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As reported by De Angelis in her seminal work *Third or Additional Language Acquisition* (2007), traditionally studies on language acquisition have primarily concentrated on the acquisition of first (L1) and second languages (L2). Thus, they have neglected the processes occurring in the mind of multilingual individuals when learning a third language (L3), although the majority of present-day language learners proceed to acquire languages beyond their second one, and the behaviour of second language learners cannot sufficiently provide insights into matters pertaining to multilingualism. Nevertheless, in recent times there has been a growing body of literature suggesting that the prior knowledge of one or more non-native languages can and should be taken into account as a significant factor in the investigation of non-native language acquisition. The volume we review below aims to concentrate on some pivotal studies in L3 acquisition research to provide an overview of the advancements made in this field, as well as the limitations of these studies and the areas that should be considered in future research.

The book, entitled *L3 Syntactic Transfer: Models, new developments and implications* and edited by Tanja Angelovska and Angela Hahn, provides a comprehensive overview of the field of L3 acquisition and highlights the factors that contribute to differences and similarities among individuals who speak multiple languages. It stresses the importance of examining instructed L3 acquisition, particularly in classroom settings with reduced input conditions, and highlights the gap in incorporating prior linguistic knowledge into pedagogical approaches. The volume is structured to refine existing models, present new empirical studies, and discuss implications for instructed L3 acquisition. It also addresses the significance of individual variability, factors affecting transfer, and the need for future research methodologies in L3 acquisition studies.

Most part of the studies featured in this book review and empirically examine some or all of the four models of cross-linguistic transfer. Next, these models are briefly presented to provide a comprehensive understanding of this review. The L1 Factor model, proposed by Na
Ranong and Leung (2009), suggests that the L1 has the greatest influence on the acquisition of a new language structure. In contrast, the L2 Status Factor Model, proposed by Bardel and Falk (2007) and Falk and Bardel (2011), argues that the recency and cognitive prominence of the L2 give it a more significant role in the initial stages of acquiring morphosyntax in a L3. The Cumulative Enhancement Model (CEM), introduced by Flynn et al. (2004), proposes that previously acquired properties from both L1 and L2 are potentially accessible to L3 learners during language processing. According to this model, prior language experiences can either facilitate or have a neutral impact on subsequent language acquisition. The Typological Primacy Model (TPM), developed by Rothman (2010, 2011, 2015), suggests that the initial development of L3 is constrained by the perceived structural similarity among the three grammars (L1, L2, and L3). This model highlights the influence of similarities in lexicon, phonetics/phonology, functional morphology, and syntactic structure. The perceived similarity leads to the transfer of the entire grammar, forming the initial state of L3 acquisition. Both the CEM and TPM propose that any previously acquired languages can serve as a source of transfer.

This book is divided into three parts. Part I, titled “Refining the existing models on L3 syntactic transfer”, presents papers that explore advancements in the aforementioned theoretical models of syntactic transfer in third language acquisition (TLA). Part II, “New empirical studies on L3 syntactic transfer”, features experimental research that examine the existing models from diverse perspectives, encompassing formal, lexico-functional, and neurocognitive approaches. Part III, named “Implications for instructed L3 acquisition”, offers discussions on the implications for learning and teaching arising from the prevailing L3 transfer research, while also suggesting novel strategies for improving the existing models, approaches and interventions as well as creating new ones.

The introduction (“L3 syntactic transfer – an integrative approach”), written by Tanja Angelovska and Angela Hahn, provides an overview of the field of third language acquisition and highlights the factors that contribute to differences and similarities among individuals who speak multiple languages. It references various studies that demonstrate the advantages of L3 learners over L2 learners in areas such as processing speed, delayed onset of dementia, executive processing, and word learning. The introduction emphasizes the need to examine instructed L3 acquisition, particularly in classroom settings with reduced input conditions. It also mentions the gap in incorporating prior linguistic knowledge into pedagogical approaches. This presentation further outlines the structure of the volume, which includes refining existing models, new empirical studies, and implications for instructed L3 acquisition. The final part of the introduction discusses the importance of individual variability, factors affecting transfer, and
the need for future research methodologies in L3 acquisition studies, including combined data collection methods and neurophysiological techniques like ERP measures.

