Chapter 4

TOWARDS AN EFFECTIVE INSTRUCTION ON ASPECT

4.1. Introduction

There has been increasing research interest in the role of formal instruction in second language acquisition (SLA). Moreover, acquisition of tense/aspect morphology has been extensively studied in the L2 acquisition of Spanish. The present study focuses on the second language research issue of whether instruction directed at specific grammatical features results in their acquisition. In particular, the main concern of this paper is whether the teaching of grammatical aspect might contribute to its understanding and acquisition in a second language.

In spite of the fact that both Germanic and Romance language speakers have a mental concept for (im)perfectivity, the obligatory expression in the verbal morphology constitutes one of the biggest problems in the acquisition of the Spanish language. More specifically, in Germanic languages, this opposition is not grammaticalized. In Spanish, the simple past tense forms are aspectually marked through inflection. In Germanic languages, this concept remains unexpressed, the aspectual relations being understood thanks to the context in which they are produced.

It has been shown that English L2 learners of Spanish approach the L2 system by linking aspectual marking and lexical meaning (Andersen 1991). Spanish grammatical aspect marking (that is, the two simple past tense forms) is initially interpreted as a redundant marker of inherent aspect (the intrinsic meaning of the verb). This means that the inherent aspectual information of the verb (whether it refers to a state, or an activity, etc.) seems to be taken by L2 learners of Spanish as the information they need to produce sentences with past tense morphemes. An established classification of verb meanings according to their inherent aspectual information is Vendler (1957)’s verb classes: states, activities, accomplishments and achievements:

(1) Rick wanted a book (state: no dynamics)
(2) Rick walked (activity: duration and homogeneity)
(3) Rick walked a mile (accomplishment: duration with an inherent end point)
(4) Rick discovered a treasure (achievement: single point in time)

This verbal information is understood as the aspectual clue the learner has to follow to use the two simple past tenses in Spanish. This is given as the reason why L2 learners of Spanish with English as L1 seem to have problems when acquiring the

\[^{1}\text{It should be noted that the notions of lexical aspect or inherent aspectual information of the verb are misleading. A proper aspectual theory is described in section "Theory on aspect". This nomenclature is included here as they are the terms used to describe the Aspect Hypothesis.}\]

Spanish aspectual system (Andersen 1991). Andersen postulates the Aspect Hypothesis, which makes the following claims:

1. Perfective forms are first used with achievements, then with accomplishments, spreading later to activities and, finally, states.
2. Imperfective forms appear later than perfective forms and they appear first with states, spreading later to activities, accomplishments and, finally, achievements.

Several studies have found evidence for Andersen’s Aspect Hypothesis (Hasbún 1995, Bergström 1995, Cadierno 2000, Bardovi-Harlig 1998, among others). The data presented in these studies seem to follow the pattern established by Andersen in order to describe the acquisitional development of the two past tenses in Spanish. For a summary of relevant studies, see Bardovi-Harlig (2000) or González & Verkuyl (2002). It is likely that these results can be generalised to other Germanic languages as they share the same aspectual system, where predicational aspect plays an active role in a sentence with a simple past verb form but grammatical aspect does not, because it is not overtly marked (for discussion, see Borik & González 2001). Besides, there have been a number of studies where their analysis of data also proves that Dutch learners of Spanish encounter the same problems postulated by the Aspect Hypothesis: García & van Putte (1988) and Martínez Bautzá (1994). The former study shows that Dutch learners of Spanish rely on the “lexical meaning of the verb” (García & van Putte 1988: 277) to produce verbal morphology, that is, the meaning of the verb (whether it is a state, an activity, an accomplishment or an achievement) seems to influence the choice of past tenses the Dutch learners of Spanish make. Martínez Bautzá concludes that a certain influence on the acquisition order of the aspectual system described by Andersen can be demonstrated by the data of his Dutch students. Taking into account the results of these two studies, we may conclude that the acquisition of Spanish past tenses by Dutch learners is also a complicated process, where the learner relies on the information conveyed by the predicational aspect to choose one of the two simple past verbal forms in Spanish.

From a cross-linguistic analysis between a Germanic language and a Romance language, it can be deduced that grammatical features involved in the aspectual composition of a language do not necessarily match with those used with another language. Such differences may be the cause of the difficulties in acquiring the aspectual system of a language, with a different system than that of the learner’s L1. If the source of the difficulty is found in the differences between aspectual systems, pointing them out may be an instructional solution.

4.2. Instruction on grammatical items

The main concern in previous research on the role of formal instruction in SLA is whether instruction makes a difference in the acquisition of a L2. Ellis (1997)

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2 The AH makes two more claims which will not be included as they are not considered to be relevant for the purposes of this paper.
TOWARDS AN EFFECTIVE INSTRUCTION ON ASPECT

addresses a number of problems on the teaching and learning of grammatical items in a second language. Ellis agrees with the Weak Interface Hypothesis: the kind of explicit knowledge which typically results from formal grammar instruction can convert, through practice, into the kind of implicit knowledge that is required for use in communication.

To be able to prove whether explicit knowledge can be converted in implicit knowledge, one has to predict that the proficiency level of the learner improves after instruction. There have been a number of empirical studies that demonstrate that learners who receive instruction outperform those who do not, both with respect to the rate of acquisition and ultimate level of achievement (Long 1983, 1988, Ellis 1985, 1990, among many others). The instruction these learners received entailed grammar teaching; which led them to conclude that teaching grammar to learners contributes to their linguistic development.

After reviewing literature on the effect of explicit instruction on L2 acquisition, de Graaff (1997:19) concludes:

“fluent performance is based upon implicit knowledge; the acquisition of implicit knowledge is hypothesized to require detection (Tomlin & Villa 1994), or awareness at the level of noticing (Schmidt 1990). Detection or noticing can be facilitated by explicit knowledge, causing more input to be converted into intake. Explicit knowledge about language, then, does not convert into implicit knowledge of language but facilitates the acquisition of implicit knowledge by enhancement of noticing.”

It seems right to state at this point that grammar teaching can work if explicit knowledge is transferred to implicit knowledge. What needs to be found out now, is which sort of grammar teaching works and what is the role of the learner in the second language classroom. As aspect is a grammatical phenomenon, its explicit teaching might be worthwhile; the rate of acquisition might be accelerated and student errors might be circumvented, but only if its teaching aims at converting grammar instruction into implicit knowledge.

However, not every grammatical program will work. We need to elaborate on some criteria to develop a possible successful instruction. On the basis of the research on the effects of form-focused instruction on accuracy, there is enough evidence to show that form-focused instruction can result in definite gains in accuracy. By form focus instruction, we refer to the attempt to focus learners’ attention on specific linguistic features in the input and the meanings they realize.

