Summary of the dissertation

This dissertation addresses the question of whether the written production of gender marking in French is constrained by the syntactic complexity of agreement constructions and the (lack of) phonological expression of gender inflection.

The first part of this dissertation is concerned with the structural analysis and the acquisition of gender inflection. In chapter 2, I defined the working definition of syntactic complexity and ranked adjectives and past participles agreement constructions in French based on their level of syntactic complexity. In the experiments reported on in chapter 4 and 5, these analyses are used as a measure of the syntactic complexity of gender agreement constructions. Against this background, well-founded predications are made for the processing accuracy of these constructions in French.

Chapter 3 gives a state-of-the-art on the L1 and L2 acquisition of gender inflection. In this respect, the acquisition order of gender inflection in native speakers is related to the size of the syntactic domain in which agreement takes place. This effect has mainly been shown in spoken language production by native speakers and can best be explained by the fact that the processing of agreement constructions hosted in a larger syntactic domain (e.g. past participle agreement), is cognitively more demanding than the processing of agreement constructions hosted in a smaller syntactic domain (e.g. noun-adjective agreement). As a result, fewer cognitive resources leave for the production process of gender inflection. This leads to a decrease of the production accuracy. Furthermore, this chapter gives an overview of studies on the effect of the phonological expression of inflections written language production. This overview shows that the lack of phonologically distinct inflections has a negative effect in the written productions by native speakers. This effect, however, has not been found in the written productions by second language learners.

In either L1 or L2 literature, both the potential effect of syntactic complexity and phonological expression on the written production of inflections did not receive much attention. Only a few studies are dedicated to these topics. This dissertation tackles these issues in the written production of gender marking in French.

The second part of this dissertation addresses the question of whether the effect of syntactic complexity and phonological expression have an effect on written French gender marking. In chapter 4, I focused on syntactic complexity. For
that purpose, a set of agreement constructions representing different levels of syntactic complexity, were used as a test bed: noun-adjective, clitic-past participle and noun-past participle agreement constructions. For both native speakers and second language learners of French, the results showed that more writing errors are made in agreement constructions representing a relatively large syntactic domain. More specifically, in both native speakers and second language learners, past participle agreement elicited more writing errors than noun-adjective agreement. Furthermore, clitic-past participle agreement constructions elicited fewer writing errors than noun-past participle agreement constructions. This suggests that an increased level of syntactic complexity probably engages extra computational efforts in the processing of complex sentences.

Chapter 5 addressed the question of whether the phonological expression of gender inflection (overt vs. covert nature) and the lexical category of the word to be inflected (adjective vs. past participle), have an effect on the accuracy of gender inflection in written French. In this experiment, the target items were in attributive or predicative positions in order to account for potential interactions between syntactic complexity, phonological expression and lexical category. The results showed that, in both native speakers and second language learners of French, the syntactic complexity of the sentence and the lexical category of the target item have an effect on the accuracy of gender inflection in written French. More specifically, gender inflection in adjectives elicited fewer writing errors than in past participles. Here also, the syntactic complexity of the sentence influences the accuracy of gender inflection: predicative constructions elicited more writing errors than attributive ones. With respect to the phonological expression of gender inflection, this factor only has an effect on the written production of gender inflection within certain levels of syntactic complexity and with particular lexical categories. In adjectives for instance, ‘silent’ gender inflection elicited more writing errors than overtly expressed ones in the native speakers’ written productions. Furthermore, in attributive positions, overtly expressed gender inflection elicited fewer writing errors than ‘silent’ ones in second language learners.

In chapter 6, I tested the performance of some French digital grammar and spell checkers (Antidote, BonPatron and Scribens) in order to evaluate whether they could be effective to improve the students’ performance at writing gender inflection. I used the test items of the experiment reported on in chapter 4, and submitted these items to the grammar and spell checkers. The results showed that the performance of these grammar and spell checkers differ in particular agreement constructions. More precisely, these checkers performed better in noun-adjective and noun-past participle constructions than in clitic-past participles ones. Subsequently, I compared these results to those of human language learners reported in chapter 4, to test whether French grammar and spell checkers are more accurate in correcting gender marking than language users. The comparisons
showed that the checkers developed for native speakers of French (Antidote and Scribens), performed better than language users in noun-adjective and noun-past participle agreement constructions. However, in clitic-past participle agreement constructions, native speakers performed better than these checkers. With respect to checkers developed for second language learners of French (Antidote and BonPatron), BonPatron reached a similar level of performance than this group of language learners. Comparisons between the Antidote checker and second language learners showed that Antidote outperformed these learners in noun-adjective and noun-past participle agreement constructions, but not in clitic-past participle agreement constructions.

The results of this dissertation are important for the educational practice. For form-focused writing instructions on grammatical inflection, the advice to language teachers and publishers would be to firstly focus on agreement constructions representing relatively small syntactic domains. More complex constructions should be treated by following a gradual scale of syntactic complexity. In writing exercises for native speakers of French, specific attention needs to be paid to adjectives exhibiting ‘silent’ gender marking to make these native speakers aware of gender inflection in these particular adjectives. Roughly the same holds for second language learners of French. In this group of language users, specific attention needs to be paid to attributive adjectives and past participles exhibiting ‘silent’ inflection.

Based on the tests on French grammar and spell checkers, teachers using digital checkers in language education, needs to decide on which grammar checker could be of help to students. In this respect, for both native speakers and second language learners of French, Antidote and Scribens might be effective to improve the students’ performance in noun-adjective and noun-past participle constructions, but not in clitic-past participle constructions.