Chapter 1 of Part I is titled “Language control in the context of L3 acquisition: The centrality of individual differences” by David W. Green. This chapter provides an insightful discussion on the intricacies of L3 acquisition, emphasizing the complex interplay between language control and individual differences. It explores the role of bottom-up and top-down control processes in the initial transfer of syntactic structures, considering different models of L3 acquisition. The chapter underscores the importance of understanding multilingual processing and the effects of L3 proficiency on the two prior languages. It highlights the impact of control processes on speech production in all languages involved and suggests that different trajectories exist based on cognitive abilities, motivation, and language context. The chapter concludes by emphasizing the need for longitudinal studies and investigating the influence of language ecology on language control and production.

In Chapter 2 ("Toward a new understanding of syntactic CLI: Evidence from L2 and L3 acquisition") Suzane Flynn and Éva Berkes explore various aspects of multilingual development and the influence of prior language knowledge on L2 and L3 acquisition. It addresses questions about the initial state of language acquisition, the impact of the first language and other known languages on language development, and the role of syntactic development. The paper emphasizes the need to consider both surface and abstract features in language acquisition and highlights the importance of understanding learners' developmental stages. The two independent studies presented in the chapter focus on the acquisition of empty categories in English L2 and L3 and examine the identification of features in relative clauses and binding properties in adverbial adjunct clauses. The findings suggest that learners' previous linguistic experience influences their acquisition of abstract features and that language learning is a cumulative process.

“Testing the current models of third language acquisition” by Roumyana Slabakova and María del Pilar García Mayo deals with factors such as psycho-cognitive prominence, structural characteristics of languages, and linguistic input in L3 acquisition. The authors argue that understanding how these factors interact is crucial in developing comprehensive theories of L3 development beyond the initial stages, considering the differential learnability of linguistic properties and the impact of discourse context on sentence acceptability. The study investigated the English proficiency and performance of trilingual and bilingual learners in experimental studies. The participants were tested on their ability to evaluate English L2 and L3 topicalization and null objects. The results showed that the participants had difficulty evaluating English
topicalization. However, they were more accurate in rejecting unacceptable null objects. The influence of Spanish was observed in the participants' ratings, with generic null objects rated significantly higher than specific null objects. The findings supported the Transfer-Driven Model in predicting the influence of Spanish on the acquisition of English topicalization. However, the predictions of the other L3 acquisition models (L1 Factor model, L2 Status Factor Model and Cumulative Enhancement model were not supported by the results.

The fourth chapter of Part I (“The L2 status factor hypothesis revisited: The role of metalinguistic knowledge, working memory, attention and noticing in third language learning”) is written by Camilla Bardel and Laura Sánchez. In it, the authors delve into the distinction between native (L1) and non-native languages (L2 and L3) in adult language learning, focusing on the role of explicit metalinguistic knowledge (MLK) and the impact of cognitive factors such as working memory (WM) and attention control (AC). The chapter adopts Paradis' (2004, 2008) declarative/procedural memory model, which suggests that while implicit linguistic competence (ILC) is prevalent in the native language, MLK plays a more significant role in non-native language learning. The chapter discusses the L2 status factor hypothesis, which considers MLK as an inherent feature of L2 status and explores language transfer and individual differences in L3 learning from previously acquired languages. The study also examines the relationship between WM, AC, and negative transfer caused by incorrect linguistic representations stored in declarative knowledge.

