

## English Summary

This dissertation examines second language (L2) performance in three linguistic domains in order to explore whether L2 performance exhibits domain-related modularity, i.e. whether or not L2 learners may perform well within one linguistic domain while performing poorly within another linguistic domain. It is further examined whether the nature of such domain-related modularity varies between L2 groups differing in native language (L1) background and degree of L2 experience. Specifically, the dissertation examines L2 performance in syntax, phonetics and phonology, and the lexicon in four L2 learner groups, Experienced and Inexperienced L1 Danish and L1 Finnish learners of English, and compares the performance of these L2 learner groups to the performance of a baseline group of native English speakers. Experienced learners have lived in an English speaking country for at least 2.5 months, and Inexperienced learners have not lived in an English speaking country for a longer period of time. The dissertation moreover examines a number of domain internal expectations on L2 performance within the three domains of interest

The dissertation consists of three empirical studies of L2 performance: 1) a syntax study examining Grammaticality Judgements of negation and question formation, 2) a phonetics and phonology study examining L2 speech perception and production, and 3) a study examining lexical knowledge. The dissertation approaches L2 performance within the three domains with current models of domain-specific L2 acquisition. The dissertation moreover examines relations between levels of L2 performance in the different linguistic domains in order to address the two modularity questions, i.e. whether there is domain-related modularity in L2 performance, and whether the nature of such domain-related modularity depends on L1 background and degree of L2 experience.

Chapter 1 presents the theoretical and empirical motivation for studying between-domain relations in L2 performance. Chapter 1 also presents an overview over the dissertation. A number of previous studies suggest some difference between the three linguistic domains with respect to L1 acquisition, L2 acquisition, and language retention. In the area of L2 acquisition, the Conrad Phenomenon presents interesting anecdotal evidence on the nature of between-domain relations. The Conrad Phenomenon is named after the famous author, Joseph Conrad, whose native language was Polish but who wrote his literary works in English. Judging from these literary works, Joseph Conrad mastered English

morphosyntax and lexicon at a near-native level. Nevertheless, he was known to speak with a very strong Polish accent. This discrepancy between Joseph Conrad's levels of L2 performance in different linguistic domains of English is known as the Conrad Phenomenon. Chapter 1 presents two competing accounts of the Conrad Phenomenon, i.e. the Modularity Account, which claims independence between linguistic domains in L2 performance, and the Inverse Relation Account, which claims an inverse relation between L2 performance in the domains of syntax and the lexicon on the one hand and in the domain of phonetics and phonology on the other hand.

Chapter 2 presents the experimental design of the dissertation arguing for the choice of target language and native languages. English is chosen as target language due to its position as the globally most dominant L2 and the most studied target language in second language acquisition research. Hence, results from the present dissertation are comparable to a large amount of previous research. Danish and Finnish are chosen as native languages in order to examine variation in the linguistic learning task while keeping differences in the learning environment minimal. While Danish has many linguistic similarities with English, Finnish is markedly different from English. However, Denmark and Finland exhibit similar learning environments for L2 learners of English due to similar educational systems and exposure to anglophone speech in the media.

Chapter 3 is a methods chapter presenting information about participants, experimental procedures, and statistical analyses.

The following three chapters present domain-internal models, hypotheses, methods, results, and analyses of three studies of L2 English performance in Experienced and Inexperienced L1 Danish and L1 Finnish learners as well as the native speaker baseline. Each study examines L2 performance in a specific linguistic domain; syntax (Chapter 4), phonetics and phonology (Chapter 5), and the lexicon (Chapter 6).

Chapter 4 presents a Grammaticality Judgement study on embedded and main clause sentential negation, *yes-no*-questions, and *wh*-questions in English. L2 performance on these syntactic constructions is examined because these constructions exhibit structural differences at different syntactic layers, among English, Danish, and Finnish. The results are analysed in terms of Modulated Structure Building, which is a generative model of L2 syntax acquisition, and in terms of the concept of cross-linguistic overcorrection, which is the tendency to overstress L1-L2 differences rather than L1-L2 similarities. The study found general support for the Modulated Structure Building notion that L2 syntax develops incrementally from the hierarchically lowest layer to the hierarchically highest layer even though there was a ceiling

