

This is a repository copy of *Recasts versus clarification requests: the relevance of linguistic target, proficiency, and communicative ability*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/167450/>

Version: Published Version

Article:

Mifka-Profozic, Nadia orcid.org/0000-0002-5616-8895 (2020) Recasts versus clarification requests: the relevance of linguistic target, proficiency, and communicative ability. *International Review of Applied Linguistics in Language Teaching*. 2019-0149. ISSN 1613-4141

<https://doi.org/10.1515/iral-2019-0149>

Reuse

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:
<https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Research Article

Nadia Mifka-Profozic*

Recasts versus clarification requests: The relevance of linguistic target, proficiency, and communicative ability

<https://doi.org/10.1515/iral-2019-0149>

Abstract: This paper compares the effects of recasts and clarification requests as two implicit types of corrective feedback (CF) on learning two linguistic structures denoting past aspectual distinction in French, the passé composé and the imparfait. The participants in this classroom-based study are 52 high-school learners of French FL at a pre-intermediate level of proficiency (level B1 of CEFR). A distinctive feature of this study is the use of focused, context constrained communicative tasks in both treatment and tests. The paper specifically highlights the advantages of feedback using recasts for the acquisition of morpho-syntactically complex grammatical structures such as is the French passé composé. The study points to the participants' communicative ability as an essential aspect of language proficiency, which seems to be crucial to bringing about the benefits of recasts. Oral communicative skill in a foreign language classroom is seen as a prerequisite for an appropriate interpretation and recognition of the corrective nature of recasts.

Keywords: corrective feedback, recasts, clarification requests, imparfait, passé composé

1 Introduction

Research so far has provided substantial evidence for the effectiveness of oral corrective feedback (CF) in language learning (Ellis 2012; Li 2010; Long 2007; Lyster and Saito 2010; Mackey and Goo 2007; Nassaji 2016; Nassaji and Kartchava

*Corresponding author: **Nadia Mifka-Profozic**, Department of Education, University of York, Derwent College, Heslington West, York, North Yorkshire, UK, E-mail: nadia.mifka-profozic@york.ac.uk

2017; Norris and Ortega 2000; Russell and Spada 2006; Sato and Loewen 2018), but there is no consensus among researchers on the utility of specific types of feedback. Although a large number of studies have been conducted over the past decades, research findings are still inconclusive, particularly where classroom-based research is concerned (e.g. Brown 2016; Li 2014; Lyster and Ranta 2013). A range of factors have been considered as possible contributors to the mixed findings in classroom-based studies: starting from the type of instructional setting (Sheen 2004) and different methodologies employed in research on CF, namely the studies that involved development on the one hand and those that looked only at uptake on the other hand (Goo and Mackey 2013; Long 2007), to the prosodic and rhetoric characteristics of recasts (Egi 2007; Loewen and Philp 2006; Sheen 2006) and the linguistic focus triggering CF, e.g. lexis, grammar, or phonology (Mackey and Goo 2007). Both primary studies and meta-analytic syntheses have suggested that lexis and phonology are more likely than morpho-syntax to be amenable to CF (Carpenter et al. 2006; Mackey et al. 2000; Mackey and Goo 2007; Saito 2013). Thus, grammar remains the area where discussion is still ongoing, with open questions relating to the influence that specific types of feedback may have on learning various grammatical features.

Research focusing on the English language has explored the efficacy of different CF types for learning a range of morpho-syntactic structures, e.g. articles (Doski and Cele 2018; Muranoi 2000; Nassaji 2017; Sheen 2008); regular past tense forms (Doughty and Varela 1998; Ellis et al. 2006); regular versus irregular past (Yang and Lyster 2010); regular past versus comparative adjectives (Ellis 2007); possessive determiners his/her (Ammar and Spada 2006); third person singular -s and possessive determiners his/her (Sato and Loewen 2018); question formation (Mackey and Philp 1998; McDonough and Mackey 2006; Philp 2003); past progressive (Révész 2009, 2012); passive voice (Li et al. 2016); prepositional and double object datives (McDonough 2006); locative prepositions (Nakatsukasa 2016), ‘that’ trace filter in English (Goo 2012). Research into the effects of CF on learning languages other than English has been less frequent (e.g. Ayoun 2001, 2004; Carroll 2001; Ishida 2004; Iwashita 2003; Leeman 2003; Li 2014; Yilmaz 2012).