Chapter 5 (“Transfer or no transfer; that is the question: The role of the L1 & L2 in L3 acquisition” by Karoline Wirbatz and Pascal Buttkewitz) focuses on the acquisition of syntactic structures by L2 and L3 English learners. It compares two learner groups: L3 English learners with Turkish as L1 and German as L2, and L2 English learners with German as L1. The study aims to determine if these learners follow the same developmental hierarchy proposed by Pienemann’s (1998, 2005) Processability Theory (PT) or if there are notable differences in the acquisition of English as L3 and L2. Additionally, it investigates whether L3 learners transfer syntactic structures from their L2, regardless of their L1. The authors argue that theories proposing transfer from L1 or non-native languages in L3 production fail to provide convincing evidence on theoretical and empirical grounds, since none of these models consider processability as a significant factor. The authors propose the Developmentally Moderated Transfer Hypothesis (DMTH) as a psycholinguistic transfer-constraining theory based on processability. DMTH allows for transfer from both the L1 and L2, with facilitative and non-facilitative transfer, and predicts that learners follow the same developmental trajectory regardless of their L1 or whether the target language is an L2 or L3. The study presented in the

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Chapter investigates the acquisition of declarative and interrogative sentences by L2 and L3 English learners. The results indicate that, despite some individual differences, all learners follow the stages proposed by PT for the acquisition of English word order rules, regardless of whether they are learning English as L2 or L3. The study dismisses the claim of CLI in the acquisition of declarative sentences with constituents other than the subject in initial position. It suggests that the lack of target-like structures in the learners' data can be explained by processability constraints rather than transfer from previously learned languages.

Chapter 6, titled “On pronouns that drop (out of German)”, opens Part II of the book. In it, Ylva Falk investigates the transfer of the null-subject parameter (NSP) in third language (L3) learning. The study examines the results in relation to different theories of transfer, namely the L1 transfer hypothesis, the L2 status factor, and the Typological Proximity Model (TPM), and finds support for the L2 status factor. Previous studies on NSP (un)learning have yielded varying results, with some partially supporting the L1 transfer hypothesis, while others support the L2 status factor or the TPM. These studies have also highlighted individual variation based on the learner and the specific linguistic structure. This longitudinal study focuses on the acquisition of German as an L3 by absolute beginner learners who have Swedish as their L1 and various Romance languages, as well as English, as their L2s. The research question aims to determine if the L2 status factor has a strong influence, leading to the transfer of the NSP from an L2 that is neither typologically close nor similar to the L3, resulting in non-target-like structures. The two participants, both university teachers of Romance languages, had no prior formal instruction in German. The Obligatory Occasion Analysis (OOA) was used for data analysis, considering the subject pronoun acquired if it reaches a 90% criteria level on three consecutive occasions. The study reveals no visible development in the omission of subject pronouns over time, as neither learner reaches the 90% level at any occasion. Throughout the data collection semester, they continue to rely on transfer from their weakest L2, producing non-target-like utterances in German L3. The findings demonstrate that the NSP from one of the learners' weakest background languages is transferred into L3 German. This transfer can be explained by the strong influence of the L2 status factor on L3 syntax learning. Thus, the answer to the research question confirms that the L2 status factor has a significant impact, leading to the transfer of the NSP from a L2 that is neither typologically close nor similar to the L3, resulting in non-target-like structures.

