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The L2 acquisition of the French quantitative pronoun *en* by L1 learners of Dutch: vulnerable domains and cross-linguistic influence


Abstract
Success or failure in L2 acquisition has been attributed to different factors, such as the linguistic domain involved, (the absence of) instruction or positive or negative transfer. Whereas in most of the literature these factors are studied separately, in this paper we investigate the relative impact of each of them, analyzing the L2 acquisition of the French quantitative pronoun *en* by native speakers of Dutch. On the basis of acquisition data elicited in a Grammaticality Judgment Task, we show that the L2 acquisition of *en* proceeds very slowly. We argue that this is mainly caused by the presence of a similar, but not completely equivalent pronoun in Dutch.

1. Introduction

In French, if a noun is omitted in an indefinite object DP, the pronominal clitic *en* has to be used to signal the ellipsis of the noun, instructing the hearer or reader to retrieve the interpretation of the elided noun from the linguistic or situational context:

(1) *Combien d’enfants avez-vous? J’en ai trois.*

‘How many children do you have? I have three’

Since the main role of the indefinite object noun phrase that *en* is used with is to quantify, *en* has been called quantitative *en* in the generative literature (Milner, 1978; Hulk, 1982).

Starting in the seventies, various aspects of the use of *en* have been analyzed, such as the original syntactic position of the clitic (Kayne, 1977; Milner, 1978; Hulk, 1982), the licensing of the elided noun (Sleeman, 1996; Bouchard, 2002), and the syntactic contexts in which *en* has to be used and those in which it cannot be used (Pollock, 1998; Sleeman, 2003).

* We thank the research institute ACLC of the University of Amsterdam for hosting Tabea Ihsane as a guest researcher during the spring of 2016. This paper is the result of our collaboration during that period. We are also very grateful to two anonymous reviewers and the editors for their critical remarks and useful suggestions. Finally, we thank our research assistant Sanne Leeman for helping us to collect the data and the participants for accepting to participate in this research.
Whereas in (1) the indefinite object DP is introduced by a quantifier, 
*en* can also occur in combination with a not explicitly quantified plural 
indefinite complement:

(2) *Marie voit des enfants sur la plage. Paul en voit aussi.*
Marie sees IND children on the beach Paul EN sees also 
‘Marie sees children on the beach. Paul also sees children’

Ihsane (2013) claims that noun phrases introduced by *des* cannot always be 
combined with *en*. This is the case if the noun phrase has a referential 
interpretation:

(3) *Marie voit des enfants sur la plage. Ce sont Sophie et Claire.*
Marie sees IND children on the beach it are Sophie and Claire
*Paul en voit aussi / Paul les voit aussi.*
Paul EN sees also / Paul them sees also 
‘Marie sees children on the beach. They are Sophie and Claire. Paul 
also sees children / Paul also sees them’

Ihsane accounts for the distinction between (2) and (3) by claiming that 
different layers within the DP can be pronominalized, a non-referential layer 
and a referential layer, respectively.

Whereas some research has been done on the L1 acquisition of *en* 
(Valois & Royle, 2009; Gavarró, Guasti, Tuller, Prévost, Belletti, Cilibrasi, 
Delage & Vernice, 2011; Sleeman & Hulk, 2013; Berends, Hulk & Sleeman, 
2016), much less is known about L2 acquisition of *en*. Wust (2009) used a 
dictogloss task to test the comprehension of French clitics by learners of 
French with L1 English. She shows that not a single low- or intermediate-
level student used quantitative *en* in their recreations of the dictogloss task. 
Wust concludes that this may indicate that this is a late-emerging form in L2 
production. In this study, we test the intuitions of L2 learners of French who, 
contrary to the English-speaking students, have a comparable pronoun in their 
L1, Dutch.

The goal of this paper is to study which factors influence the L2 
acquisition of the French quantitative pronoun *en* by L1 Dutch learners. Since 
the correct use of *en* involves syntax, semantics and pragmatics, we firstly 
explore which aspects are more difficult to acquire than others. Secondly, we 
investigate if explicit instruction or the absence thereof may influence L2 
acquisition. Third, we are interested in the positive or negative influence of 
the presence of a quantitative pronoun in the L1 of the learners on their 
acquisition of a quantitative pronoun in the L2. To be able to answer our 
questions, we submitted a Grammaticality Judgment Task to a group of 
advanced learners of French with L1 Dutch.

The paper is organized as follows. In section 2 we present several 
theoretical analyses of *en* that have been proposed in the literature. Section 3
provides a general theoretical background on acquisition. In section 4, the context of study, our research questions and our predictions are presented, followed by our results in section 5 and a discussion in section 6.

2. Theoretical analyses of *en*

In this section, we briefly present several theoretical analyses of *en* which show that there are several types of *en* (section 2.1), and that the use of *en* is restricted by semantic notions like (non-)referentiality (section 2.2) and by additional factors, like function (section 2.3).

2.1 The interpretation of *en*

French has three types of *en*: the quantitative *en* illustrated in the Introduction, a partitive *en* (see below) and a genitive *en*, i.e. a pronoun replacing a prepositional phrase (PP) as in (4) below:

(4) *Tu connais ce livre? Jean en a parlé ce soir.*
     you know this book Jean EN has spoken this evening

     ‘Do you know this book? Jean talked about it tonight’

Besides quantitative and genitive *en*, Milner (1978) distinguished a third type of *en*, the partitive *en*, used to express a part-whole relation:

(5) *Il a attrapé trois lions hier. Il en a tué deux aujourd’hui.*
     he has caught three lions yesterday he EN has killed two today

     ‘He caught three lions yesterday. He killed two (of them) today’

In (5), *il en a tué deux* is ambiguous: the two lions can either be two of the three lions that were caught (partitive *en*) or two other lions (quantitative *en*).

2.2 Referential and non-referential des-phrases

Kayne (1977) proposes that *en* is always a pro-PP, replacing a phrase starting with the preposition *de* (1977: 108ff, 129). In (4), *en* replaces the complement of a verb, but it could also pronominalize the complement of an adjective like *de sa famille* ‘of his family’ in *fier de sa famille* ‘proud of his family’ and of a noun like *de ce livre* ‘of this book’ in *la couverture de ce livre* ‘the cover of this book’.

In contrast to subject and direct object pronouns, *en* does not carry any agreement features (cf. the contrast in (6) and (7) with a past participle). Kayne argues that this supports his analysis of *en* as a pro-PP rather than a pro-N(P).
(6) Jean a conduit la voiture. Il l’a conduit*(e).
Jean has driven the car. He drove it.