A successful instruction on aspect needs to fulfil three criteria:

First of all, in indirect explicit grammar teaching, learners are provided with data illustrating the use of a particular grammatical structure, which they analyse in order to arrive at some generalization that accounts for regularities in the data. For the learner to arrive at some generalization, the task has to call for some logical reasoning. By eliciting a correct response or rule from a learner, achieved through logical reasoning, we will be promoting active learning. This will be our first
criterion: the learning techniques used in the experiment must promote active learning, that is, the learner is required to process the new information by solving problems, answering questions, formulating questions of their own, discussing, or explaining during class.

Secondly, the techniques used must be, not only attention focusing, but also compatible with the way learners learn. To make the learner the focus of the instruction and not the grammatical item, we first need to know which processes will be more appropriate to learn any new information (Ausubel 1968, Slagter 2000). It is stipulated that what is to be learnt must be first linked in some meaningful way to the “already known” (the Principle of Learning). This will be our second criterion: linking the already known to the unknown. What the Dutch L2 learners of Spanish already implicitly know about aspectual systems is how it works in their own language. Making them aware of the principles of the Dutch aspectual system, which they automatically use correctly, serves as the already known, and can therefore be linked to the unknown Spanish aspectual system. This can be achieved by first making the learners aware of the similarities between the two aspectual systems and then finishing with the full Spanish aspectual system, which covers both the aspectual information that overlaps with the Dutch aspectual system and the Spanish grammatical aspectual information, which does not have a counterpart in the Dutch system.

The third criterion is to develop an adequate theory on aspect. There are two main reasons that compel us to carry out a cross-linguistic analysis of the phenomenon ‘aspect’. The first reason is methodological. To have a clear picture about what the learner already knows (Criterion 2), we need to understand how the aspectual system of the first language works. Only then can we relate it to the aspectual system of the second language. The second reason is theoretically oriented. Previous studies on the acquisition of aspect have taken Vendler’s verb classes as point of departure. Verkuyl (1993, 1997) shows that the verb on its own does not contain all the aspectual information; to find it, one needs to look into the combination of the verb and its arguments; therefore, into the whole predication. A description of this theoretical framework is therefore needed. Our third criterion is thus to create a theory on aspect, which can provide a descriptive explanation for the Dutch and Spanish aspectual systems, with both their similarities and differences. An indication of their shared characteristics and their intrinsic qualities will exhibit an overview of, not only what the learner is dealing with for the first time, but also of what the learner already implicitly, through his/her L1, knows.

An interesting issue emerges when studying the acquisition and learning of the two past tenses in Spanish by learners with a Germanic mother language (that is, the learning of grammatical aspect by learners with an L1 which does not overtly mark it, therefore they do not implicitly know their meaning and uses). Is it the form or is it the meaning what needs to be learned? Is there a correlation between the two? Can form be learned independently from meaning and/or the other way around? In her study on the development of tense/aspect morphology in English, Bardovi-Harlig (1992) suggests that the development of form precedes appropriate use. Learners provide morphological markers, but sometimes in incorrect contexts. That is, fully
grammatical forms emerge and are used by the learners before they carry target-like meaning. Montrul and Slabakova (2002) set out to investigate whether there was a connection between the acquisition of the morphological markers and their meanings. They concluded that, with instructed learners, the acquisition and use of past tense morphology preceded the acquisition of the semantic properties associated with these past tenses. If, after all, the ultimate goal of foreign language learning stretches far beyond the learning of linguistics features, aiming for a communicative function, our goal in this study is to investigate whether the learner can acquire the target-like meaning of the past tense forms in Spanish, and whether the learner can use it accurately.

The European Science Foundation (ESF) carried out a number of studies including target languages such as English, Dutch, French, German and Swedish. Dietrich et al. (1995) conducted different studies with learners of each of the five target languages. Some of the learners received instruction; some did not. This allows for comparison between instructed and uninstructed learners. One of the key findings is that instruction on its own is not responsible for success, rather it is a form of access to the target grammatical phenomenon; and as such, it has a positive effect on its acquisition.

4.3. Theory on aspect

Predicational aspect and grammatical aspect are two closely related but different notions in the realm of aspectual systems. Both may occur in any language overtly or covertly. A brief definition of both aspects will now follow.

Predicational aspect is determined by the compositionality of the verb and its arguments (Verkuyl 1993). The lexical semantic information given by the verb combines with structural information from the verbal arguments to express whether the situation expressed by the clause has, or lacks, a natural inherent end point (terminative versus durative clauses). Grammatical aspect is a verbal morphological category referring to the semantic opposition between perfective and imperfective aspectual past tenses. The use of the perfective form is an instruction to take the situation as a completed, closed entity, often putting an emphasis on its beginning or end; in contrast, the imperfective form presents the situation as ongoing in either an episodic or a habitual sense. Examples of both types of aspectual coding are given in the Dutch and Spanish sentences presented below.

Spanish and Dutch have two different aspectual systems. Not only do they differ in their aspectual systems but also in their aspectual encoding. While Spanish formally expresses both predicational and grammatical aspect, Dutch does not have the means to overtly mark an im/perfective distinction.

(5) Laura dronk een cola   PAST TERMINATIVE
    ‘Laura drank a coke’

(6) Laura dronk cola’s   PAST DURATIVE
    ‘Laura drank cokes’
Sentence (5) expresses an end point while sentence (6) does not. However, there is no information about whether the situation is to be viewed as completed or ongoing.

The two grammatical aspect markers in Spanish combine with both durative and terminative sentences, giving way to 4 different combinations:

(7) Laura bebió una Coca-Cola PAST PERFECTIVE TERMINATIVE  
    ‘Laura drank a Coca-Cola’

(8) Laura bebía una Coca-Cola PAST IMPERFECTIVE TERMINATIVE  
    ‘Laura drank a Coca-Cola’

(9) Laura bebió Coca-Colas PAST PERFECTIVE DURATIVE  
    ‘Laura drank Coca-Colas’

(10) Laura bebía Coca-Colas PAST IMPERFECTIVE DURATIVE  
    ‘Laura drank Coca-Colas’

Sentence (7) contains a terminative predication, which conveys that the eventuality ['drink a coke'] reaches an end point; and a perfective marker on the verb, which presents the situation as closed off, as completed. Sentence (8) contains the same terminative predication but the imperfective morphology tells us that the situation is to be understood as ongoing in either an episodic, progressive or habitual sense (depending on the context in which the sentence is produced). Sentences (9) and (10) contain a durative predication ['drink cokes'], which is not bounded, that is, it does not reach an endpoint on its own. Nevertheless, this predication can be presented in two ways, with perfective marking (9) or imperfective marking (10). The same happens to examples (7) and (8), the former presents the predication in a completed closed off temporal domain; the latter in an uncompleted, open period.