The above studies provided ample evidence that not all grammatical targets are equally susceptible to the treatment via CF. Therefore, Li (2014) suggested that more empirical research should be conducted to examine the differential effects of CF on a range of grammatical structures in relation to the overall learner proficiency. Furthermore, a recent meta-analysis of 28 observational classroom studies with 52 separate data sets (Brown 2016) also underscored the need for more empirical evidence from classrooms to better understand provision of feedback in relation to particular linguistic features and teaching contexts.

The current study set out to investigate the impact of oral CF on L2 acquisition of two past aspectual forms in French, the *passé composé* (PC) and the *imparfait*

(IMP). The goal of this study was to examine how successful CF may be when utilised to improve the accuracy of some challenging linguistic targets, learnt in a communicatively oriented foreign language classroom. Since aspectual distinctions can be learnt only in communicative contexts (Jackendoff 1991) as explicated in Section 1.3, two implicit types of CF, recasts and clarification requests have been chosen to respond to learner errors. Implicit types of CF are deemed to be most appropriate for such contexts because explicit CF may hinder communicative flow and development of fluency (Long 2007).

In what follows I cast a glimpse over research on CF, followed by a summary of the target structure characteristics and a discussion on the roles of proficiency and the type of task. Research questions and methodology are then presented, followed by the study results and a related discussion.

1.1 Interaction and corrective feedback

In classifications of CF, recasts and clarification requests are usually viewed as implicit CF, but they differ considerably in the sense that recasts provide input (i.e. the target form) whereas clarification requests are defined as output-prompting discourse moves (Ellis and Sheen 2006; Sheen and Ellis 2011). Recasts simultaneously provide target-like input and implicitly render negative feedback, which may translate into negative evidence if the learner's interpretation and inferences are correct. Clarification requests, on the other hand, aim at eliciting a correction or clarification of the learner's preceding utterance by indicating that something was unclear or incorrect in that utterance. The following are examples of a recast (1) and a clarification request (2) from the current study:

- (1) S6: ... *boisson.... et les deux garçons s'est disputé* ← error, trigger
 (inaccurate auxiliary)
 [...drink... and the two boys argued (SING)]
 T: *se sont disputés ?* ← recast
 [they argued ?]
 S 6: *oui ils se sont disputés um parce que le garçon n'est umm n'est donné*
 [yes they argued um because the boy is not umm is not given]
- (2) S34: *et um il faisait beau avec beaucoup de soleil... il faisait très chaud
 donc ils ont très soif* ← error, trigger
 [and um the weather was nice with a lot of sun ... it was hot so they are very
 thirsty]
 T: *comment ? tu peux répéter ?* ← (clarification request)
 [how ? can you repeat ?]

S34: ils étaient ? er er er ... il avait
 [they were ? er er er ... he had

Both recasts and clarification requests can function as negative evidence to the extent that learners are able to make appropriate inferences and interpret the corrective intent of implicit negative feedback. That is because, crucially, negative evidence is not a type of input or feedback given to the learner, but the inferencing made by the learner following a certain type of feedback (Carroll 2001).

An extensive body of research on CF and specifically recasts has largely been conducted within the interactionist framework based on the tenets of the Interaction Hypothesis (Long 1996, 2007; Long and Robinson 1998). Long and Robinson considered recasts to be an ideal type of focus on form in that they do not interrupt the ‘predominant focus on meaning’ (1998, p. 26). From this perspective, negotiation for meaning allows the learner to briefly focus on form while being engaged in conversation and trying to comprehend and produce the language needed for a message to be understood by the interlocutor. These short instances of attention diverted from meaning to form are seen as ideal situations in which noticing, argued to be a precursor for learning (Schmidt 1990, 2001) is more likely to occur (Doughty 2001). The intervention provided by negative feedback in the form of recasts, Doughty argued, can lead to ‘cognitive comparison’ which may allow the mapping of form onto meaning and function, and can lead to knowledge restructuring in this ‘highlighted state of activation’ (Ellis 2005).