(7) Il a souffert de la solitude.
he has suffered of loneliness.
Il en a souffert*(e).
he has suffered.
‘He has suffered from loneliness. He has suffered from it’

Kayne proposes that the structure of des-constituents, on a par with examples involving a numeral (8a), contains a PP (8b), (1977: 120-3), which is, in both cases, pronominalized by en. In addition, he postulates a rule that erases des in (8b).

(8) a. [NP une [PP de fleur]]
   one of flower
b. [NP des [PP de fleurs]]
   IND of flowers

Ihsane (2013) shows however that such an analysis cannot account for the contrast between (9) and (10), namely for the fact that the des-phrase can be replaced by en in (9) but not in (10) (cf. the b examples): (8) predicts that en should be grammatical in both cases, contrary to fact.

(9) a. Jean cherche des noisettes.
   Jean is looking for nuts
   ‘Jean is looking for nuts’

b. Jean en cherche.
   Jean EN is looking for

(10) Speaker A:
      I have seen the garden it were Jules and Sophie
      ‘I saw some children in the garden, namely Jules and Sophie’

Speaker B:
   b. *Oui, j’en ai vu aussi.
      yes I have seen too
   c. Oui, je les ai vus aussi.
      yes I have seen too
      ‘Yes, I’ve seen them, too’

What Ihsane (2013) proposes to account for the above contrast is that the des-constituents in these contexts represent different syntactic categories, associated with different interpretations, and that en can only replace one of
them, the non-referential one in (9), thus corroborating Gross’ (1973) observation that quantitative *en* cannot be referential. That *des enfants* ‘some children’ in (10a) is referential is supported by (10c), in which the pronoun *les* must be used. In terms of structure, Ihsane suggests that the syntactic categories of the *des*-constituents correspond to different layers of the nominal structure, say FP$_{+\text{Ref}}$ ...$>$ FP$_{\text{Ref}}$.

Quantitative *en* can replace the latter but not the former.

### 2.3 The presence/omission of *en*

The quantitative pronoun *en* is obligatorily used in standard French with noun phrases involving quantities in object position. With subject noun phrases it cannot be used.

To account for this asymmetry, Pollock (1998) proposes that these constructions involve a null topic operator which licenses a null pronoun *pro* and which moves as a head to C$^\circ$. As this operator is not a clitic, its movement is blocked by the intervening V and I in examples like (11), leading to ungrammaticality.


*I have already sent two to Anne*

‘I have already sent two to Anne’

To rescue (11), quantitative *en* has to be used. Quantitative *en* is a head that attaches to a verbal host and that licenses *pro*. Since *en* is a clitic, its movement in (12) is not blocked by any heads:

(12) J’en ai lu trois pro.

*I EN have read three*

‘I have read three (of them)’

If the empty operator is extracted from a subject position, there are no blocking heads, and the empty operator can move to C$^\circ$:

(13) C$^\circ$[Op, ] t i Trois pro viennent d’être vendus.

*three come of to.be sold*

‘Three have just been sold’

In Pollock’s analysis, quantitative *en* can only license *pro* if it minimally c-commands *pro* at spell-out (cf. Hulk, 1982). This is the case in (12), but not in (14).

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1 SRefP and PropP in Ihsane’s (2013) article, for Speaker’s Reference Phrase and Property Phrase, respectively.
Instead of a syntactic account, Sleeman (2003) proposes a pragmatic analysis of the subject–object asymmetry illustrated above (see also Sleeman, 1996). In the framework of Erteschik-Shir’s (1997) theory of focus structure, Sleeman claims that, in (13), an empty pronoun can be used and that anaphoric *en* is not necessary, because within the topical subject the empty noun is a subordinate topic, with the quantifier functioning as the subordinate focus (cf. (15)). The subordinate topic can be related to an overt noun in the linguistic or situational context, from which it retrieves its interpretation.

(15) **[[trois]_{FOC-sub} [pro]_{TOP-sub} ]_{TOP} viennent d’être vendus.**

In (11), the empty noun is not a subordinate topic, because the indefinite object is in focus position, which explains the ungrammaticality of the sentence:

(16) **[^J’ai déjà expédié [deux pro]_{FOC} à Anne.**

In (12), the quantitative pronoun *en* is anaphoric, and therefore can be analyzed as a subordinate topic:

(17) **J’en ai lu [[trois]_{FOC-sub} [ti]_{TOP-sub }]{FOC.**

Sleeman (2003) claims that, in an analysis in which partitives involve an empty noun, the empty noun is a subordinate topic, because it is coreferential with the noun within the partitive PP, which is a topic:

(18) **[II]_{TOP} [a insulté [deux]_{FOC-sub} pro [de mes collègues]_{TOP-sub}]_{FOC.**  

‘He has insulted two of my colleagues’

The use of *en* in this case is pragmatically superfluous, which explains the unacceptability of (19):

(19) **[^II]_{TOP} en, [a insulté [deux]_{FOC-sub} ti [de mes collègues]_{TOP-sub}]_{FOC.**  

‘He EN has insulted two of my colleagues’

If the empty noun is part of a definite noun phrase, i.e. a topic, in object position, as in (20), it is also licensed, because it can be related to a referent in the context, from which it can retrieve its interpretation. In (21), as in (14), the ungrammaticality of *en* is due to pragmatic reasons, its use being pragmatically unnecessary. Pollock’s operator-analysis cannot account for
this contrast. If, in (20), an operator has moved to $C^o$, the sentence would have to be ungrammatical, like (11), contrary to fact. As for (21), it would have to be grammatical, like (12), unless $D^o$ counts as an intervening head blocking the relation between $en$ and its trace. In this case, the grammaticality of (20), which also contains a possible blocking $D^o$, would still have to be accounted for. Sentence (21) contrasts with (22), which contains an indefinite determiner + adjective and in which $en$ is required in standard French, cf. (16)-(17).

(20) *Il a attrapé trois lions. Il a tué [le troisième pro]$\text{TOP}$.  
    he has caught three lions he has killed the third  
    ‘He caught three lions. He killed the third’

(21) Il a attrapé trois lions. *Il en, a tué le troisième $t_i$.  
(22) Il *(en) a tué [un troisième]$\text{FOC}$.  
    he EN has killed a third one

In this study, we investigate whether L1 Dutch learners make a distinction between the quantitative and the partitive interpretations of $en$ (section 2.1), and between referential and non-referential $des$-DPs when using $en$, (section 2.2). We also test the L2 learners’ knowledge of the presence/omission of quantitative $en$, which we consider to be a pragmatic phenomenon, preferring Sleeman’s (2003) analysis over Pollock’s (1998), as argued in this subsection. If the presence/omission of $en$ turns out to be one of the most difficult aspects of the acquisition of $en$, this might support the Interface Hypothesis (Sorace & Filiaci, 2006, a.o.), which we discuss in the next section. If learners do not make a distinction between referential and non-referential NPs, this might be caused by instruction. It might also be that non-complete L2 acquisition is hindered by the negative influence of the L1, an aspect also addressed in the next section.