What Dutch and Spanish share, therefore, is the marking of predicational aspect. This shared characteristic is crucial for our educational purposes. At the instruction, the predicational aspect distinction in Dutch will be introduced first (“the already known”). The learners will have to become conscious of how the Dutch aspect system works. The second part of the instruction will contain the same sentences they received in the Dutch predicational aspect instruction but this time in Spanish. The idea is that their intuitions for their first language can be applied in the Spanish sentences, since the predicational aspect in Spanish works the same way as it does in Dutch. Here it is expected that the learners will apply the “already known” to the unknown, that is, the rules they created for the Dutch sentences can be recycled and used for the Spanish sentences. Only when it is clear that the students know that their intuitions for Dutch can be used for Spanish, then the distinction perfective/imperfective will be shown, giving extra emphasis on the role of the context, since it decides, in most cases, which aspectual form the verb needs to take (González & Verkuyl 2003). A meticulous description of the instruction is given in section 4.4.2.

Although this study may suggest an L1-driven SLA theory, the purpose is not to make any commitment to any particular SLA theory. Moreover, the learning process of these students is manipulated (following the Weak Interface Hypothesis) and therefore the results may be polluted, becoming less appealing for an L2 acquisition
theory. This paper will aim at showing that grammatical instruction on aspect focusing on active learning, with attention focusing techniques and a primary focus on the “already known” improves significantly the accuracy of Spanish simple past form choices and uses of the Dutch L2 learner.

4.4. Method

4.4.1. Two studies

Two parallel studies were carried out, the first one with an intermediate group, the second one with a beginners group. The instruction and design of the study were nearly the same for both groups (some differences will be dealt with later on). The same teacher gave the instruction to both classes. The teacher was also the researcher.

Respondents in the intermediate study (N=20) participated in a Spanish course at the intermediate level given at the University College in Utrecht. Results from three students are not analysed because their mother tongue is not Dutch. Most of the students were 19 years old. All had successfully followed the same beginner’s course in Spanish a year earlier. This had been their only formal access to the Spanish language up to this point.

Respondents in the beginner study (N=20) participated in a Spanish course at the beginners level given at the University College in Utrecht. Results from seven students were not analysed because their mother tongue was, again, not Dutch. Most of the students were 18 years old. None of them had had any contact to Spanish prior to this course.

4.4.2. Course

Ellis (1997) gives a clear overview of different sorts of instruction methods. To avoid terminological confusion, we will stick to his terms and define the instruction practised in this study as being of indirect explicit grammar instruction type. It belongs to the feature focused type of instruction (together with implicit grammar instruction). It distinguishes itself from instruction that focuses on communication. Both types of focusing belong to the learner-performance option of teaching grammar. Indirect explicit grammar instruction makes use of rule search conditions. The students are not given a grammatical rule but are asked to come up with one. This can be achieved by making use of input oriented implicit grammar instruction, in particular presenting examples from an input enhancement interpretation task: the learner is exposed to multiple exemplars of the target structure. The instructor increases the prominence of the target structure in the input by setting some task that requires learners to attend to the structure (e.g. asking questions that will lead the learners to pay careful attention to the structure).

Every week a subgroup of two or three students received the extra instruction on the use of the two past tenses in Spanish. The average instruction took around 1 hour and 30 minutes. Each student received the instruction only once.
The experimental instruction included a list of sentences with which the learners were provided with data illustrating how predicational aspect works in their L1 (Dutch) and in the L2 (Spanish) as well as a list of sentences showing how grammatical aspect in the L2 (Spanish) works (see Appendix II). Input oriented implicit grammar instruction can be achieved when the learner is exposed to multiple exemplars of the target structure. This is basically what the actual teaching practice does, as it presents a large number of sentences with both Spanish past tenses.

The instruction on aspect in Spanish was divided in two main parts, (a) the predicational instruction and (b) the grammatical instruction. Each part of the instruction consisted of a number of pages in which a couple of sentences were given to attract the students’ attention to a specific aspectual value. After each part of the instruction, the students were asked to outline and summarise the main points covered in the particular section.

The predicational aspect distinction was introduced first becoming the “already known”. The first half of this instruction referred to their L1 (Dutch) (Appendix II, pages 1 to 6). Only when they understood and recognised predicational aspect in Dutch sentences, the distinction in Spanish was shown. This part of the instruction involved a recognition task first.

At the end of the Dutch predicational instruction, the students were asked to construct rules summarising the grammaticality and ungrammaticality of the Dutch sentences. The Dutch examples allowed the students to create the following tests:

A  “in een uur” + quantifier = grammatical
    (in an/one hour)
    (11)  Laura heeft in 1 uur 3 appels gegeten
          ‘Laura ate 3 apples in one hour’

B  “de hele dag” + quantifier = ungrammatical
    (the whole day)
    (12)  *Laura heeft de hele dag 3 appels gegeten
          ‘Laura ate 3 apples the whole day’

C  “in een uur” – quantifier = ungrammatical
    (in an/one hour)
    (13)  *Laura heeft in 1 uur appels gegeten
          ‘Laura ate apples in one hour’

D  “de hele dag” – quantifier = grammatical
    (the whole day)
    (14)  Laura heeft de hele dag apples gegeten
          ‘Laura ate apples the whole day’

The only theoretical addition during the instruction was to state that sentences that fit into case (A) were those with an inherent endpoint, whereas those sentences that would fit into case (D) were those lacking an endpoint. This was the most direct
explicit part of the instruction on predicational aspect, where (meta)linguistic information was included.

The second part of the instruction contained the same sentences they received in the Dutch predicational instruction but this time in Spanish (Appendix II, pages 6 to 11). The idea was that their intuitions for their first language could be applied in the Spanish sentences. This constituted the applying the already known to the unknown part. At the end of the second part (Appendix II, page 11), four new pairs of sentences were added, which had not been included in the Dutch predicational aspect instruction. The reason for this extra page in the instruction was to see whether the students could abstract rules from the Spanish sentences that had been already presented in Dutch and apply this same rule to brand new examples. Producing the same rules for Spanish as they did for Dutch is evidence that they now know that predicational aspect works the same way in both languages.

