that have greatly attracted the interest of linguists, educators and politicians over the past decades. It seems to be common sense that proficiency in a second language is an inevitable prerequisite for educational success, especially in contexts of migration and globalization when schooling is delivered in a second language. At the same time, second language acquisition research aims to gain insights into the developmental trajectory of language acquisition in order to achieve an in-depth understanding of the psycholinguistic processes underlying it. This, in turn, can help to derive theoretically well-founded and empirically supported recommendations for policy making in language learning and language teaching.

In order to contribute to this debate on second language acquisition research on the one hand and language education and politics on the other hand, two main perspectives will be pursued. First, there is the academic interest of linguists and second language acquisition researchers who aim to gain insights into processes of language acquisition and of grammar development. This includes in particular the questions how, i.e. via which developmental steps grammar growth proceeds, where it starts, i.e. whether it makes use of prerequisites such as the first language, and what its outcome looks like, i.e. whether grammar will become native-like in the end, and if not, why not.

From an applied perspective, language teachers, educators and politicians hope to learn more about program development and curriculum design in language learning. It is their interest to find out how language learning programs need to be designed and carried out in order to accommodate a diverse and multifaceted student body and to lead as many students as possible to success in language learning. In other words, the questions are, what is success in language learning and how can school programs help students to achieve it. In this context, aspects of multiculturalism and social inclusion play an increasingly important role.

Addressing aspects of second language acquisition research and language education, the present study aims at combining those two perspectives and

at promoting an exchange between theory and practice in order to contribute to quality development in language learning.

1.1 Motivation for the study

In the context of language acquisition, language learning and language education outlined above, the present study empirically investigates a specific and exceptional type of language learning situation: a full immersion program in German as a second language at Waddell Language Academy, a public school in Charlotte, North Carolina, United States of America. The school offers teaching in six different languages, English, German, French, Spanish, Chinese and Japanese. I first visited the school in 2007 and was instantly fascinated and intrigued by the positive attitude on multilingualism and by the enthusiasm for the program that teachers, parents and students alike all showed. On entering the school, it seemed perfectly normal that a parent addressed one of the administrative staff members in Spanish while the principal was having a conversation with a student in German while two Japanese teachers were planning their next field trip – all at the same time, in different languages. I had the opportunity during that first stay to visit several of the German teachers in their classrooms and also to carry out language assessments with students from the French, Japanese and German language strands. During that time my fascination and academic interest in the institution increased tremendously and I went home wondering how the students were doing what they were doing, what made them successful language learners and what one could learn from the program and transfer to other school programs in language learning.

Numerous further visits to the school in the following years have revealed a detailed picture of language development in German as a second language at the school. A closer look at the students' language performance revealed that some aspects of language proficiency, such as understanding and general communicative skills, are remarkably well developed while others appear to fall short of success, especially in the domain of grammar.

In the further course of research at the school, the aim was to find out which aspects of grammar are particularly challenging for the students and in how far these challenges might be explainable in relation to their first language. Additionally, it was investigated whether the detected difficulties

are robust across grade levels and across different kinds of tasks or whether an increase in grammar growth over the years can be detected and whether different tasks bring out different results in grammatical accuracy.

Finally, it is considered what the findings from Waddell Academy can contribute to other language learning programs in schools and in how far best practices can be derived from that school. In the interest of continuous development of the program, suggestions will be made how the detected grammatical problems can be educationally targeted within an immersive approach.

1.2 Aims of the study

This study is concerned with the development of the article system in German as a second language in child learners in a language immersion program. The study combines a theoretical perspective of research in the acquisition of second language syntax with an applied perspective on second language learning and teaching. Picking up on established findings from second language acquisition research as well as on numerous studies investigating the acquisition and development of articles and DP structures in a second language, this study will address selected issues of second language acquisition, DP syntax, and the immersion teaching methodology. The guiding question for the study is: how does the article system in L2 German develop in child language learners in an immersive school setting?