3. Modules of grammar, instruction and cross-linguistic influence

The knowledge of the use of $en$ involves various aspects related to different modules of grammar. The knowledge of the position of $en$ cliticizing to a verbal host concerns syntax, and its quantitative or partitive interpretation concerns semantics. If Ihsane (2013) is correct in claiming that only non-referential $des$-phrases can be replaced by $en$, this knowledge of $en$ also involves semantics. If Sleeman’s (2003) analysis of the presence/omission of $en$ is correct, this aspect of $en$ would involve pragmatics. A theory that seeks to account for the order in which phenomena are acquired in L2 acquisition is the Interface Hypothesis (Sorace, 2000, 2005; Sorace & Filiaci, 2006), which we present in section 3.1. In section 3.2 the role of instruction is briefly discussed. Another aspect of the L2 acquisition of $en$ that we investigate is
the influence of the L1, which also possesses a quantitative pronoun. In section 3.3 we compare the use of *en* in French and of *er* in Dutch.

### 3.1 The Interface Hypothesis

The Interface Hypothesis (IH) was first formulated for near native L2 acquisition, but has been later extended to other types of bilingual acquisition, such as less advanced L2 learners (Lardiere, 2011; White, 2011a). According to the IH, phenomena that concern the interface between two modules, such as the syntax-semantics or the syntax-pragmatics interface, should be more difficult to acquire than phenomena that only concern one module, such as pure syntax. In a later version of the IH (Tsimpli & Sorace, 2006; Sorace & Serratrice, 2009; White, 2011b), a distinction is made between internal and external interfaces. Interfaces that relate two modules of grammar are internal interfaces, such as the syntax-semantics interface. An interface with a module outside of grammar, such as the syntax-pragmatics interface, is an external interface. External interfaces should be more vulnerable in acquisition than internal interfaces according to the more recent versions of the IH.

Several studies, involving different types of populations, have supported the IH by showing that interface phenomena are more vulnerable in acquisition than purely syntactic phenomena (Tsimpli, Sorace, Heycock & Filiaci, 2004; Sorace & Filiaci, 2006). Other studies, however, have shown that purely syntactic phenomena may remain difficult for the learner (Cuza, 2012) or that interface phenomena do not raise many problems (Rothman, 2008) or do so only for less advanced L2 learners (Slabakova, Kemchinsky & Rothman, 2012). In this paper we test the IH by examining what the relative difficulty of acquisition by advanced L2 learners is of various aspects of the quantitative pronoun *en*.

If the IH is correct, then purely syntactic phenomena involving quantitative *en* (such as its placement) should be acquired before phenomena involving the syntax-semantics interface (such as the impossibility for *en* to replace referential *des*-phrases), which in turn should pose fewer problems to the L2 learner than phenomena related to the syntax-pragmatics interface (such as presence/omission in Sleeman’s 2003 analysis).²

² One of the reviewers observes that even within modules or Interfaces there may be relative complexity of phenomena. This means that a relatively complex syntactic phenomenon may be more difficult to acquire than a relatively non-complex Interface phenomenon. Also, a relatively non-complex syntactic phenomenon may be easier to acquire than Interface phenomena simply because of that, and not because syntax would be easier to acquire than the Interfaces (White, 2011b). Laleko & Polinsky (2016) argue that phenomena related to the CP might be more difficult because they involve a higher portion of the structure (cf. Platzack, 2001) and not because of their interface properties. We are aware of this problem for the Interface Hypothesis. Therefore we tested phenomena that we all judged equally complex.
3.2 Instruction

It is well-known that explicit instruction may prevent fossilization and may help the learner to acquire the correct use of the L2. However, what is often not discussed in the literature is that a lack of explicit instruction may hinder acquisition. Ihsane, Forel & Kusseling (2015) show that in textbooks destined to learners of L2 French, it is observed that *des*-phrases can be replaced by *en*, not making a distinction between referential and non-referential noun phrases. This rule incorrectly predicts that referential noun phrases can be replaced by *en*.

3.3 Cross-linguistic influence

In the acquisitional process, cross-linguistic influence from the L1 on the L2 is possible. This influence can be positive or negative. Dutch, like French, possesses a quantitative pronoun (*er*), but the uses of *en* vs. *er* are not completely identical. When their use is identical, positive transfer is expected, whereas when it is not identical, there might be negative transfer. The contexts in which *en/er* behave the same are listed below and illustrated with French.

(i) Neither *en* nor *er* can replace referential indefinite plural NPs; a definite pronoun is required, cf. (10c).
(ii) Both *en/er* have a quantitative and a partitive interpretation, cf. (5). Besides, for the partitive interpretation the pronoun *ervan* is also used in Dutch (23).

(23) Context: Last year we built 50 houses.
   a. *Gisteren hebben we er twee afgebroken. [Er zijn er nog 48 over.]*
   yesterad have we ER two demolished [there are 48 left]
   ‘Yesterday we demolished two’ [There are 48 left]
   b. *Gisteren hebben we twee ervan afgebroken. [Er zijn er nog 48 over.]*
   yesterad have we two ERVAN demolished [there are 48 left]
   ‘Yesterday we demolished two of them’ [There are 48 left]

(iii) Both *en/er* are used with a quantified object and are impossible with a subject, cf. (11)-(17).
(iv) Both *en/er* are impossible in combination with a partitive PP, cf. (18)-(19).
(v) Both *en/er* are impossible with a definite complement containing an adjective, cf. (20)-(21).

3 Note that a difference between *en* and *er* is that the former is a clitic in French, occurring in preverbal position, whereas the latter is a pronoun and is placed after the inflected verb.
In other contexts, *en*/*er* differ, in particular with indefinite complements that do not contain a quantifier:

(i) *en* is required and *er* ungrammatical with non-referential indefinite plural NPs, cf. (9);
(ii) *en* is required and *er* ungrammatical with mass nouns, cf. (24);
(iii) *en* is required and *er* ungrammatical with a negated singular or plural complement, cf. (25). Native speakers of Dutch seem to prefer a definite pronoun *ze/het* ‘them/it’ or the non-replacement of the noun phrase in contexts like (i-iii), cf. (26) for (i).