The third and last part of the instruction added information to the knowledge the students already had of the two simple pasts in Spanish. They had to verbalise what they knew about the two simple pasts in Spanish. Only then were they given further theoretical information (again, metalinguistic information, therefore, direct explicit instruction):

A Perfective form: 1 action in the past
(15) El viernes jugué al baloncesto
   ‘On Friday I played basketball’

B Imperfective form: more than 1 action in the past = habituality
(16) Cada viernes jugábamos al baloncesto
   ‘Every Friday we used to play basketball’
   Situation = progressive meaning, episodicity
(17) El viernes, cuando jugábamos al baloncesto, me torcí el tobillo
   ‘Last Friday, when we were playing basketball, I tore my ankle’

A number of sentences attempting to focus the learner’s attention on the differences in meaning were presented (Appendix II, pages 12 to 18). During this part of the instruction extra emphasis was put on the non-influential role of predicational aspect and on the indispensability of context, since it decides, in most cases, which aspectual form the verb needs to take. This section of the instruction included sentences such as (18):

(18) Mis padres paseaban por las Ramblas cada tarde
   ‘My parents walked along las Ramblas every evening’

Table 1 summarises what needs to come across thanks to the instruction. It was given at the end of every session:
Table 1  Summary of the experimental instruction on aspect

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Verb form</th>
<th>Endpoint</th>
<th>Grammatical?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perfective</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Perfective</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Imperfective</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>14</td>
<td>Imperfective</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The idea behind this instruction is, therefore, that of the weak interface hypothesis: explicit knowledge can indirectly promote the acquisition of implicit knowledge. The extent of explicitness may vary in the three instruction steps. At the beginning of the instruction, attention is given to the implicit knowledge of the learner about the aspectual system of their L1, that is, the Dutch predicational aspect, and they are made aware of the existence of such a system by eliciting the students to use their native intuitions. The second part of the instruction makes use of the awareness the learner now has about the functioning of the aspectual system in their L1 and calls for an application of such awareness in the L2. The L1 is used as a step to focus attention to the grammatical feature at hand. The third part gives explicit attention to, firstly, the forms of the two past tenses in Spanish, secondly, the non-decisive nature of the aspectual information of the predication, and thirdly, the importance of context in order to make the right choice.

There are several differences between the instruction given to the intermediate group and the instruction given to the beginners group. These differences need to be outlined in order to understand the results. First of all, the study with the intermediate course took place in spring of 2000; the study with the beginners took place in spring of 2001. Secondly, although both groups were taking courses at the University College in Utrecht, each of them had their own regular teacher. The Spanish teacher giving the intermediate course at the University College gave as little attention as possible to the aspectual phenomenon in Spanish; however, just before the experiment began, the beginners group received a more traditional lesson on the two past tenses in Spanish, so that they would get acquainted with the morphological markings and could fill in the pre-test. This was not necessary for the intermediate group, as they had received an extra semester of instruction; and were, therefore, already familiarised with the two forms of the past tenses in Spanish. As a consequence, there was a small but significant difference in the form of the instructions. While the intermediate group is expected to already have acquired the morphological markers of past tense (in the previous course), this does not hold for the beginners group. As already mentioned, this group received an extra lesson on the forms of the two past tenses; but they were not expected to have successfully acquired all the forms. This is why the instruction for the beginners group included an extra page that was handed out to each student so they could see the complete conjugation of both simple past tenses in Spanish, with simple default examples of their use (see Appendix III). This extra page was given right before the instruction.
on grammatical aspect in Spanish, that is, before the third part of the experimental instruction.

4.4.3. Data Collection and Design of the Study

The total of weeks that the intermediate level needed to receive the experimental instruction was eight weeks; the beginners’ group needed seven (as there were less students attending the regular beginners’ course at the University College). All students took standardised tests at three occasions: at the beginning, in the middle and at the end of the course. Furthermore, students were required to write a composition each week. Every week during the experiment each student, in groups of two to four, participated once in the experimental instruction on aspect.

In the first week, before the experimental course on aspect, students took a pre-test on their knowledge about the two past tenses in Spanish (past perfective and past imperfective). To avoid memory effects, students took a parallel test of the pre-test after 4 weeks. At the end of the course, every student had received the experimental instruction and all participated in a final test. This post-test was a replica of the pre-test.

The second test allowed us to compare the results of those students who had received the experimental instruction with the results of the students who had not received the instruction. At this moment half of the students formed the experimental group, and the other half served as a control group. But this design allows for more comparisons. It is expected that the students who received instruction will show a gain in the correct use of either perfective or imperfective verb forms. Therefore, a gain in scores between the pre-test and the mid-test is to be expected for the students who received instruction between these two tests. The students who did not receive instruction will not show a gain in results. They will show a gain in scores in the second half of the experiment when they will have received their instruction. This means that the last test allowed us to compare the results of the second group in both the first and second test with their results in the last test.

All students were randomly assigned to either one of the two groups. The first group received an instruction in the first half of the experiment whereas the second group received the same instruction in the second half of the course. Simply put, before the mid-test, half of the students form the experimental group; the other half is the control group. At the second half of the regular course, the instruction is given to those students who until now belong to the control group.

The intricacy of the design was caused by the fact that having one control group and one experimental group would mean that the control group would not profit from the experimental instruction. The University College in Utrecht did not consider this appropriate. This complication forced us to develop a design that was ultimately very useful and efficient for our purposes: not only could we assess differences in performance between the two groups (at the second measurement occasion) but also we could assess a developmental pattern within each learner’s acquisition path.
In addition, every week each student wrote a 100 word essay on different topics. These compositions allow a comparison of verb use of students who have and who have not received the experimental instruction. Ideally, the students who received instruction would outperform those who had not received the instruction yet. These data were collected weekly and at the end of the experiment both conditions were compared. Note, however, that the control group and the experimental group were not fixed. The number of students in the experimental group gradually increased each week while, inversely, the control group membership decreased. At the beginning of the experiment, all subjects were part of the control group, by the end of the experiment, they all had moved to the experimental group.

4.4.4. Instruments

As mentioned in the previous section, two types of measurement resulted from the two methods of data collection: (I) two standardised tests and, (II) weekly compositions.

4.4.4.1. Standardised tests

The standardised tests were of two types: a multiple-choice test and a fill-in-the-blanks test. In the pre-test and in the post-test, both types of standardised tests were taken (see Appendix IV). In the middle-test the students only took the multiple-choice exercise (see Appendix V). The multiple-choice exercise included 11 sentences. The filling the blanks exercise consisted of two paragraphs with 15 total blanks. The multiple-choice items were presented in the following way:

(19) Antes la vida fue (PERFECTIVE) / era (IMPERFECTIVE) más barata
    ‘In the past life was cheaper’
(20) Aquella noche me acosté (PERFECTIVE) / acostaba (IMPERFECTIVE) a las ocho
    ‘That night I went to bed at eight’
(21) Clara e Iñaki se casaron (PERFECTIVE) / casaban (IMPERFECTIVE) por la iglesia
    ‘Clara and Iñaki got married in church’

For each item, students had three choices, of which only one was correct:

A. The imperfective form;
B. The perfective form;
C. Both forms are possible.

The fill-in-the-blanks exercise included two short stories for the intermediate group and one story for the beginners group. It was expected that the beginners would take more time to fill in the test; therefore, less blanks were given, which resulted in one story less. The stories contained blanks wherever a simple past tense was needed.
The students were given the infinitive form of the verb and they had to fill the blank in with the right verbal form, that is, either the perfective or the imperfective form.

(22) Ayer _________ (pasar) un rato en el café donde Nuria _________ (tomar) el desayuno todos los domingos. _________ (estar) muy animado. (…)

‘Yesterday (to spend) a while in the café where Nuria (to have) breakfast every Sunday. (To be) very busy.’