effect. However, the expected overall group differences were not observed, either between L2 learners and native speakers or among L2 groups. The lack of group effects is plausibly due to the ceiling effect. The only construction exhibiting a group effect was embedded *wh*-questions, for which Inexperienced L1 Finnish learners accepted *do*-support in 38% of the cases. This is an instance of cross-linguistic overcorrection, because neither Finnish nor English have inversion in embedded *wh*-questions, while Finnish, contrary to English, has inversion in embedded *yes-no*-questions. Based on these results, the incorporation of the concept of cross-linguistic overcorrection into the Modulated Structure Building Model is argued to be beneficial. The incorporation of cross-linguistic overcorrection helps Modulated Structure Building account for cases of non-straightforward L1 transfer, such as the acceptance of *do*-support in Inexperienced L1 Finnish learners of English. Moreover, Modulated Structure Building provides a formal framework for studying cross-linguistic overcorrection.

Chapter 5 presents a study on L2 speech perception and production consisting of two experiments. Experiment 1 is an assimilation study examining how English vowels and consonants map on to the phoneme inventories of Danish and Finnish. Experiment 2 is a study on L2 speech perception and production performance. L2 speech perception is measured by means of identification tests for vowels and consonants. L2 speech production is measured as ratings of perceived global foreign accent. The assimilation results showed that English vowels map onto Finnish in a more consistent manner than they map onto Danish, while English consonants map onto Danish in a more consistent manner than they map onto Finnish. Based on hypotheses derived from the Speech Learning Model and the Perceptual Assimilation Model, the assimilation results from Experiment 1 were used to predict identification accuracy in Experiment 2. Predictions regarding the identification of English phones which were perceived to be the only exemplar of their L1 counterpart or which had no L1 counterpart were generally supported, while predictions regarding the identification of English phones which were perceived to be one among two or more exemplars of the same L1 counterpart were only partially supported, as was the predicted relationship between perception and production.

Chapter 6 presents a lexical study, in which English vocabulary size is measured by means of The Vocabulary Size Test, which is a multiple-choice definition test. The vocabulary sizes obtained suggest that all L2 participants are lexically equipped to listen to spoken English and read novels and newspapers unaided in English. The lexical study further examined the effect of word family frequency and cognateness on correct word definition and

found a positive effect of word family frequency for all groups and a positive effect of cognateness for the Inexperienced learner groups only.

Chapter 7 draws together the results of the three domain-internal studies in order to examine the modularity questions. The study found no support for either the Modularity Account or the Inverse Relation account of the Conrad Phenomenon. Instead, the present data suggests that Joseph Conrad was an exceptional L2 learner in exhibiting such a strong discrepancy between the levels of his L2 performance in the domains of syntax and the lexicon on the one hand and in the domain of phonetics and phonology on the other hand. Correlations between levels of L2 performance in the three linguistic domains revealed a general trend of positive relations between domains, though a considerably degree of variation in between-domain relations was observed among L2 groups differing in L2 experience and L1 background, suggesting that the nature of between-domain relations depends on the combination of native language and degree of L2 experience. The observed relation between L2 performance in the lexical domain and in the domain of phonetics and phonology was especially strong, which supports the claim of the Vocab Model regarding a lexical facilitation effect in L2 speech acquisition. Lexical facilitation of L2 speech acquisition presents an example of between-domain relations playing a role in domain-internal matters. The present data suggest that the relation between L2 vocabulary and L2 speech acquisition may not be the only between-domain relation in L2 performance, and since between-domain relations plays a role in domain-internal matters in the case of L2 speech acquisition, it is likely do so in other linguistic domains as well. Chapter 7 moreover examines the validity of L2 learners' self-estimated competence in the three linguistic domains and found that L2 learners have some awareness of their strengths and weaknesses in their L2, especially in the lexical domain and least so in the domain of syntax. However, L2 groups differing in L1 background and degree of L2 experience varied considerably in both degree of awareness and domain of most awareness.

To conclude, this dissertation presents three studies on L2 performance in Experienced and Inexperienced L1 Danish and L1 Finnish learners of English in three different linguistic domains and analyses the results both domain-internally and between domains. The main findings of the dissertation are that, in general, L2 performance in different linguistic domains is positively related, and that domain-internal analyses may benefit from knowledge of between-domain relations. Consequently it is argued that between-domain relations in L2 acquisition should be researched further.