(24) Context: Louis: *Les chats ont bu du lait ce matin?* Louis: the cats have drunk DU milk this morning
Jeanne: *Oui, ils en/*l’ ont bu.* Jeanne: yes they EN/it have drunk
‘Louis: Did the cats drink milk this morning? Jeanne: Yes, they did’

(25) Context: Anne: *Tu ne bois jamais de vin?* Anne: you NEG drink never of wine
Lucie: *Non, je n’ en/*le bois jamais.* Lucie: no I NEG EN/it drink never
‘Anne: Do you never drink wine? Lucie: No, I never do’

(26) Context: At the wedding all guests may take some flowers from a basket to throw at the bride and the bridegroom. Julia decides to throw flowers. Michelle says:
  a. *Ik gooi er ook.* I throw ER too
  b. *Ik gooi ze ook.* ‘I throw them too’
  c. *Ik gooi ook bloemen.* ‘I also throw flowers’

(iv) *en* is required (in standard French) and *er* ungrammatical with an indefinite complement containing an adjective, cf. (27) vs. (28):

(27) Context: Marie a acheté un ballon bleu. Marie has bought a balloon blue
*Pierre *(en) a acheté un rouge.* Pierre EN has bought a red
‘Pierre bought a red one’

(28) Context: Mary bought a blue ball in the shop.
*Peter heeft *(er) een rode in de winkel gekocht.* Peter has ER a red in the shop bought
In the next section, our research questions and predictions, as well as our methodology are outlined.

4. Experimental study

4.1 Research questions and predictions

In this study we investigate which factors influence L2 acquisition most. We address three research questions:

*RQ1:* Which aspects of *en* are more vulnerable than others in L2 acquisition?

*RQ2:* Do instructed L2 learners of French make a distinction between referential and non-referential noun phrases when they replace them by a pronoun?

*RQ3:* What is the role of transfer in the L2 acquisition of quantitative *en*?

RQ1 pertains to the IH as seen in section 3.1. RQ2 is related to the semantic phenomenon mentioned in section 2.2, namely the fact that the use of *en* depends on the (non-)referential interpretation of the complement. Whereas RQ1 concerns intra-linguistic relative complexity, RQ3 deals with relative complexity in relation to cross-linguistic influence.

With respect to these research questions, we make the following predictions:

*Pred 1:* If modules of grammar influence L2 acquisition, the presence/omission of *en*, under a pragmatic analysis, should be more vulnerable than syntactic-semantic phenomena involving *en* (cf. sections 2.2 and 3.1). Both should be acquired after syntactic phenomena such as clitic placement.

*Pred 2:* Because of instruction, L2 learners of French replace both referential and non-referential *des* + noun by *en*.

*Pred 3:* With respect to the acquisition of the quantitative pronoun *en*, we predict that there may be positive transfer in constructions that are similar in the L1 and in the L2. In contrast, phenomena that are not present in the L1 are predicted to be acquired more slowly or to lead to negative transfer.

In the next section, we present our methodology.
4.2 Methodology

4.2.1 Participants
We tested 28 native speakers of Dutch, studying French at the university of Amsterdam in the Netherlands (age range: 20-30). Five participants were left out because they were bilingual Dutch-French, had been living a long time in France or did not have Dutch as L1. We grouped the 23 remaining students according to their level of study into undergraduates (13 students) and masters/masters+ (10 students). The masters+ students were former Master students that recently graduated.4 A control group of 8 native speakers of French filled in the French part of the test. The L1 Dutch learners of French L2 filled in both the French part and the Dutch part of the test, in this order. They all had roughly the same entry level when they started the Bachelor’s study French Language and Culture, as they had learned French at secondary school during six years. At university, they all followed more or less the same program French Language and Culture, and were submitted to the same exams testing their proficiency of French.

4.2.2 The test
The test was an online grammaticality judgment task (GJT), with 92 French questions including 8 fillers, and 88 Dutch questions including 16 fillers. A brief context was provided in brackets when necessary. In section 3.3, we used some of the test items to illustrate similarities and differences between French and Dutch. The order of the questions was randomized and there was no time limit for the participants to take the test. Because of the length of the test (180 items + a questionnaire), we decided to submit the test in the form of a binary choice task. Students had to choose between “correct” and “incorrect”. In an introductory message that the students were asked to read before they started the test, we told the students that there were only two options, “correct” and “incorrect”, although this could be a simplification. We asked the students to choose for each question the option that came closest to their judgments, “correct” or “incorrect”.5 At the end of the task, they had to provide some information about their background (sex, age, mother tongue(s), level of French, certificate etc.). Some students took the test in class as an offline task.

Table 1 lists the phenomena that were tested and indicates the number of items per phenomenon. The phenomena were illustrated in section 3.3. For

4 At the end of the Bachelor program, Dutch students of French generally have reached level B2/C1 of the common European framework of reference for languages. Master students generally reach level C1/C2.
5 One of the reviewers observes that in the current research a gradient Likert scale is preferred above a binary choice. However, studies such as Bader & Häussler (2010) and Weskott & Fanselow (2011) report that gradient and binary judgments yielded quite similar results.
several phenomena the participants had to judge both grammatical and ungrammatical sentences.\textsuperscript{6,7}

The French test contained 36 questions pertaining to the syntax-semantics interface and 30 questions related to the syntax-pragmatics interface (in Sleeman’s 2003 analysis, see section 2.3). Furthermore, the participants had to answer 18 syntax questions testing the position of the clitic le ‘it/him’ or les ‘them’: 6 with vouloir ‘want’ / oser ‘dare’ / pouvoir ‘be able to’, 6 in interrogatives with an inverted subject, and 6 with the causative faire + infinitive. The first context is illustrated in (29). We used clitic le(s) here, and not quantitative en, because we did not want the students to judge the acceptability of the use of en in these sentences, but only the position of the clitic. We assume that the students’ judgment of the position of the clitic le(s) by transitivity also holds for the position of en. Sleeman (2010) shows that the three clitic constructions mentioned above are extremely problematic for Dutch (first year) BA students of French.

\begin{table}
\begin{tabular}{l}
\textbf{(29) Context:} & \textit{Jean veut voir le film}.\\
          & Jean wants to see the film\\
\end{tabular}
\end{table}

\begin{itemize}
\item \textit{Jean veut le voir.}\\
     Jean wants it to see\\
     ‘Jean wants to see it’\\
\item *\textit{Jean le veut voir.}\\
     Jean it wants to see
\end{itemize}

The Dutch test contained 54 questions pertaining to the syntax-semantics interface and 12 questions related to the syntax-pragmatics interface. For Dutch, we did not test the acceptance of the use of er with indefinite subjects or with partitive noun phrases.