Using these two types of tests allowed us to see whether there was a difference in accuracy between results collected when students were only asked to name the form of the verb that they thought was correct and when students where asked to give the morphological form.

The standardised tests were tested in a pilot study to construct parallel versions for the multiple-choice tests (see Table 2). Parallel versions of the same test are needed in order to make sure that exactly the same phenomenon is being tested in both tests. To be able to construct parallel versions, the mean, standard deviation and reliability of both versions have to be (almost) equal. This is of course a necessary condition for parallel tests. The reliability –as estimated by a random matched sub-test procedure (Gullikson 1950)- of the multiple-choice tests equals 0.88 in both tests, and for the two fill-in-the-blanks exercise the reliability was estimated as 0.79 and 0.86 respectively. Furthermore, the scores show that the tests are neither too difficult nor too easy for both proficiency levels, as the pilot was carried out with both beginners and intermediate students. Thus, we have assessed that all the differences between occasions are not attributable to the differences between the (parallel) forms of both multiple-choice tests.

Table 2

<table>
<thead>
<tr>
<th>Test Type</th>
<th>M</th>
<th>SD</th>
<th>Ni</th>
<th>MIN</th>
<th>MAX</th>
<th>Ns</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple choice Version A</td>
<td>6.51</td>
<td>2.12</td>
<td>11</td>
<td>1</td>
<td>11</td>
<td>35</td>
<td>0.88</td>
</tr>
<tr>
<td>Multiple choice Version B</td>
<td>6.94</td>
<td>2.48</td>
<td>11</td>
<td>1</td>
<td>11</td>
<td>35</td>
<td>0.88</td>
</tr>
<tr>
<td>Fill-in-the-blanks Story A</td>
<td>4.83</td>
<td>1.82</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>35</td>
<td>0.79</td>
</tr>
<tr>
<td>Fill-in-the-blanks Story B</td>
<td>3.71</td>
<td>2.84</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>35</td>
<td>0.86</td>
</tr>
</tbody>
</table>

4.4.4.2. Compositions

The topics of the compositions were chosen following two criteria. First, the topic had to be related to the past, so the students would be forced to use both past tenses in Spanish. Second, the topics had to be of general interest, so the students would be motivated to write the stories (see Appendix VI for a list of all compositions). The aim of this exercise was to make an analysis of the use of forms made by the learners according to their aspectual function. Some topics’ examples are:
1. Describe your best party ever
2. Describe your first childhood memory

As it has already been mentioned, the experimental instruction was first given to the intermediate group. While analysing the data from this group, we discovered that one topic of composition was not as reliable for our purposes as the rest. The topic in particular was “describe your worst nightmare”. Since the use of past tense when describing a dream falls under secondary marked uses of the past tenses, we decided to remove this topic from the list of composition titles of the beginners’ group. Special attention to this fact is given in the discussion section.

The following variables were taken into account when correcting the compositions:

1. Number of perfective forms used in the proper way out of all the verbs used with perfective forms.
2. Number of imperfective forms used in the proper way out of all the verbs used with imperfective forms.
3. Number of other verbal forms that should have been either a perfective or an imperfective form.

Two independent correctors graded nine out of the 136 compositions of the intermediate group. The correction focused on the use and misuse of the two past tenses in Spanish. The proportion of agreement was high (94.1%); and the proportion corrected by chance (Cohen’s Kappa) was 0.91 (se=0.028; p<0.001). The rest of the compositions were graded by the main corrector.

4.5. Results

This section includes a presentation of findings in the standardised tests and in the compositions of both proficiency groups.

4.5.1. Standardised tests

4.5.1.1. Intermediate group

In Table 3, the scores of the intermediate group on the standardised tests are presented per measurement occasion. The data are analysed by means of a regression analysis\(^3\).

\[^3\] Let \(Y_{ij}\) be the score of student \(j\) at occasion \(i\). Furthermore, \(G1_{ij}\) and \(G2_{ij}\) are dummy variables that indicate whether a student belongs to the 1st or the 2nd group. That is, \(G1_{ij}\) is turned on (equals 1) if a student belongs to the first group and turned off (equals 0) if a student belongs to the second group. The second dummy variable is coded the other way around. The next three dummy variables are defined to distinguish between the three measurement occasions (pre-, middle- and post-tests). Together these dummy-variables define all six combinations of Group and Measurement occasion. Hence, in the model for all combinations of group and measurement and occasion a mean score can be estimated. The difference between these means can be tested by means of a contrast comparison (Goldstein 1979), which yields a chi-square distributed testing statistic.
### Table 3  
**Results on the standardised tests (se: standard error of estimate) for intermediate students**

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Mean</th>
<th>se</th>
<th>Mean</th>
<th>se</th>
<th>Mean</th>
<th>se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Choice</td>
<td>1st</td>
<td>6.64</td>
<td>0.59</td>
<td>8.59</td>
<td>0.59</td>
<td>8.36</td>
<td>0.62</td>
</tr>
<tr>
<td>Multiple Choice</td>
<td>2nd</td>
<td>7.09</td>
<td>0.56</td>
<td>7.07</td>
<td>0.56</td>
<td>9.18</td>
<td>0.62</td>
</tr>
<tr>
<td>Fill in the blanks</td>
<td></td>
<td>9.83</td>
<td>0.54</td>
<td>-</td>
<td>-</td>
<td>11.36</td>
<td>0.59</td>
</tr>
</tbody>
</table>

In the pre-test the means of both (randomised) groups (6.64 vs. 7.09) for the multiple choice test do not differ ($\chi^2=3.19; df=1; p=0.074$). For the first group the mean score on the pre-test (6.64) is lower than either the mean score on the middle-test (8.59) or the post-test ($\chi^2=7.57; df=1; p=0.006$). This corresponds with an effect size of 0.64 (Cohen 1977). The difference between the latter two means for this group (8.59 vs. 8.36) is non-significant. Only a gain in scores can be shown after participation in the experimental instruction.

These effects are graphically illustrated in Figure 1. The round sign stands for the results of the first group, the triangle stands for the results of the second group.

#### Figure 1  
**Effect of instruction on standardised tests for the intermediate group**

For the second group only the mean on the multiple choice post-test (9.18) is significantly higher than either the mean of the pre-test (7.09) or the middle test (7.07) ($\chi^2=8.97; df=1; p<0.01$), effect size 0.88. The latter two mean scores of
course do not differ significantly. Also, for the second group only after the experimental course a gain in scores can be shown (see Figure 1).

On the middle test there is a difference in mean scores between the students who have received the experimental instruction (8.59) and those who have not (7.07; $\chi^2=3.52; \text{df}=1; p=0.03$), effect size 0.88. The former clearly outperformed the latter on the multiple-choice test.

For the second standardised test, 'fill-in-the-blanks', there is a significant difference between pre-test (9.83) and post-test scores (11.36), ($\chi^2=4.90; \text{df}=1; p<0.05$). After instruction in the experimental course the scores are higher than before.