Ainara Imaz Agirre and María del Pilar García Mayo are authors of Chapter 7, “Transfer effects in the acquisition of double object constructions in English as an L3”. This study investigates the transfer effects in the processing of dative alternation by L1 Spanish learners of
L2 English and Basque/Spanish learners of L3 English. The study examines the accuracy rates and reaction delays of different proficiency groups in evaluating and processing dative alternation constructions. The results reveal that L1 Spanish speakers were more accurate than Basque/Spanish bilinguals across proficiency levels, although none of the non-native groups achieved native-like accuracy. These findings support previous evidence of negative blocking effects. Additionally, the reaction delays indicate non-facilitative transfer in both non-native groups compared to native speakers. The predictions of L3 models were only partially confirmed, indicating the presence of non-facilitative transfer in L3 learner groups. The study also highlights the lack of differences between Basque/Spanish bilinguals and L1 Spanish speakers in terms of accuracy and reaction delays in the intermediate and advanced proficiency groups. Only the elementary group of L3 learners showed some bilingual advantage effects not observed in the higher proficiency groups, indicating a reanalysis process at the initial stages of learning. The findings suggest that previously acquired systems do not always result in facilitative transfer, contrary to the predictions of the CEM. Transfer from Spanish was not exclusively observed, as Basque/Spanish bilinguals displayed transfer from Basque in the processing of dative alternation. Proficiency levels played a significant role, with a minimum proficiency level required for the reanalysis process. However, increasing proficiency did not overcome the difficulties in accuracy and reaction delays, challenging previous claims about the resolution of negative blocking effects with proficiency. The study also highlights the difficulty in acquiring semantic aspects for non-native languages, particularly related to the Latinate and possessor constraints.

In Chapter 8, “L3 morphosyntactic effects on L1 vs. L2 systems: The Differential Stability Hypothesis”, Jennifer Cabrelli Amaro explores the phenomenon of regressive transfer in L3 acquisition and its impact on the L1 and L2 systems. While most research focuses on transfer during the initial stages of L3 acquisition, this study investigates L3 development and its influence on L1 English/L2 Spanish and L1 Spanish/L2 English bilinguals. The researchers specifically examine the influence of L3 Brazilian Portuguese (BP) on the bilinguals' L1 and L2 Spanish systems. The findings indicate that both L1 and L2 Spanish learners exhibit L3 influence, but the effect is stronger on the L2 Spanish group. This supports the Differential Stability Hypothesis (DSH) and emphasizes the importance of investigating L3 regressive transfer in theories of second language acquisition. The DSH, which expands on the Phonological Permeability Hypothesis (Cabrelli Amaro, 2013; Cabrelli Amaro & Rothman, 2010), posits the existence of a crucial timeframe wherein a grammar maintains a relatively stable state. Consequently, linguistic systems acquired beyond adolescence are more susceptible...
to being influenced by an L3 system compared to those acquired during early childhood. To test the DSH, the study focuses on subject-to-subject raising across a dative experiencer (TPExp) in Spanish and Brazilian Portuguese. The results reveal that both L1 and L2 Spanish groups rate TPExp structures higher than the Spanish control group, with the L2 Spanish group showing a larger difference. This suggests that L3 BP influence may play a role in the acceptability of TPExp structures in Spanish. The findings also support the DSH, indicating that L2 morphosyntactic representations are more susceptible to cross-linguistic influence than L1 representations.

Tanja Angelovska’s study “(When) do L3 English learners transfer from L2 German? Evidence from spoken and written data by Russian speakers” examines syntactic transfer in L3 acquisition, focusing on the source of transfer at elementary and intermediate proficiency levels. It considers the dominant language used on a daily basis by adult learners in an instructed foreign language learning setting. The study explores negative interlanguage transfer outcomes and the influence of L2 activation in L3 transfer. It specifically investigates the transfer of verb-second (V2) in declarative clauses, comparing Russian, English, and German. Predictions are made based on the four transfer models and considering factors such as the learners' dominant language and the typological similarity between languages. Language dominance is seen as a determining factor for the source of transfer. The study involves 13 adult L3 learners of English with L1 Russian and L2 German at various proficiency levels. Obligatory Occasion Analysis (OOA) is used to assess learners' accuracy in using specific linguistic features. The results show that none of the existing transfer models fully explain the observed patterns of transfer. Only a small percentage of sentences exhibit V2 transfer from the L2, and this transfer is phonologically triggered by the preceding topicalized element. In conclusion, this study highlights the complexity of syntactic transfer in L3 acquisition and emphasizes the role of language dominance and phonological factors. Further research is needed to explore these factors and their impact on transfer patterns in multilingual contexts.