The beneficial effects of recasts have been shown in a large number of experimental laboratory studies (e.g. Ishida 2004; Iwashita 2003; Leeman 2003; Long et al. 1998; Lyster and Izquierdo 2009; Mackey and Philp 1998; McDonough and Mackey 2006; Philp 2003). Mackey and Philp (1998) for example, showed that the learners who were ‘ready’ to move to a higher level of language development demonstrated significant gains following the treatment with recasts, while those who may not have been ‘ready’ yet to move to a higher level did not show much improvement. The authors hypothesized that for these learners, the content of the recasts was not adjusted to their developmental level.

Contrasted with laboratory settings, experimental research conducted in classrooms has usually found an advantage for explicit and output-prompting feedback over the implicit recasts (e.g. Ammar and Spada 2006; Ellis 2007; Ellis et al. 2006; Sato and Loewen 2018; Yang and Lyster 2010). Nevertheless, recasts as a feedback strategy seem to have been widely used in second/foreign language classrooms. Descriptive studies with both adults and children, in various instructional settings and contexts (e.g. Ellis et al. 2001; Havranek 2002; Loewen and Philp 2006; Lyster 1998; Lyster and Ranta 1997; Oliver 1995; Sheen 2004)

regularly find recasts to be the most frequently employed type of CF by teachers, although Lyster et al. (2013) in their review of 12 classroom studies suggested that this may not be the case across all instructional settings. However, a recent meta-analysis of classroom observational studies (Brown 2016), which synthesized the results of 28 classroom primary studies, found that recasts made 57% of all CF, compared to 30% of CF provided via prompts. Brown's meta-analysis pointed to grammatical errors as the most common focus of teachers' CF in classrooms (43%), with lexis comprising 28% and phonological errors accounting for 22%. The next section focuses on the target structures and the current study which is reflecting the challenges associated with the acquisition of aspect in French.

1.2 Target structures: PC and IMP

The passé composé (PC) and the imparfait (IMP) are two forms of French grammatical aspect in spoken language, referring to the polarity between perfective (complete) and imperfective (incomplete) action. According to Comrie (1976), imperfective is further divided into habitual and continuous aspect, where continuous may be progressive and non-progressive. Grammatical aspect is to be distinguished from the tense temporal dimension (e.g. present vs. past), but also from lexical aspect, which was proposed by Vendler (1967), and has been attested as a universal categorisation of verbs. In brief, grammatical aspect points to 'different ways of viewing the internal constituency of a situation' (Comrie 1976, p. 3), while lexical aspect relates to the inherent semantic meaning of the verb predicate. Grammatical aspects differ across different languages depending on how they mark the perfective/imperfective distinction. For example, English differentiates between progressive and non-progressive, whereas French works with the imperfect and the perfect.

Lexical aspect, on the other hand, has been established as a property that all languages share. There are four classes of lexical aspect: states, activities, accomplishments and achievements. It has been argued that accomplishments and achievements as telic verbs are prototypically associated with the use of perfective morphology since the meaning of the perfective is a completed action. Activities and states, on the other hand, are prototypically marked by imperfective morphology as both encode an incomplete, ongoing process or event (Andersen and Shirai 1994). However, proficient speakers can vary the use of perfective and imperfective, depending on the context and the meaning they wish to convey. The use of IMP in contemporary French is increasingly pragmatically conditioned. The differences between PC and IMP are recognisable in two types of complexity as explicated by DeKeyser (2005): PC in complexity of form and IMP in complexity of

meaning, which is further aggravated – at more advanced levels of learning – by complexity of form-meaning mapping.

PC can be described as a formally complex structure, but in terms of form-meaning relationship its characteristic is regularity in mapping the form onto perfective or completed action in the past. It is a compound structure consisting of an auxiliary and the past participle whereby the choice of the auxiliary (*to be* or *to have*) is determined by the verb semantics. The past participle can be regular or irregular, whereby irregular past participle is realised in a multitude of forms that have to be learnt and remembered. Importantly, because of the compound structure the PC complex morphology is imbedded in its periphrastic or analytic multi-word construction which observes the syntactic norms of the language, e. g. agreement in gender and number (Spencer and Popova 2015). The spoken PC thus presents a morpho-syntactically and morpho-phonologically complex structure. In return, the regularity of its form containing sufficient ‘phonological substance’ (Talmy 2008) makes it salient enough to be easily noticed. In research on CF, saliency has emerged as an essential factor which can make the target structure easier to notice and consequently easier to learn (Li 2014; Sato and Loewen 2018; Yilmaz 2012).