We conclude that in both standardised tests, the students in the intermediate level who received the experimental instruction outperformed those students who had not received the instruction yet. The scores of each student were significantly higher after receiving the instruction than before.

4.5.1.2. Beginners’ group

In the pre-test the means of both (randomised) groups (6.75 vs. 6.6) of the beginner’s course for the multiple choice test do not differ ($\chi^2=1.38; \text{df}=1, \text{ns}$).

For the first group, the mean score on the pre-test (6.75) is lower than either the mean score on the middle-test (8.87) or the post-test (8.62) ($\chi^2=10.2; \text{df}=1; p=0.001$). The difference between the latter two means for this group (8.87 vs.8.62) is non-significant. Only a gain in scores can be shown after participation in the experimental instruction.

For the second group, only the mean on the multiple choice post-test (8.6) is significantly higher than either the mean of the pre-test (6.6) or the middle test (7.2) ($\chi^2=7.48; \text{df}=1; p=0.006$). The latter two mean scores, as expected, do not differ significantly. Also, for the second group, only after the experimental course a gain in scores can be shown. On the middle test there is a difference in mean scores between the students who have received the experimental instruction (8.87) and those who have not (7.2) ($\chi^2=2.68; \text{df}=1; p=0.05$). The former clearly outperformed the latter on the multiple-choice test. These results are exemplified in Table 4.

<table>
<thead>
<tr>
<th>Test</th>
<th>Group</th>
<th>Pre-test Mean</th>
<th>Pre-test se</th>
<th>Middle-test Mean</th>
<th>Middle-test se</th>
<th>Post-test Mean</th>
<th>Post-test se</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple Choice 1st</td>
<td>1</td>
<td>6.75</td>
<td>0.53</td>
<td>8.87</td>
<td>0.53</td>
<td>8.62</td>
<td>0.53</td>
</tr>
<tr>
<td>Multiple Choice 2nd</td>
<td>2</td>
<td>6.6</td>
<td>0.67</td>
<td>7.2</td>
<td>0.67</td>
<td>8.6</td>
<td>0.67</td>
</tr>
<tr>
<td>Fill-in-the-blanks</td>
<td></td>
<td>4.87</td>
<td>0.48</td>
<td>-</td>
<td>-</td>
<td>5.4</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Table 4 Results on the standardised tests (se: standard error of estimate) for beginners
Figure 2 shows the gain in accuracy of both groups after receiving the experimental instruction. The round symbol represents the results of the first group to receive the experimental instruction; the triangle stands for the results of the second group.

For the second standardised test, 'fill-in-the-blanks', there is not a significant difference between pre-test and post-test scores ($\chi^2=1.74$; df=1; ns). However, by analysing the groups separately, we see that after instruction in the experimental course the scores of the group that received the instruction at the first half of the course are higher than before, and the difference is significant ($\chi^2=2.77$; df=1; $p=0.04$ one-sided). The difference in results of the second group is obviously not significant ($\chi^2=0.007$; df=1; $p=0.39$).

We conclude that for the intermediate group, in both standardised tests, those students who received the experimental instruction outperformed those students who had not received the instruction yet. The scores of each student were higher after receiving the instruction than before. On the other hand, for the beginners group, only in the multiple-choice exercise, those students who received the experimental instruction outperformed those who had not. There are no significant results for the answers of the second group to the fill-in-the-blanks exercise of the beginners’ group.
4.5.2. Compositions

To assess differences in verb use in the essays of those who followed the experimental instruction and those who did not, several logit models were specified. In such a model the (logit) proportion (Fienberg 1980) correctly used verbs is analysed as a function of the dimensions of a cross table (in this case: ‘week’, and ‘instruction’). In this study, four models are necessary. In the first model, the ‘no-effect model’, it is assumed that neither an effect of week --or topic of the essay, for that matter-- or the experimental instruction can be assessed. In the second model, it is assumed that only differences between weeks or topics can be shown. Week of instruction and/or topic of composition are indistinguishable, since as the weeks went on, the topics of compositions changed. This model will be called the ‘week model’, but it needs to be kept in mind that it is actually week + topic what is being assessed with it. In the third model, an effect of instruction is added. This model is indicated with the term ‘instruction-effect model’. In this model, it is assumed that the effect of instruction is equal in all weeks of the study. In the fourth and last model, the ‘week X instruction model’, this assumption is relaxed, and the effect of instruction is allowed to vary between weeks (or topics, for that matter).

Before the model parameters can be interpreted, we need to know which of the four models fits the data best for each proficiency group. That is, which of the models describes the observed (logits of the) proportions adequately and is most parsimonious (with the minimum number of parameters).

4.5.2.1. Intermediate group

1706 predications written by the intermediate students are hereby statistically described. The rest of the predications written (a total of 2171) were not located in one of the two past tenses we are interested in (perfective versus imperfective), but they were located either in the present, in the present perfect or the form was unrecognisable.

In Table 5, the fit of each model for both perfective and imperfective verb use is presented. As the models are nested, the increase in fit can be tested by means of the differences in $\chi^2$ (with the corresponding difference in degrees of freedom). Thus, the fit of the models can be compared.

---

4 remember logit (p) = ln [p / (1-p)] = ln [F / (N-F)], where p stands for proportion, F for the observed frequency of the phenomenon and N for the total number of observations respectively.
Table 5  Fit of four models to describe the use of the perfective and imperfective form in the compositions for the intermediate students

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fit</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\chi^2$ df P</td>
<td>$\chi^2$ df P</td>
</tr>
<tr>
<td>Perfective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) No effect</td>
<td>77.41 13 &lt;0.001</td>
<td>A vs. B 55.67 6 &lt;0.001</td>
</tr>
<tr>
<td>(B) Week</td>
<td>21.73 7 0.003</td>
<td>B vs. C 15.93 1 &lt;0.001</td>
</tr>
<tr>
<td>(C) Instruction</td>
<td>5.799 6   0.448</td>
<td>C vs. D 5.799 6 0.448</td>
</tr>
<tr>
<td>(D) Week-instruction</td>
<td>0.000 0   1.00</td>
<td></td>
</tr>
<tr>
<td>Imperfective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) No effect</td>
<td>68.145 13 &lt;0.001</td>
<td>A vs. B 44.823 6 &lt;0.001</td>
</tr>
<tr>
<td>(B) Week</td>
<td>23.322 7 0.001</td>
<td>B vs. C 13.955 1 &lt;0.001</td>
</tr>
<tr>
<td>(C) Instruction</td>
<td>9.367 6   0.15</td>
<td>C vs. D 9.367 6 0.15</td>
</tr>
<tr>
<td>(D) Week-instruction</td>
<td>0.0000 0 1.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows that for the perfective, the model A, the ‘no-effect model’, does not provide a good description of the data ($\chi^2=77.41$, df=13, p<0.001). The ‘week model’ fits the data better than the ‘no-effect model’; it gives a significantly better description of the observed data ($\chi^2=55.67$, df=6, p=0.003). However, this description is still not accurate enough since the discrepancy between the observations and the expected frequencies is still significant (p<0.001). The ‘instruction-effect model’ fits the data best (p=0.448). The increase in fit is significant as compared to the previous ‘week-model’, and adding the interaction of ‘week X instruction’ as in the fourth model does not significantly improve the fit to the data. Hence, we need to interpret the parameter estimates of this model, which show that there is an effect of week (+topic) and an effect of instruction. The interaction of week and instruction does not contribute significantly to the description of the observations; therefore we must conclude that the effect of instruction is (proportionally) equal in all weeks (see Table 5).