The last chapter of Part II, “Transfer from an L2 in third language learning: A study on L2 proficiency” by Laura Sánchez and Camilla Bardel investigates the impact of prior non-native language proficiency (L2 proficiency) on transfer in third language learning (L3). Specifically, it focuses on the role of L2 German proficiency in the written production of L3 English by 73 Spanish/Catalan bilingual learners. The statistical analysis relies on ANCOVA, using the number of transferred items as the dependent variable and L2 proficiency as the independent variable. Biological age and proficiency in the target language (L3 proficiency) are included as covariates. The findings suggest that prior language knowledge and experience can influence
L3 learning by affecting overall target language proficiency and the development of specific lexical or grammatical features. Transfer in L3 occurs when learners draw on linguistic material from their L2 interlanguage grammar. The study indicates that L2 proficiency has an impact on the occurrence of transfer, with a significant decrease in transfer as proficiency levels increase. Learners at low and intermediate levels of L2 proficiency are more likely to transfer. This suggests that even moderate proficiency in the source language can exert a powerful influence on the learning process of the L3. The study highlights the importance of considering L2 proficiency in understanding transfer phenomena in L3 learning. It emphasizes the role of interlingual connections and the perception of similarities between L2 and L3, particularly in the area of syntax. Learners with low and intermediate levels of L2 proficiency are found to transfer verb placement, perceiving typological similarities between L2 and L3 that may not objectively exist. The findings indicate that interlanguage underdevelopment plays a significant role in transfer, making the L3 more vulnerable to influence from another non-native language.

Part III starts with Chapter 11 (“Input Processing and Processing Instruction: Pedagogical and cognitive considerations for L3 acquisition”), written by Alessandro Benati and John W. Schwieter. This chapter explores the concepts of Input Processing (IP) and Processing Instruction (PI) in second language (L2) acquisition. It discusses how learners prioritize extracting meaning over analysing grammatical structures and how PI can improve learners' form-meaning connections through explicit instruction. The chapter highlights the effectiveness of PI in various linguistic features and languages, and the persistence of its positive effects over time. Furthermore, it suggests the need for further research on individual differences and the role of previous language knowledge in L3 acquisition. The chapter concludes by emphasizing the importance of considering learner characteristics and language-specific factors in future studies.

Chapter 12, “From theory to practice in multilingualism: What theoretical research implies for third language learning” by Jorge González Alonso and Jason Rothman discusses the potential benefits of integrating insights from formal acquisition theories and empirical studies into language teaching practices. The authors acknowledge that there is often a disconnect between linguistic research on language acquisition and its application in the classroom. They argue that while formal linguistic studies focus on the process of acquisition itself, pedagogical interests are more concerned with the processes of learning. However, they believe that both acquisition and learning can inform each other and lead to mutual benefits. The chapter emphasizes the importance of understanding multilingual language acquisition and its implications for the language classroom. It discusses the differences between L2 and L3 learning.
scenarios when the first language (L1) is held constant and the target language (L2/L3) is also constant. The authors highlight the significance of predicting the source of transfer in L3 acquisition and how it can help teachers differentiate between learners with L2 experience and those without. By reliably predicting multilingual transfer, teachers can tailor their instruction to meet the specific needs of multilingual learners. The chapter also provides an example from Rothman and Cabrelli Amaro's study on null subject syntax in L2 and L3 learners. It discusses the subset-superset relationship between null-subject and non-null subject grammars and how it affects the acquisition process. The study found that learners who initially represented English or French as null-subject languages had difficulty stopping the omission of subjects in contexts where it is grammatically required. The authors argue that such findings highlight the complexity of language learning and the need for teachers to be aware of the specific challenges that multilingual learners may face.