In particular, the empirical investigation aims at giving both a longitudinal and a cross-sectional observation of how the German article systems develops in second language acquisition (L2A). It is predicted that not all aspects of language proficiency develop equally in an immersion program and in terms of language acquisition research, one question is what can and what cannot be acquired in a naturalistic way. Arguably, the German article system is not a good candidate for proficient mastery via immersion and naturalistic learning only. This is related to questions of the role that the instructional context plays for success in second language learning.

From a theoretical perspective, the present study examines which aspects of language are notorious problem sources in the acquisition process, in other words, are some aspects of L2 grammars unlearnable/unacquirable? In this context, the role of the mother tongue as well as the typological

relatedness of the two languages in question need to be kept in mind as they might provide explanations for the observed development.

It is the overall aim of this study to combine theoretical aspects of second language acquisition research and practice-oriented aspects of language learning and teaching and to point out how one can inform the other.

1.3 Theoretical framework and outline of the study

Second language acquisition research has long established that child learners differ fundamentally from adult learners in both the route of language development as well as in the level of ultimate proficiency they attain. While children seem to acquire languages with greater ease and less effort, adults struggle more and typically achieve lower and more variable levels of language proficiency. This global statement, however, appears to become untenable when one looks more closely at specific grammatical structures. One such structure that is notoriously error-prone is the article.

A comparison of the languages of the world reveals that not all languages possess article-like elements. There are articleless languages like Asian or Slavic languages, for example. Languages that do possess articles behave very differently with regard to their use, functional distribution and formal complexity. And even in languages that appear to be structurally similar with regard to articles, the article system remains a challenge for language learners. English and German both have articles and on the surface both languages appear to be structurally similar. Language assessments in the German immersion program, however, have shown that article use in German is one of the areas where errors are frequent and persistent. This observation has evoked the questions *why* articles in L2 German seem to be a problem for the immersion students and *how* the German article system develops in such a context.

Articles serve various morphosyntactic and semantic functions, such as definiteness marking, number marking and gender and case marking. These nominal functional features are of great interest to the study of second language acquisition because they bring about morphological variability in second language grammars. Morphological variability is a widely debated topic in L2A research and has been abundantly attested in

various contexts of acquisition. Over the past decades, several theoretical explanations have been suggested to explain the persistent difficulties with L2 morphology that L2 learners show. These explanations include proposals of underspecification of L2 morphology, a mapping problem between overt forms and underlying features and finally problems with interfaces between levels of language being the source of such difficulties. The present study addresses these explanations and attempts to contribute further evidence and findings from second language acquisition of the German nominal system.

In addition to language-internal properties of functional complexity, success in language acquisition is also affected by variables and contexts of second language acquisition, such as age, input and the instructional context. The best researched of these aspects is age, and it seems to be consensus among researchers today that a young starting age combined with extensive exposure to L2 input eventually results in greatest success in L2A. However, native-like competence is a very rare outcome in L2A, and one needs to consider the domains of language individually in judging acquisitional success. From this perspective, young learners that are confronted with abundant qualitatively high L2 input in a naturalistic learning context should achieve the highest level of proficiency. However, grammar in particular tends to fall short of native-like success, even after extended periods of intensive exposure and training.

This debate is supplemented by a discussion of cognitive aspects of language production. In addition to the individual variables that are traditionally discussed in psycholinguistic language acquisition research, such as age or input quality and quantity, cognitive aspects also influence language outcome. Especially in school contexts of language learning, the issues of attention on the one hand and task design on the other hand are of crucial relevance. It is questionable to what extent school programs can really resemble naturalistic learning. Instead, one needs to presume that all schoolbased programs involve a certain degree of attention to language and grammatical awareness. It needs to be acknowledged, therefore, that language production is most likely influenced by aspects of attention and awareness. Additionally, the nature of the task that a learner is carrying out in a second language has been shown to influence the quality of language production. Again, tasks are something that no school program

can do without so considerations of task design and task effects need to be included in the examination and evaluation of every language learning program.

The theoretical basis of the present study is manifold. Starting out with a brief consideration of theory development in second language acquisition, the starting point and developmental trajectory of the language acquisition process will be contemplated. Also, the various types of language acquisition such as first language acquisition as opposed to child second language acquisition as opposed to adult second language acquisition will be contrasted in order to locate this study within that context.