The acquisition of PC in French L2 is usually slow at the beginning, but once the complex morphology has been mastered, its ‘transparent’, one-to-one mapping onto completed or perfective meaning of the verb assists in achieving higher levels of proficiency.

IMP is formally much simpler than PC: it is marked with only one bound, inflectional morpheme which in the verbs ending in *-er* may sound the same as the infinitive and the past participle. This makes it considerably less salient and less noticeable than the PC. On the other hand, while PC has only one semantic meaning indicating a completed action, IMP has three semantic meanings: (a) imperfective (ongoing action in the past with out-of-focus endpoints), (b) iterative or habitual events in the past, and (c) durative (states of being in the past). The following examples show the differences and similarities between French and English:

- (3) *Elle s'est réveillée.* (**PC**)
‘She woke up/She has woken up’.
- (4) *Elle chantait dans la cuisine.* (**IMP – imperfective**)
‘She was singing in the kitchen’./‘She sang in the kitchen’.
- (5) *Elle se réveillait à six heures.* (**IMP – iterative/habitual**)
‘She would wake up at six o’clock’./‘She used to wake up at six o’clock’.
- (6) *Elle connaissait l’auteur de ce roman.* (**IMP – durative**)
‘She knew the author of this novel’.

Learning past aspectual distinctions in French L2 is a challenging task which becomes evident only at post-initial stages of learning when more varied vocabulary and more sophisticated topics are introduced in the language repertoire of L2 use. Research so far has found, for example, that immersion students in Canada struggle with the appropriate use of PC and IMP even when they achieve high levels of communicative competence in French (Harley 1989, 1993; Kaplan 1987). Harley's studies suggest that learners first start to use PC, albeit not necessarily productively, before using IMP with *être* (to be), *avoir* (to have) and some other irregular verbs (e.g. *faire*, *vouloir*, *pouvoir*). These IMP forms are usually learnt early as 'lexically bound chunks' (Harley 1989, 1993) and used in formulaic expressions (e.g. *avoir faim*/to be hungry, *être malade*/to be sick, *faire du sport*/play sports, etc.), the meaning of which is encoded in the noun or adjective component of the construction. To explain the relationship between grammatical categories and saliency, Talmy (2008) posits that open-class categories are more salient than closed-class (functional) categories, while among open-class categories nouns are perceived as more salient than verbs. Since nouns lend more salience than verbs, this may explain why IMP in 'lexically bound chunks' is easier to notice and acquire at an early stage. The acquisition of IMP becomes more complex and more challenging at later stages when mapping between the form, meaning, and function is less transparent and consequently less salient. The next section is concerned with the role of a communicative context in the acquisition of aspect and in raising the levels of proficiency which is considered to be an important factor mediating the effects of implicit negative feedback.

1.3 Classroom environment and proficiency

The task of learning and using the forms of grammatical aspect becomes more difficult in a foreign language classroom situation, since for classroom learners there is usually no pressure to communicate that would force learners to incorporate aspectual morpho-syntactic markers into their system (Dietrich et al. 1995). That is to say, one of the key problems for classroom instructed learners is the lack of communicative purpose. This problem can be clearly observed when viewed through the prism of Jackendoff's (1991) argumentation showing the links between lexical semantics and phrasal semantics: since lexical semantics and phrasal semantics interrelate deeply, the meaning of a linguistic concept becomes clear and accessible only in the context of the whole sentence or even at a discursive level. Along the same lines, Gass (2003) holds that language learning, viewed from the

interactionist perspective, stems from communicative pressure which helps build the links between communication and acquisition. However, classroom environment does not usually provide for this necessity.