We did not test the syntactic knowledge of the position of the pronoun er in Dutch, although the position of the quantitative pronoun differs in Dutch and French, because we did not expect any variation here among Dutch speakers. There is another phenomenon that can be classified in Dutch as syntactic, which is the non-use of er in combination with noun phrases containing an indefinite determiner or quantifier and an adjective, as in (22). In Kranendonk’s (2010) analysis, in Dutch er is underlyingly the complement of a quantifier, leaving structurally no room for an adjective. This would account for the fact that in Dutch er cannot occur with indefinite noun phrases.

\textsuperscript{6} The second author’s judgments served as the baseline for French and the first author’s judgements as a baseline for Dutch. These judgments generally correspond to judgments given in traditional grammars or the linguistic literature.

\textsuperscript{7} In the presentation of the phenomena that were part of the test in section 3.3, some sentences are preceded by question marks. In Table 1 these are presented as “grammatical”.
containing an adjective. There were 6 sentences testing the participants’ knowledge of this phenomenon.  

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<td></td>
<td>Fr</td>
<td>Du</td>
<td>Fr</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>U</td>
<td>G</td>
</tr>
<tr>
<td>Non-referential plural NPs</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Referential plural NPs</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Mass nouns</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Negated singular nouns</td>
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<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Negated plural nouns</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Quant. and partit. interpretation</td>
<td>6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Quantified object NPs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indefinite determiner + adjective</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Definite determiner + adjective</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Indefinite subjects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partitive PP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clitic position</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Number and nature of test sentences. Fr stands for French, Du for Dutch, G for grammatical and U for ungrammatical.

In the next section we present the results of our analysis of the data.

5. Results

First, we present the results of the three groups separately with respect to the subdomains of the French test (section 5.1). Subsequently, we focus on the data that we need to answer our RQs: we compare the results per module of grammar (semantics/pragmatics/syntax), focus on the distinction between referential and non-referential indefinite plural NPs, and compare the results of the French test to the results of the Dutch test, in three subsections.

5.1 Overall results

Tables 2-4 contain the results per subdomain in percentages of accuracy. The percentages of accuracy tend to be lower for ungrammatical items than for grammatical items, especially for French.

---

8 For French, we classified this phenomenon as a syntax-pragmatics interface phenomenon. In French, en is used in combination with elliptical indefinite object NPs containing an adjective, or a quantifier, in contrast to definite NPs with an adjective. However, speakers should also have knowledge of the structural size of the constituent that the quantitative pronoun replaces in its underlying position within the noun phrase. Whereas in Dutch, this structural size is relatively big, in French it is smaller, so that the quantitative pronoun can underlyingly be the complement of an adjective.
<table>
<thead>
<tr>
<th>Syntax-Semantics</th>
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<th>Dutch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>U</td>
</tr>
<tr>
<td>Non-referential plural NPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>15.4%</td>
<td>15.4%</td>
</tr>
<tr>
<td></td>
<td>6/39</td>
<td>6/39</td>
</tr>
<tr>
<td>MA</td>
<td>60%</td>
<td>43.3%</td>
</tr>
<tr>
<td></td>
<td>18/30</td>
<td>13/30</td>
</tr>
<tr>
<td>NS</td>
<td>100%</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>24/24</td>
<td>18/24</td>
</tr>
<tr>
<td>Referential plural NPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>92.3%</td>
<td>79.5%</td>
</tr>
<tr>
<td></td>
<td>36/39</td>
<td>31/39</td>
</tr>
<tr>
<td>MA</td>
<td>96.7%</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>29/30</td>
<td>24/30</td>
</tr>
<tr>
<td>NS</td>
<td>100%</td>
<td>70.8%</td>
</tr>
<tr>
<td></td>
<td>24/24</td>
<td>17/24</td>
</tr>
<tr>
<td>Mass nouns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>56.4%</td>
<td>30.8%</td>
</tr>
<tr>
<td></td>
<td>22/39</td>
<td>12/39</td>
</tr>
<tr>
<td>MA</td>
<td>80%</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>24/30</td>
<td>15/30</td>
</tr>
<tr>
<td>NS</td>
<td>95.8%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>23/24</td>
<td>24/24</td>
</tr>
<tr>
<td>Negated singular nouns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>74.3%</td>
<td>23.1%</td>
</tr>
<tr>
<td></td>
<td>29/39</td>
<td>9/39</td>
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<tr>
<td>MA</td>
<td>90%</td>
<td>63.3%</td>
</tr>
<tr>
<td></td>
<td>27/30</td>
<td>19/30</td>
</tr>
<tr>
<td></td>
<td>NS</td>
<td>100%</td>
</tr>
<tr>
<td>------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>24/24</td>
<td>24/24</td>
</tr>
<tr>
<td>Negated plural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nouns</td>
<td>BA</td>
<td>56.4%</td>
</tr>
<tr>
<td></td>
<td>22/39</td>
<td>5/39</td>
</tr>
<tr>
<td></td>
<td>MA</td>
<td>76.7%</td>
</tr>
<tr>
<td></td>
<td>23/30</td>
<td>14/30</td>
</tr>
<tr>
<td></td>
<td>NS</td>
<td>95.8%</td>
</tr>
<tr>
<td></td>
<td>23/24</td>
<td>24/24</td>
</tr>
<tr>
<td>Quantitative and partitive</td>
<td>BA</td>
<td>56.4%</td>
</tr>
<tr>
<td></td>
<td>44/78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MA</td>
<td>76.7%</td>
</tr>
<tr>
<td></td>
<td>46/60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NS</td>
<td>95.8%</td>
</tr>
<tr>
<td></td>
<td>46/48</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Percentages of accuracy in semantic test items. BA stands for Bachelor Students, MA for Master Students, NS for Native Speakers, G for grammatical and U for ungrammatical.