Chapter 2 contains a description of the current state of academic research with regard to functional features in language acquisition. A review of respective research literature and existing empirical evidence will be provided in order to determine the state of the art. Theoretical accounts on functional features in L2 acquisition and explanatory approaches for L2 morphological variability will be presented to provide the theoretical basis for the study. Variables and contexts of second language acquisition will be presented and considered in section 2.2.5. That section includes a review on individual factors influencing success in L2A, such as age, instructional context and input. It also contains a presentation of cognitive aspects like task effects, attention and awareness in grammar development.

Section 2.3 addresses functional features in the nominal domain and gives a contrastive analysis of the form, distribution, use and functions of articles in English and German. Chapter 2 is rounded up by a review of studies on articles in first and second language acquisition. First, existent research and empirical findings on first language acquisition of the nominal system in German and English will be provided. Then, empirical evidence and recent research on second language acquisition of the German nominal system will be presented in order to serve as a point of departure for the hypotheses and empirical investigations of the present study.

Chapter 3 contains the empirical basis for this study. It starts out with the formation of research questions and hypotheses. In close relation to the theoretical and empirical findings presented in chapter 2, three main research questions are formulated. The first one targets the development of nominal concord in child L2 German and is carried out on the basis of four hypotheses. The second research question aims at the role of transfer

in the acquisition of German L2 grammar and culminates in four hypotheses. Finally, the third research question is concerned with task effects and three corresponding hypotheses are postulated.

Section 3.3 describes the methodology used for the empirical investigation. First, a brief overview on the development of immersion education is provided and the immersion approach is described as it represents a specific educational framework. In this context, the research site for the present study, Waddell Academy, is presented. Then follows a description of the data collection process, the participants of the study and a description of all tasks. The present study makes use of an ample data corpus. From 2007 to 2009, 145 students of Waddell Academy were tested, some of them repeatedly over the years on various tasks, amounting to a total of 199 test cases. Results have been obtained from grade levels 2 to 8. The task battery includes spontaneous production data from story retellings and picture descriptions as well as controlled production data from grammaticality judgment tasks and a cloze task. In both domains, spontaneous and controlled, oral and written data are included to allow for comparisons across task type. For the spontaneous production data, every single DP in an oral or written transcript was individually coded, amounting to a total of 2,712 DP structures that were included for analysis, from the retelling and picture description tasks only. Details of the data collection process are explained in section 3.3.2. The following section, 3.3.3, presents the procedures of data analysis and reports how data transcription and coding were carried out. It also explains the statistical analyses that were used for the empirical investigations.

Chapter 4 contains findings and results. It starts out with a presentation of assessment scores to provide a yardstick for the students' overall language proficiency. Then, accuracy is measured on the basis of the spontaneous production data by giving accuracy scores for each nominal functional feature. Subsequently, the more complex statistical analyses are carried out, evaluating correlations between features and conditions and determining the statistical significance of the findings. All statistical analyses are carried out with the help of the statistics software SPSS.

Section 4.2 sums up the results obtained from the statistical and quantitative analyses and describes them. In 4.3 the hypotheses from section 3.2 are revisited in the light of the obtained empirical evidence. It is pointed

out in how far the results speak to the hypotheses and how they qualify to verify or falsify them. Also, it is pointed out what conclusions the obtained findings suggest in relation to the hypotheses. These considerations tie in with the discussion that follows in chapter 5.

In the discussion in chapter 5, the results are discussed not only in relation to the hypotheses but especially in the context of the theoretical framework and the state of the art outlined in chapter 2. The discussion picks up on aspects of theory development in language acquisition, functional morphology in L2A and individual and cognitive variables of the L2A process. Additionally, it establishes a connection to educational issues of curriculum design and the implementation of language learning programs in schools. This part of the discussion also contains considerations on policy making in language learning.

Addressing both, theoretical and applied issues of second language acquisition and second language learning, this study aims to contribute to an increased understanding of fundamental aspects of second language acquisition research. At the same time, it aims to identify successful practices of language education in order to promote quality development in language learning.