In order to compensate for limited communicative opportunities, the cognitive-interactionist tradition proposes that classroom learners should work with meaningful interactive tasks which can help build the representations of the linguistic concepts. In a classroom where there is an overall focus on meaning with brief instances of focus-on-form (as explicated by the Interaction Hypothesis), CF might assist in achieving higher levels of grammatical accuracy. Specifically, recasts might be helpful when used as feedback on structures which unambiguously map meaning onto form, as shown in the example of Chinese classifiers (Li 2014). Such might be the case with French PC, as well as IMP at initial stages of development characterised by the use of 'lexical chunks'. However, where there is no one-to-one form–meaning relationship, recasts might be less helpful, as shown in Ayoun (2004) study with French IMP at later stages, in Ishida (2004) with Japanese progressive *-te i -(ru)*, and in the example with Chinese perfective *-le* (Li 2014).

Studies investigating the effects of CF have found that the extent to which recasts are effective may be strongly related to the learner's proficiency level (Ammar and Spada 2006; Carroll et al. 1992; Li 2014; Li et al. 2016; Nassaji 2010) or to the learner's developmental 'readiness' to acquire a certain grammatical structure (Iwashita 2003; Mackey and Philp 1998; Philp 2003). The notion of language proficiency is usually based on an understanding that proficiency comprises fluency, accuracy and complexity of both oral and written expression. Hulstijn (2011) for example, defines proficiency as 'the extent to which an individual possesses the linguistic cognition necessary to function in a given communicative situation, in a given modality – listening, speaking, reading, or writing' (p. 242). Clearly, communicative competence makes an essential part of proficiency.

Communicative ability might also be a prerequisite for an appropriate interpretation and recognition of the corrective nature of recasts. Doughty and Williams (1998) suggested that in order to recognise the corrective intent of a recast, the context in which it appears must be transparent and clear to the learner. In other words, the learner's proficiency level must be such that he/or she should be able to comprehend the context. Mackey (2006) also suggested that the key to identifying the corrective force of recasts lies in the context since recasts are contingent on learners' errors.

However, in classroom-based studies on CF it has often been reported that learners had developed high levels of explicit knowledge about the grammatical structures, which was not matched with the ability to use these structures freely in conversation (e.g. Ellis et al. 2006; Sato and Loewen 2018; Yang and Lyster 2010).

In such situations, for classroom learners who are taught on the basis of structural syllabus, recasts may not be effective because learners might have difficulties with comprehension of the context in which CF has occurred, or they might be struggling with the use of spoken language. Where there is a lack of communicative ability, explicit or output prompting feedback might be more successful. This might seem to be in contradiction with Lyster's studies (e.g. Lyster and Ranta 1997) and his counterbalance hypothesis (Lyster and Mori 2006); however, these studies were conducted in immersion classrooms where students are engaged with lesson content and do not see CF on grammatical errors something they should be paying attention to. Moreover, low uptake does not tell us anything about the effects of CF (Long 2007).

1.4 Research questions

Recasts have so far been compared mostly with explicit forms of feedback and with prompts. However, the problem with prompts is that they involve four different types of output-prompting strategies with different levels of explicitness. Clarification requests are considered the most implicit form of prompts. They have so far been used only in few studies, namely in Loewen and Nabei (2007) which compared recasts, clarification requests and metalinguistic feedback; in McDonough (2007) where the efficacy of recasts was compared with clarification requests focusing on the use of English past activity verbs¹; and in Sato and Loewen (2018) who recently compared recasts and clarification requests with and without additional metalinguistic information. They found that recasts and clarification requests were equally successful when used along with metalinguistic information, but when used alone clarification requests were found to be more effective. In both McDonough's and Sato and Loewen's study, participants had longer experience in FL learning than the learners in the current study but their experience may have been limited to developing only explicit metalinguistic knowledge and receptive language skills. In comparison, young classroom instructed learners in the current study had developed a certain level of communicative competence, and their use of the target structures was in the process of development. Based on these characteristics, they may have been more similar to second language learners than to foreign language learners. They were also dissimilar to the learners in the immersion programmes since in FL classrooms there is an obvious emphasis on mastering language skills rather than on content learning by the use of a FL.

As the majority of studies on CF have so far involved classroom learners who had high levels of metalinguistic knowledge and lower communicative

ability, it is important to see how communicatively more competent classroom instructed learners fare in this research. Studies on CF with such learners are clearly needed in order to establish what CF can offer to them and how they can benefit from it.

With this in mind, the current study set out to examine the effects of two implicit types of CF, input-providing recasts and output-prompting clarification requests, on two past aspectual forms in French: PC and IMP.