<table>
<thead>
<tr>
<th>Syntax-Pragmatics</th>
<th>French</th>
<th></th>
<th>Dutch</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>U</td>
<td>G</td>
<td>U</td>
</tr>
<tr>
<td>Quantified object NP</td>
<td>BA</td>
<td>71.8%</td>
<td>56.4%</td>
<td>89.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28/39</td>
<td>22/39</td>
<td>35/39</td>
</tr>
<tr>
<td></td>
<td>MA</td>
<td>96.7%</td>
<td>73.3%</td>
<td>96.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29/30</td>
<td>22/30</td>
<td>29/30</td>
</tr>
<tr>
<td></td>
<td>NS</td>
<td>BA</td>
<td>MA</td>
<td>NS</td>
</tr>
<tr>
<td>------------------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Indefinite</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>determiner +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adjective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>33.3%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>24/24</td>
<td>13/39</td>
<td>15/30</td>
<td>24/24</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>30.8%</td>
<td>33.3%</td>
<td>62.5%</td>
</tr>
<tr>
<td></td>
<td>24/24</td>
<td>12/39</td>
<td>10/30</td>
<td>15/24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>89.7%</td>
<td>93.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>35/39</td>
<td>28/30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>29/39</td>
<td>20/30</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>74.4%</td>
<td>66.7%</td>
<td></td>
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<td>adjective</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>84.6%</td>
<td>83.3%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>24/24</td>
<td>33/39</td>
<td>25/30</td>
<td>24/24</td>
</tr>
<tr>
<td></td>
<td>76.9%</td>
<td>73.3%</td>
<td>76.9%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>30/39</td>
<td>22/30</td>
<td>30/39</td>
<td>30/30</td>
</tr>
<tr>
<td></td>
<td>94.9%</td>
<td>86.7%</td>
<td>94.9%</td>
<td>93.3%</td>
</tr>
<tr>
<td>Indefinite</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>61.5%</td>
<td>74.4%</td>
<td>66.7%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>24/39</td>
<td>29/39</td>
<td>16/24</td>
<td>24/24</td>
</tr>
<tr>
<td></td>
<td>74.4%</td>
<td>91.7%</td>
<td>58.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29/39</td>
<td>22/24</td>
<td>14/24</td>
<td></td>
</tr>
<tr>
<td>Partitive PP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>85%</td>
<td>53.8%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>33/39</td>
<td>21/39</td>
<td>30/30</td>
<td>24/24</td>
</tr>
<tr>
<td></td>
<td>53.8%</td>
<td>40%</td>
<td>40%</td>
<td>58.3%</td>
</tr>
<tr>
<td></td>
<td>21/39</td>
<td>12/30</td>
<td>12/30</td>
<td>14/24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Percentages of accuracy in pragmatic test items. Abbreviations as in Table 2.
### Syntax

<table>
<thead>
<tr>
<th></th>
<th>French</th>
<th></th>
<th>Dutch</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>U</td>
<td>G</td>
<td>U</td>
</tr>
<tr>
<td>Clitic position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>62.4%</td>
<td>47%</td>
<td>73/117</td>
<td>55/117</td>
</tr>
<tr>
<td>MA</td>
<td>84.4%</td>
<td>74.4%</td>
<td>76/90</td>
<td>67/90</td>
</tr>
<tr>
<td>NS</td>
<td>95.8%</td>
<td>98.6%</td>
<td>69/72</td>
<td>71/72</td>
</tr>
<tr>
<td>Indefinite determiner + adjective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>91.3%</td>
<td>71%</td>
<td>63/69</td>
<td>49/69</td>
</tr>
<tr>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Percentages of accuracy in syntactic test items. Abbreviations as in Table 2.

We compared the scores of the participants of each of the groups. There were 84 French test items (fillers not included). The results for the “correct” answers, i.e. the answers that met our expectations, are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native speakers</td>
<td>73-82</td>
<td>77.75</td>
<td>2.82</td>
</tr>
<tr>
<td>Master students, with two students scoring lower</td>
<td>57-66</td>
<td>60.3</td>
<td>7.44</td>
</tr>
<tr>
<td>Bachelor students, with one student scoring higher</td>
<td>36-52</td>
<td>44.8</td>
<td>6.22</td>
</tr>
</tbody>
</table>

Table 5: Ranges of the three groups of participants

The data were analyzed in SPSS, by means of non-parametric testing because of the low number of participants in each of the groups. A Kruskal-Wallis H test showed that the three groups’ results differ significantly, \( H(2) = 24.29, p < .001 \), with a mean rank score of 7.62 for the Bachelor students (BA), 17.7 for the Master students (MA) and 27.5 for the native speakers (NS). This also holds for the correct sentences (\( p < .001 \)) and the incorrect sentences (\( p < .001 \)) separately. We performed an additional Mann-Whitney U test, which revealed that the BAs’ results differ significantly from the MAs’ results (\( U = 8, p < .001 \)) and that the MAs’ results differ significantly from the NSs’ results
We tested this also for the correct sentences and the incorrect sentences separately. In the correct sentences, the results of the three groups differ significantly ($H(2) = 25.214, p < .001$). In the correct sentences, the BAs’ results differ significantly from the MAs’ results ($z = -3.203, p = .001$) and the MAs’ results differ significantly from the NSs’ results ($z = -3.390, p = .001$). In the incorrect sentences, the results of the three groups also differ significantly ($H(2) = 21.434, p < .001$). In the incorrect sentences the BAs’ results also differ significantly from the MAs’ results ($z = -2.715, p = .007$) and the MAs’ results differ significantly from the NSs’ results ($z = -3.567, p < .001$).

5.2 Modules of grammar

The semantic part contained 36 items, the pragmatic part 30 and the syntactic part 18. Diagram 1 shows the percentages of “correct answers” per group of learners in each of the domains:

![Diagram 1: Percentage of “correct” answers per group and per domain](image)

We first compare the differences between the groups for each of the modules.

A Kruskal-Wallis H test showed that the three groups scored significantly differently in the semantic part of the French test: $H(2) = 22.206, p < .001$, with a mean rank score of 8.15 for the BAs, 17.20 for the MAs and 27.25 for the NSs. A Mann-Whitney U test was used to compare pairs of groups. The MAs (Mean = 25; SD = 5.56) scored higher than the BAs (Mean = 16.9; SD = 4.05). This difference is significant ($U = 15, p = .002$). The NSs (Mean = 33.9; SD = 1.13) scored higher than the MAs. This difference is also significant ($U = 2, p = .001$). The significant differences hold for the overall results and for the correct and incorrect results separately.
In the pragmatic part of the French test the three groups also scored significantly differently ($H(2) = 18.975, p < .001$). In the pragmatic part, there is only a significant difference ($U = 1, p < .001$) between the NSs (Mean = 26.4; SD = 2.07) and the MAs (Mean = 21; SD = 2.45). As for the difference between the BAs (Mean = 18.85, SD = 2.67) and the MAs, it is not significant ($U = 34, p = .052$).