For the imperfective forms, the ‘instruction-effect model’ is also the best model to describe the observed frequencies (p=0.15); it matches the data significantly better than the ‘week model’ (p<0.001) and the final model does not improve the fit to the observed data significantly.
Table 6  Proportions of the use of the perfective and imperfective forms in the weekly compositions for the intermediate students

<table>
<thead>
<tr>
<th>Week</th>
<th>Perfective Instruction Yes</th>
<th>Perfective Instruction No</th>
<th>Imperfective Instruction Yes</th>
<th>Imperfective Instruction No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.90</td>
<td>0.78</td>
<td>0.79</td>
<td>0.60</td>
</tr>
<tr>
<td>2</td>
<td>0.75</td>
<td>0.60</td>
<td>0.77</td>
<td>0.58</td>
</tr>
<tr>
<td>3</td>
<td>0.75</td>
<td>0.60</td>
<td>0.90</td>
<td>0.78</td>
</tr>
<tr>
<td>4</td>
<td>0.84</td>
<td>0.72</td>
<td>0.84</td>
<td>0.68</td>
</tr>
<tr>
<td>5</td>
<td>0.63</td>
<td>0.46</td>
<td>0.94</td>
<td>0.87</td>
</tr>
<tr>
<td>6</td>
<td>0.89</td>
<td>0.80</td>
<td>0.85</td>
<td>0.70</td>
</tr>
<tr>
<td>7</td>
<td>0.78</td>
<td>0.67</td>
<td>0.93</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Table 6 shows the estimated proportions of the correct use of the perfective and imperfective forms in the compositions. The last composition of the course is not included because it was written after all students had completed the experimental instruction. Therefore, at this measurement occasion, a comparison between the experimental group and a ‘control group’ was not possible.

It can be seen in Table 6 that after the experimental instruction, the proportions are higher in all weeks than their counterparts of students who have not received the experimental course yet. Those who received instruction on the Spanish aspectual system make more frequent correct use of both types of the Spanish past tenses.

Note that the proportions vary between weeks. Every week there was a different topic of composition. This fact points out that there is not only a difference due to the independent variable “instruction”, but also the factor “composition+week” plays a crucial role. This means that week/topic effect may exceed the effect of instruction. We must conclude that the effect of instruction on the compositions is smaller than in the standardised tests.

The third variable mentioned in the Method section involved all those other verbal forms (present tense, present perfect, subjunctives, conditionals...) that were wrongly used in the position where a perfective or imperfective form was expected. The use of these forms proved to be randomly distributed over weeks/topics of compositions. The analysis results came out non-significant.

4.5.2.2. Beginners’ group

656 predications written by the students are hereby statistically described. The rest of the predications written (a total of 1224) were not located in one of the two past tenses we are interested in (perfective versus imperfective), but they were located either in the present, in the present perfect or the form was unrecognisable. The topics were basically the same as in the study with intermediate learners; however, as the topic “describe your worst nightmare” did have its own intricacies as far as the use of past tenses is concerned, we left it out of the analysis (see section 4.3.4.2.). However, the total number of composition was much lower than the
number of compositions written by the intermediate group. There are two reasons for this difference in number of analysed compositions. First of all, the number of Dutch students in the intermediate group was higher (17 versus 13). Secondly, the beginners group handed in compositions late, more often than the intermediate group. Thirdly, some of the compositions handed in on time by the beginners group were written completely with the present tense. These compositions where not taken into account when analysing the use of the past tenses, as they were not present.

In Table 7, the fit of each model for both perfective and imperfective verb use is presented. As the models are nested, the increase in fit can be tested by means of the differences in \( \chi^2 \) (with the corresponding difference in degrees of freedom). Thus, the fit of the models can be compared.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model Fit</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>P</th>
<th>Comparison</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) No effect</td>
<td>32.26</td>
<td>7</td>
<td>&lt;0.001</td>
<td>A vs. B</td>
<td>22.34</td>
<td>3</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>(B) Week</td>
<td>9.92</td>
<td>4</td>
<td>0.041</td>
<td>B vs. C</td>
<td>5.70</td>
<td>1</td>
<td>0.016</td>
<td></td>
</tr>
<tr>
<td>(C) Instruction</td>
<td>4.22</td>
<td>3</td>
<td>0.239</td>
<td>C vs. D</td>
<td>4.22</td>
<td>3</td>
<td>0.239</td>
<td></td>
</tr>
<tr>
<td>(D) Week-instruction</td>
<td>0.000</td>
<td>0</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imperfective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) No effect</td>
<td>9.26</td>
<td>7</td>
<td>0.235</td>
<td>A vs. B</td>
<td>0.23</td>
<td>3</td>
<td>&gt;0.20</td>
<td></td>
</tr>
<tr>
<td>(B) Week</td>
<td>9.03</td>
<td>4</td>
<td>0.060</td>
<td>B vs. C</td>
<td>6.98</td>
<td>1</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>(C) Instruction</td>
<td>2.05</td>
<td>3</td>
<td>0.562</td>
<td>C vs. D</td>
<td>2.05</td>
<td>3</td>
<td>0.562</td>
<td></td>
</tr>
<tr>
<td>(D) Week-instruction</td>
<td>0.0000</td>
<td>0</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table shows that for the perfective, the model A, the ‘no-effect model’, does not provide a good description of the data (\( \chi^2=32.262, \text{df}=7, \text{p}<0.001 \)). The ‘week model’ fits the data better than the ‘no-effect model’; it gives a significantly better description of the observed data (\( \chi^2=9.92, \text{df}=4, \text{p}=0.041 \)). However, this description is still not accurate enough since the discrepancy between the observations and the expected frequencies is still significant (\( \text{p}<0.001 \)). The ‘instruction-effect model’ fits the data best (\( \text{p}=0.24 \)). The increase in fit is significant as compared to the previous ‘week-model’, and adding the interaction of ‘week X instruction’ as in the fourth model does not significantly improve the fit to the data. Hence, we need to interpret the parameter estimates of this model, which show that there is an effect of week (+topic) and an effect of instruction. The interaction of week and instruction does not contribute significantly to the description of the observations; therefore we must conclude that the effect of instruction is (proportionally) equal in all weeks (see Table 7).