The study sought to answer the following research questions:

1. Does oral corrective feedback in the form of (a) recasts and (b) clarification requests have an effect on L2 learners' accuracy of use and form² of the PC, as observed in oral production narrative tasks?
2. Does oral corrective feedback in the form of (a) recasts and (b) clarification requests have an effect on L2 learners' accuracy of use and form of IMP, as observed in oral production narrative tasks?

It was hypothesized that:

1. Based on the past research which showed that recasts can assist in learning salient structures where there is one-to-one form-meaning mapping, it is predicted that recasts will positively impact on acquisition of PC. Clarification requests will be less effective in learning a morpho-syntactically complex structure such as is PC, because of the participants' insufficient knowledge of all the forms of formally complex target structure.
2. Both recasts and clarification requests will be effective for acquisition of formally less complex IMP structures, but only for more salient irregular verbs and constructions that are learnt as 'lexically bound chunks' (Harley 1989, 1993). Due to little prior knowledge of the target structures and very slow development of IMP as documented in previous research, this study will only partially reflect the issues connected with the acquisition of IMP.

2 Method

2.1 Participants

The study was carried out with 52 high school learners of French as a foreign language (FL) in New Zealand, whose average age was 16. There were two experimental groups, each involving 18 students while the control group consisted of 16 students. The two experimental groups were from one school, both taught by the same teacher, and the control group was from another school, but both schools followed the same curriculum based on a functional syllabus and used the same text-books for teaching French. The

treatment with recasts and clarification requests in both experimental groups was carried out by the same teacher/ researcher. Students in the control group only took the tests. As a true control group (Norris and Ortega 2000) they did not carry out any activities related to the target structures.

In the recast (RE) group, there were nine males and nine females, while in the clarification (CR) group there were five males and 13 females, and in the control (CN) group five males and 11 females. All three groups involved early bilingual speakers whose first language was not English, but they all had lived in New Zealand for more than 10 years and had spoken English since their early childhood. In the RE group 11 students were English native speakers, one was bilingual native English/German, two were German native speakers, two Korean, one Chinese and one a Filipino Tagalog native speaker. In the CR group there were 10 English native speakers, four Chinese, two Korean, one German and one Romanian native speaker. In the CN group 14 participants were English native speakers, one was German and one was a native speaker of Serbian.

On average, all participants had had around 500 h of French instruction at the time when the data were collected. Most participants started learning French as an optional subject in Year 9 but some of them started in Year 7 or 8 (in Intermediate school). The teachers in both schools stated that their teaching practices followed the communicative approach, but there was also an emphasis on grammar and accuracy since students are expected to sit the external examinations at the end of each of their last three years of secondary education. Apart from having regular FL classes every day (five times per week for 1 h) these students also met for 15–20 min per week with a native speaker teaching assistant, to have small group or individual conversations. These learners were at a pre-intermediate proficiency level according to their teachers' estimation and based on the fact that they had passed NCEA level 1 NZ examination in French which is comparable to B1 level of CEFR. The target structures, PC and IMP of some – irregular – verbs had been introduced about a year earlier in both schools, so the participants already had a certain level of explicit knowledge of the target structures, based on the presentation and explanations in standard high school textbooks. They had already started using PC, and IMP with a limited number of verbs. Taking into consideration the stages of French L2 acquisition proposed by Bartning and Schlyter (2004), the pre-test results showed that participants were at stage 2 – though considerable individual variation was observed in each class. At this, *post-initial stage*, learners start using PC more productively, but the full finite morphology is not yet established. Some learners may use IMP with *être* and *avoir* in appropriate contexts. In the current study there was one student in RE group, two in CR group and none in CN group who achieved the score of 75% for PC on the pre-test. No student in any of the three groups achieved such a pre-test score for IMP.

2.2 Instruments and procedures of data collection

The study had a pre-test, treatment, an immediate and a delayed post-test design. The pretests were administered two weeks before the treatment started. Treatment took place in three sessions over a period of two weeks, each session lasting for 20–25 min. Immediate post-tests were administered in the week following the last treatment session, and a delayed post-test took place after the term break, 6 weeks after the immediate post-test, i.e. seven weeks after the last treatment session.