In the syntactic part of the French test the three groups also scored significantly differently ($H(2) = 17.897, p < .001$). In the syntactic part of the French test, the MAs (Mean = 14.3; SD = 3.09) scored significantly higher ($U = 20, p = .005$) than the BAs (Mean = 9.84; SD = 3.08). The NSs (Mean = 17.5; SD = 0.76) scored significantly higher ($U = 14, p = .017$) than the MAs.

We also compare the scores on the modules. We first compare the results for the syntactic items to the results of the semantic and pragmatic sentences taken together, and only for the NSs of French and the MAs. For the NSs a Wilcoxon test reveals a significant difference between syntax and semantics/pragmatics ($z = -2.383, p = .017$) for correct and incorrect sentences taken together. Splitting the correct and the incorrect sentences we found a significant difference only for the incorrect sentences ($z = -2.536, p = .011$). For the MAs, we also found a significant difference between syntax vs. semantics/pragmatics in the incorrect sentences ($z = -2.191, p = .028$).

For the correct and incorrect sentences taken together, we only found a significant difference between separate modules for the natives, viz. between syntax and semantics ($z = -2.371, p = .018$). We also compared the scores between the modules for the correct and incorrect sentences separately. A Wilcoxon test shows that the NSs scored significantly higher on the incorrect syntactic sentences than on the incorrect semantic sentences ($z = -2.555, p = .011$). The NSs also scored significantly higher on the incorrect syntactic sentences than on the incorrect pragmatic sentences ($z = -2.207, p = .027$). There is no significant difference between semantics and pragmatics for the incorrect sentences ($z = -1.292, p = .196$). For the correct sentences there is, however, a significant difference between the semantic and the pragmatic items ($z = -2.066, p = .039$). For the MAs, there are no significant differences between the modules on the correct sentences, but there is a significant difference between syntax and semantics for the incorrect sentences ($z = -1.988, p = .047$).

A domain in which many errors were made is the semantic domain. In the next section, we focus on one context of the semantic part of the test and investigate how difficult it is for Dutch BAs and MAs to learn this distinction between the replacement of referential vs. non-referential noun phrases (section 2.2), a distinction not made in the grammar that the students used at university.
5.3 Referentiality
Of the 36 semantic items, 12 contained a des + NP, classified in four types of test items, each containing 3 sentences (cf. Table 1). Table 2 shows that the non-referential des-NPs raised more problems than the referential des-NPs.\(^9\) This difference is significant (\(z = -3.783, p < .001\)). The correct replacement of non-referential des-NPs by en is much more problematic for the learners than the correct replacement of referential des-NPs by les. The learners also misjudged the correctness of the replacement of a non-referential des-NP by en and the incorrect replacement of a non-referential des-NP by les. With the non-referential des-NPs, the BAs differed significantly from the MAs (\(U = 24,000, p = .009\)) and the MAs differed significantly from the NSs of French (\(U = 13,500, p = .016\)). For the referential des-NPs there were no significant differences between the three groups.

5.4 Comparison of the French and the Dutch data
As shown in section 3.3 there are contexts in which French and Dutch behave the same, and contexts in which they do not behave the same. In this section we compare the results for French and Dutch. Since we did not test partitive noun phrases, subject + en/er, and pronoun placement in Dutch, we leave these contexts out of the analysis. We take negated singular and plural noun phrases together. This means that there are 8 contexts left: four contexts in which French and Dutch behave similarly and four contexts in which they differ. Before comparing the BAs’ and the MAs’ results in the French and the Dutch test for the eight different subjects, we first present the NSs’ results:

<table>
<thead>
<tr>
<th>Natives French</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Figure 2: Results native speakers of French per subject

\(^9\) Besides des-NPs, the test-sentences contain other non-referential NPs, viz. mass nouns, negated singular nouns and negated plural nouns. For a proper comparison, we oppose referential des-NPs only to non-referential des-NPs.
Figure 2 shows that in all eight contexts the native speakers scored as expected in at least 80% of the cases. We will now compare the results of the learners on the French and the Dutch tests.

5.4.1 Contexts where en/er behave the same
The first four contexts in figure 2 are contexts in which en/er are used in the same way in Dutch and French. In figure 3 we present the results for the Bachelor and the Master students, without distinction between the groups of learners:

![Figure 3: Results BAs and MAs for “similar uses” of French and Dutch](image)

For referential plural NPs, the results differ minimally. This difference is not significant ($z = -0.451, p = 0.652$).

For definite determiner + adjective, the results for French and Dutch do not significantly differ either ($z = -1.895, p = 0.058$).

For quantified NPs, the French and Dutch results differ significantly ($z = -2.973, p = 0.003$), but this is mainly due to the BAs’ results ($z = -2.716, p = 0.007$). The MAs’ French results do not significantly differ from their Dutch results ($z = -1.342, p = 0.180$).

The learners also significantly differ in French and in Dutch in their judgments of the quantitative versus partitive interpretation of en and er ($z = -3.810, p < 0.001$). This also holds for the BAs ($z = -2.913, p = 0.004$) and the MAs ($z = -2.546, p = 0.011$) separately.

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10 In Table 2 we do not make a distinction between replacement by a definite pronoun and the use of a full noun phrase in Dutch (recall (26)). The correct replacement of a referential indefinite plural NP by a definite pronoun was almost always accepted by the learners (94%). The correct replacement of these constituents by a full NP was accepted in 75% of the cases.
5.4.2 Contexts in which en/er differ

The last four contexts in figure 2 are contexts in which *en/*er are used differently in Dutch and French. The learners’ results are presented in figure 4:

![Figure 4: Results BAs and MAs for “different uses” of French and Dutch](image)

In all contexts the learners scored significantly lower for French than for Dutch: indefinite determiner + adjective \( (z = -3.351, p = .001) \), non-referential bare plurals \( (z = -3.933, p < .001) \), mass nouns \( (z = -3.608, p < .001) \), and negated singular and plural indefinite NPs \( (z = -4.064, p < .001) \).