Overall, the chapter emphasizes the importance of bridging the gap between linguistic research and classroom practice. It suggests that integrating insights from formal acquisition theories and empirical studies can enhance language teaching and help address the unique needs of multilingual learners. By understanding the processes of acquisition and learning, teachers can make informed decisions and design effective instructional interventions in the language classroom.

The last chapter, “Input-Practice-Output: A method for teaching L3 English after L2 German with a focus on syntactic transfer” by Angela Hahn and Tanja Angelovska, emphasizes the significance of teachers' awareness of their own and their learners' knowledge in effectively addressing negative syntactic transfer in L3 acquisition. The interplay of previously acquired supporter languages plays a crucial role in the acquisition of L3 grammar. Language awareness, particularly among teachers, is essential in heterogeneous classrooms where L3 learners face specific challenges related to grammar instruction. The chapter acknowledges the lack of a framework and practical suggestions for handling classroom situations with a majority of L3 learners who possess different language repertoires. It proposes a combination of two approaches: Action research and the flipped classroom. Action research involves teachers actively engaging in a collaborative process to identify and address specific problems or challenges, leading to practical knowledge and improvements. The flipped classroom approach reverses the traditional order of learning activities, enabling students to engage with instructional materials outside the classroom and promoting active learning during class time. For L3 teaching, the authors suggest integrating the diverse language repertoires of learners by tailoring grammar activities to their previous linguistic knowledge. This includes taking into
account typological relatedness between languages and incorporating learners' personal interests and world knowledge. The input-practice-output (IPO) method, which follows a structured sequence of learning activities, is recommended as an effective instructional framework. It involves providing relevant input, allowing practice and application, and producing output to promote meaningful learning and skill development. The chapter also highlights the importance of designing materials that sensitize learners to negative syntactic transfer phenomena and encourage the use of correct word order. Teachers are encouraged to enhance the input phase by proactively using specific examples of linguistic features from previously acquired languages that are prone to transfer. Various modes of input enhancement, such as colours, sizes, and intonation, can be incorporated into materials to support learners in deducing rules on their own. By combining action research, the flipped classroom approach, and the IPO method, teachers can create a learner-centred framework that addresses L3 learners' challenges and raises their metalinguistic awareness. This comprehensive approach provides practical insights and applications for L3 grammar instruction, empowering teachers to make informed decisions based on their learners' language backgrounds and individual needs.

To sum up, this book contributes to a deeper understanding of L3 acquisition and provides valuable information for researchers, educators, and language learners alike. However, despite the undeniable advancements demonstrated by the studies compiled in this volume, it remains indisputable that key questions related to the processes of learning and acquisition of an L3 still remain unresolved. It becomes evident, after reading the book, that there is a need for conducting studies that involve larger groups of informants, which would enable the generalizability of data and the derivation of conclusions that can benefit L3 instruction. Additionally, it is observed that while certain morphosyntactic aspects, such as word order or empty categories, have been extensively studied, many other equally important elements of grammar remain unexplored, such as the study of functional words or the complexity of verb conjugation, among others. Furthermore, there is a lack of longitudinal studies that would allow examining to what extent the proposed models of cross-linguistic influence serve to analyse the data obtained from the performances of intermediate and advanced-level students. Additionally, it would be desirable to complement the research on L3 Syntactic Transfer with studies dedicated to L3s other than English, in order to provide a broader perspective on the issues faced in this field of study.

Nonetheless, this volume provides valuable insights into the field of L3 acquisition. It explores various factors influencing L3 learning, including language control, individual differences, prior language knowledge, and cognitive abilities. It discusses the complexities of transfer in L3 acquisition, highlighting the importance of understanding multilingual processing.
and the impact of L3 proficiency on prior languages. The empirical studies presented in the book shed light on specific aspects of L3 syntactic transfer, such as the acquisition of some morphosyntactic categories, the role of metalinguistic knowledge and cognitive factors, and the influence of the L1 and L2 on L3 learning.

References