Both the tasks and the tests were picture-based and designed to elicit the target structures. All were of the same format, but each based on a different story presented in a set of six connected pictures. Such ‘focused tasks’ (Ellis 2003) provide opportunities to elicit grammatical structures in obligatory contexts (the tasks used are presented in Appendix A).

Examples (7) and (8) demonstrate how the context determines the use of either IMP (7) or PC (8) of the verb *se faire bronzer* /to sunbathe:

- (7) *Les garçons ont vu une dame qui se faisait*
 the boys have (AUX) see (PP) a lady who make (IMP-refl)
bronzer.
 sunbathe (INF)
 “The boys saw a lady who was sunbathing”.
- (8) *Elle s’est fait bronzer hier après-midi*
 She is (AUX-refl) make (PP) sunbathe (INF) yesterday afternoon
 “She was sunbathing/she sunbathed yesterday afternoon.”

With regards to the use of PC and IMP it is worth noting that in narrative stories French speakers tend to use PC to describe events in the foreground, while IMP is used to describe the background (Bardovi-Harlig 2000). This makes narrative stories the most appropriate type of task to practice and test the use of past aspectual distinctions in French.

2.2.1 Treatment

Treatment tasks were carried out in the whole class and included information gaps, such that some pictures were missing from the students’ sheets and they had to ask the teacher about their content in order to see what happened in the story. Likewise, some pictures were missing from the teacher’s sheet and then she asked the students to describe their pictures. In each treatment session each story was narrated twice, first with the teacher’s help, followed by students’ narration without help. CF was provided orally, during the task. It was important that during

the interaction, the focus was constantly on meaning, with very short episodes of focus on form provided by either recasts or clarification requests. Recasts were operationalised as reformulations of a learner's utterance in which non-target-like grammatical items were replaced by the corresponding target language form. Recasts were short, partial, involving one change, with rising intonation. Clarification requests were operationalised as teacher's utterances showing to students that a clarification or a repetition was required. Uptake was operationalised as a learner's utterance immediately following the teacher's feedback and containing repair of the error which triggered the teacher's feedback. Only French was used during the treatment sessions.

As this was the whole class activity, all students were equally exposed to the instances of CF provided by the teacher. She did not call out students to narrate the story but individuals were allowed to volunteer their answers. In this regard, by replicating the real classroom situation the study had a high level of ecological validity. Each student had an equal opportunity to take part in interaction, but not all of them used this opportunity; some only listened (an excerpt from a treatment task is provided in Appendix B). All students in the class, however, audited the feedback received by others. (The tables in Appendix C present frequencies of CF episodes in two experimental groups, and frequencies of uptake by individual students, along with their individual gain scores on immediate (post-test1) and delayed post-test (post-test 2).

Since CF is contingent on the errors committed, in unscripted oral communication tasks³ it is not possible to plan how many instances of feedback will be provided. The students' errors determine the number of CF episodes; thus it is not possible to control for the number of CF episodes, and neither to have an equivalent number of CF instances in each group if an unequal number of errors occurs in the two groups.

2.2.2 Tests

The tests were of the same format as the treatment tasks (picture-prompted stories) and required the participants to tell the story on their own. There were six pictures making up the story, with a sentence at the beginning of each set of pictures, starting with 'This story happened two days ago ...', or 'I saw this happened yesterday ...' (*Cette histoire s'est passée il y a deux jours ...* or *J'ai vu ça s'est passé hier ...*). Thus, the students' orientation was directed towards the past time and this precluded the use of historical present which can be employed in retelling past events. The students were asked to use at least two sentences to say what was happening in each of the six pictures. Testing was carried out individually with each student in a quiet room, and their narratives were recorded on a digital voice

recorder, to be transcribed later. The test tasks were counter-balanced, so that each student had a different story of the same format on each test, in order not to produce a practice effect (for example, task A on pre-test, task B on post-test1 and task C on post-test2; or task B on pre-test, C on post-test1 and A on post-test2, etc.). From pictures it was possible to make up a story involving a plot and events in the foreground, as well as obtain some background information. Two independent French native speakers were asked to retell the stories presented in the pictures beforehand, to check if they would elicit a sufficient number of PC and IMP forms.