Comparing MAs to BAs, table 6 shows that in all “different use” contexts, both the BAs and MAs scored significantly differently in French than in Dutch:

<table>
<thead>
<tr>
<th>Context</th>
<th>BAs</th>
<th>MAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ind. def. + adj.</td>
<td>( p = .006 )</td>
<td>( p = .049 )</td>
</tr>
<tr>
<td></td>
<td>( z = -2.739 )</td>
<td>( z = -1.965 )</td>
</tr>
<tr>
<td>Non-ref. bare plurals</td>
<td>( p = .001 )</td>
<td>( p = .043 )</td>
</tr>
<tr>
<td></td>
<td>( z = -3.187 )</td>
<td>( z = -2.019 )</td>
</tr>
<tr>
<td>Mass nouns</td>
<td>( p = .004 )</td>
<td>( p = .036 )</td>
</tr>
<tr>
<td></td>
<td>( z = -2.906 )</td>
<td>( z = -2.094 )</td>
</tr>
<tr>
<td>Negated ind. NPs</td>
<td>( p = .001 )</td>
<td>( p = .019 )</td>
</tr>
<tr>
<td></td>
<td>( z = -3.192 )</td>
<td>( z = -2.347 )</td>
</tr>
</tbody>
</table>

Table 6: Results BAs and MAs in “different use” contexts
6. Discussion

The goal of this paper is to determine which factors influence L2 acquisition most. We investigated this on the basis of the L2 acquisition of the French quantitative pronoun *en* by L1 Dutch learners.

The first question we are addressing in this paper is whether there are aspects of *en* that are more vulnerable, i.e. more difficult to acquire, than others in L2 acquisition, and if so which ones, depending on the linguistic domain.

We showed that syntax, e.g. clitic placement, is the least difficult domain, at least for the MAs and the NSs. Taken together, the semantic and pragmatic items were most problematic for the NSs, and also for the MAs, but for this group only for the incorrect sentences. This is mainly due to the significant difference in the MAs’ judgment of the incorrect syntactic and semantic items. According to the IH (Sorace & Filiaci, 2006 a.o.), interface phenomena are more difficult to acquire than non-interface phenomena, such as syntactic phenomena, but for the Dutch L2 learners of French evidence was only found in the incorrect sentences.

A second claim made by the IH is that external interfaces are more difficult to acquire than internal interfaces. Only for the correct sentences judged by the NSs of French did we find a significant difference between the semantic and the pragmatic items, but not for the learners.

Our second RQ concerns the semantic phenomenon of pronominalisation of (non-)referential indefinite plural NPs. The French NSs’ data confirmed the correctness of Ihsane’s (2013) claim that referential and non-referential indefinite NPs have different structures. In the correct sentences, the NSs accepted at 100% the replacement of non-referential indefinite noun phrases by *en* and the replacement of referential indefinite noun-phrases by *les*. The learners’ results did not confirm the distinction, though. Since in grammar books it is suggested that *des*-NPs can be replaced by *en*, we expected the learners to accept *en* with both non-referential and referential noun phrases. However, it was exactly the opposite: in the grammatical sentences, the students massively rejected *en* with non-referential noun phrases and did not reject *les* with referential noun phrases; in the ungrammatical sentences, they massively misjudged the non-acceptability of *les* replacing non-referential noun phrases, and in 80% of the cases they judged the use of *en* replacing referential noun phrases unacceptable, preferring *les*. These results show that the learners do not master the replacement of non-referential *des*-phrases by *en* yet, although the MAs made half as many errors as the BAs. The learners treated non-referential noun phrases as referential noun phrases and highly preferred to replace *des*-phrases by *les*. The question is whether this might have to do with possible transfer from their L1, Dutch.

This was formulated as our third research question. We found a significant difference between the results in the four contexts in which French
and Dutch differ, also for BAs and MAs separately. This may be accounted for by negative transfer. In the contexts in which French behaves like Dutch, we expected positive transfer and a non-significant difference between the French and Dutch results. This was borne out for two contexts: referential NPs and definite determiner + adjective. The difference is, however, highly significant in the quantifier context. This is mainly due to the BAs’ results. For the MAs there is no significant difference between French and Dutch in this context. There is also a significant difference in the fourth context, the quantitative – partitive interpretation, and also for BAs and MAs separately. The French test contains three grammatical sentences in which en has a quantitative interpretation, and three in which en has a partitive interpretation, a distinction not made in Table 2. The learners misjudged the quantitative interpretation in the French sentences in almost half of the cases and the partitive interpretation in 25% of the cases. Besides er, which can have a quantitative and a partitive interpretation, Dutch has a pronoun with only a partitive interpretation, viz. ervan. It may be that learners assimilate en with ervan and that the quantitative – partitive interpretation of en and er cannot be analyzed as a “similar use” context.

Overall our data show that the quantitative pronoun en is difficult to acquire for L2 learners, although it emerges early in L1 acquisition (Valois & Royle, 2009; Sleeman & Hulk, 2013; Berends et al., 2016).  We have argued that the role of the L1 may be an important contributing factor. Although the L1 may facilitate the acquisition of a second L1 or an L2 (in early acquisition or in late acquisition), it may also hinder the acquisition (Hulk & Müller, 2000; Müller & Hulk, 2001). Like Hulk (1991), however, we showed that the role of negative transfer can be (partially) overcome by Dutch learners of French when they make developmental progress in their L2. Overall, the results of the MAs differ significantly from the results of the BAs. However, the NSs performed significantly better than the MAs, and in the “different” contexts there is still a significant difference between the MAs’ French results and their Dutch results (although the MAs performed better than the BAs), showing the complexity of the quantitative pronoun en for Dutch L2 learners.

Our results have to be taken with care. There were only a limited number of participants, their supposed proficiency level was based on their university level and on the information they gave in the questionnaire and not on an independent proficiency test. We used a binary scale instead of a gradient Likert scale. All these factors may have influenced the results.

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11 Gavarró et al. (2011) show ambiguous results for 5 year olds. Although in the elicitation task the French children produced only 35% target like utterances containing the quantitative pronoun, the repetition task was 98% target like.
7. Conclusion

The goal of this paper was to investigate which factors play a role in L2 acquisition, c.q. the acquisition of *en*. On the basis of an experimental study, we showed that the success or failure of the L2 acquisition of *en* marginally depends on the modules involved. We furthermore showed that the role of explicit instruction in grammar books does not have to be exaggerated. The most contributing factor turned out to be the L1 also containing a quantitative pronoun, which can have both a positive and a negative influence.

Although *en* is not easy to acquire for Dutch learners of French, we showed, like Hulk (1991) for French word order, that learners can partly overcome negative transfer and can become more target-like as their knowledge of French increases.

It would be interesting to submit our test to L2 learners of French who are not hindered by a semi-equivalent quantitative pronoun in their mother tongue, such as L1 speakers of German, or to compare the L2 acquisition of Dutch by native speakers of French with a test comparable to ours. We leave these questions for future research.

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