These compositions are pending analysis, so as to assess development within learner from a 0-use of the past tense markers to their first emerging instances.
For the imperfective forms, the ‘instruction-effect model’ is also the best model to describe the observed frequencies ($p=0.56$); it matches the data significantly better than the ‘week model’ ($p>0.008$) and the final model does not improve the fit to the observed data significantly.

Table 8  
Proportions of the use of the perfective and imperfective forms in the weekly compositions for beginners

<table>
<thead>
<tr>
<th></th>
<th>Perfective Instruction</th>
<th>Imperfective Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>0.96</td>
<td>0.93</td>
</tr>
<tr>
<td>3</td>
<td>0.72</td>
<td>0.59</td>
</tr>
<tr>
<td>4</td>
<td>0.78</td>
<td>0.66</td>
</tr>
<tr>
<td>5</td>
<td>0.81</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Table 8 shows the estimated proportions of the correct use of the perfective and imperfective forms in the compositions. Again, as for the intermediate study (Table 6), the last composition of the course is not included.

Also for the beginners group, it can be seen in Table 8 that after the experimental instruction, the proportions are higher in all weeks than their counterparts of students who have not received the experimental course yet. Note that the proportions vary between weeks, as they did in Table 6. Again, there is not only a difference due to the independent variable “instruction”, but also the factor “composition and/or week” plays a crucial role.

There are group differences in results between the intermediate and the beginners groups. First of all, we need to keep in mind that the number of analysed predications for the beginners group was much smaller than that of the intermediate group (656 versus 1706). The proportions of the beginners’ findings are therefore higher than it would otherwise have been expected. In particular, the proportion of properly used perfective forms before instruction (0.93) is very high. This can be a result of the low number of used perfectives ($n=3$). On the other hand, the proportion of properly used imperfective forms before instruction (0.55) is relatively low. Again, the scarce use of this form ($n=3$) can be the reason why the proportion is low.

### 4.6. Discussion

This article describes a study that focuses on the second language research issue of whether instruction directed at specific grammatical features results in their acquisition. In particular, the main concern of this study is whether the teaching of grammatical aspect might contribute to its understanding and acquisition in a second language.

In this study, the effect of experimental instruction on the Spanish aspectual system on two types of measurement in two proficiency levels was investigated. A complicated quasi-experimental design was needed in order to assess the effects of the instruction, without being able to form a distinct control group.
On both standardised tests as well as on written compositions an effect of instruction was shown for the intermediate group. On the multiple-choice exercise, an effect of instruction is found in both the beginners and the intermediate group. On the fill-in-the-blanks exercise, an effect is found for all students in the intermediate group. However, a small number of students in the beginners group did not improve their overall performance in the fill-in-the-blanks exercises. There is probably a relationship between their proficiency level and this result. The fact that the beginners performed better in the multiple choice after the experimental instruction shows that they did understand the meaning difference between the two forms; they only had to point out which form they considered correct; that is, the form was already given. On the contrary, for the fill-in-the-blanks exercises, they needed to come up with the form itself. This result, however inconclusive, may point out to the direction that having acquired the semantic distinction between the forms does not presuppose the acquisition of the related morphological markers. It may also be that because of being such a small group, the result is just a coincidence.

The success of students can be therefore partially proficiency related, as far as the fill-in-the-blanks exercise is concerned, if we discuss the fact that a small group of students (n=6) did not significantly improve after having received the experimental instruction in this test as a relevant result. This may have been caused by the fact that the intermediate group only filled in one of the two stories in the fill-in-the-blanks exercise. Eight blanks may not have been enough to test whether they had improved their proper use of the two past tenses in Spanish.

The intermediate group’s results of the standardised tests, for the multiple choice and the fill-in-the-blanks, show the positive effect of the experimental instruction on the performance of the students. Making Dutch students of Spanish aware of how the aspectual system works in their own language by using a recognition task allows them to understand the L2 Spanish aspectual system better than if they were unaware of the differences and similarities between the two languages. Therefore, those students who have followed the experimental instruction about the Spanish aspectual system perform better in standardised tests than those students who had not received the experimental instruction.

The success of students also seems to be task related. While in the standardised tests the effect of the experimental instruction is, in general, positively judged, the effect of the experimental instruction in the results of the compositions is not so clear. Logit analysis shows that those students who followed the instruction are better than those who have not, in using the past forms in the right contexts in their written assignments. Nevertheless, the proportions vary between weeks. This illustrates that not only is there a difference due to the independent variable “instruction”, but that the factor “topic of composition” also plays a critical role.

The composition results are more complicated to analyse, due to large differences among weeks. As Van den Bergh & Rijlaarsdam (1999:13) state,

“the nature of writing processes is recursive and dynamic: different sub processes can and do occur at any moment during the process.”
Experiments based on written results involve not only the grammatical knowledge of the learner, but also cognitive factors understood from an individual perspective such as general knowledge, memory, etc. These cognitive factors may affect the data more strongly than we had expected. This may be the reason why the ‘topic of composition’ effect is stronger than the instruction effect.

An explanation for the fact that the ‘topic of composition’ effect is stronger than the instruction effect can be found for week 5 of the intermediate group study. The topic for the composition was “describe your worst nightmare”. It was only after collecting the compositions that we realised nightmares in Spanish are described with imperfective forms; no matter whether the situation or action is completed or not. This is why this topic was removed from the second study, the beginners’ proficiency level. This special characteristic of describing dreams could explain why the proportion numbers in the perfective columns are so low and why the percentages of the imperfective columns are so high (0.63/0.46 vs. 0.94/0.87). However, what happens with the topic of composition “describe your worst nightmare” may not be generalised to the remainder of composition topics.

This leads us to conclude that, in written tasks, there is more at stake than only the acquisition of certain grammatical phenomena. The instruction-effect model provides the best description of the data. However, it does not explain why the proportions vary between weeks. This proves that other processes are occurring during writing, which strongly affect the correct use of grammatical phenomena, as in this case, the use of the two simple pasts in Spanish. However, this paper has shown that when, during instruction, a clear link is made between the L1 system and the L2 system (in this case aspectual systems), the student’s proficiency significantly improves.

The main result of this combined study is, nevertheless, that teaching aspectual distinctions in this way, works. This way would include linking the aspectual system of the L1 into the to-be-learnt aspectual system of the L2 by explicit and implicit grammar teaching methods. This finding may have repercussions to both language acquisition theory and instructional methodology. On the one hand, this study has proved that incorporating explicit and implicit options to the teaching of grammar works and, on the other hand, comparing L1 and L2 grammar systems in order to understand the difficulties L2 learners may have can clarify the acquisitional problems found in L2 learning of the Spanish aspectual system by students with a Germanic L1.