2.2.3 Coding and scoring

All tests were coded separately for each of the two target structures. The tests elicited a range of 5 to 15 obligatory occasions for PC with an average of 10 occasions per test per student. A slightly lower number of obligatory occasions was elicited for IMP: 3 to 13, with an average of six per test per student. For each correct verb supply in obligatory context including the finite target-like form participants were given two points: one point was given for the correct use of the verb tense in obligatory context and one point for the correct form. For example, (a) if a particular context required the tense/aspect which was actually used and it was formed correctly participants were given two points, (b) if a particular context required the tense/aspect which was used but did not contain the correct form, participants were given 1 point and (c) if a particular context did not require the tense/aspect which was actually used the score was zero. Examples are provided below:

- (9) *Elle a ouvert la porte*
 she has (AUX) open (PP) the door
 ‘She opened the door’
 [correct auxiliary + correct past participle = 2 points]
- (10) *Elle est ouvert la porte*
 she is (AUX) open (PP) the door
 [incorrect auxiliary + correct past participle = 1 point]
- (11) *Elle ouvre la porte*
 she open (PRES) the door
 [incorrect tense in the context of past events = 0 point]

The obligatory use contexts were established for PC and IMP separately, where the instances of overuse were identified. Scores were calculated using the target-like use (TLU) analysis (Pica 1983):

$$\frac{n \text{ correct supply in contexts (incl. correct form)}}{(n \text{ obligatory contexts}) + n \text{ supply in non oblig. contexts}} \times 100$$

= percent (%) accuracy

The number of obligatory contexts and the number of supply in non-obligatory contexts were multiplied by 2, to account for the fact that two points were available for each use in obligatory context. This calculation is essential to distinguish users who have learned only a form and generalized the form beyond precise context, from those who have either acquired an exemplar in the context or those who have mastered a form-meaning mapping. The latter group will not show evidence of overgeneralization.

To ensure the reliability of coding, 15% of each set of tests were coded by a French native speaker trained teacher. Agreement was calculated in percentage: the obtained agreement was 91% for PC pre-test, 93% for the immediate post-test, 89% for delayed post-test. For the IMP agreement was 95% on the pre-test, 97% on the immediate post-test, 92% on the delayed post-test.

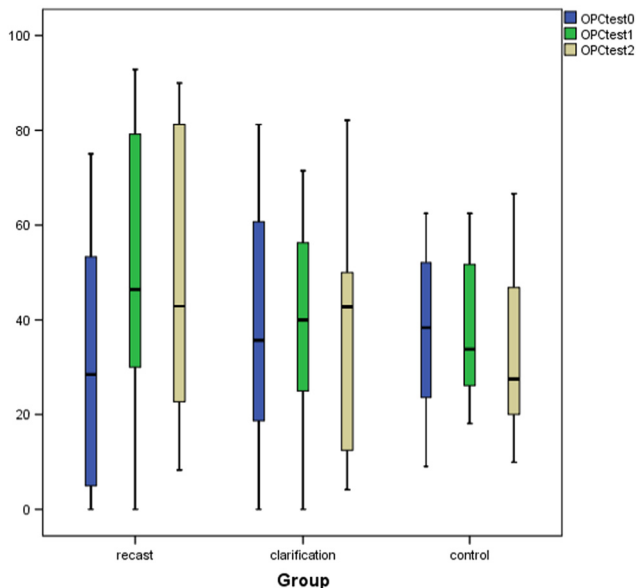


Figure 1: Boxplot of data distribution on three tests for the passé composé.

2.3 Data analysis

An initial screening for data distribution indicated that on all three tests (pre-test, post-test1, post-test2) PC data were normally distributed (Figure 1). Standard deviation values were rather large in all three groups, which is an almost inevitable characteristic of classroom studies where considerable differences exist among learners. A one-way ANOVA on the pre-test suggested that the groups were comparable: $F(2, 50) = 0.567$, $p = 0.571$. A mixed design repeated measures ANOVA was used to analyse PC, with the test results at three levels (pre-test, post-test1, post-test2) as dependent variables and the three conditions (groups) as the independent variable. The assumptions for repeated measures ANOVA were satisfied, with a non-significant Mauchly test of sphericity ($p = 0.150$). This was followed by an ANCOVA on post-test1 and the post-test2, with the pre-test scores as a covariate to account for differences on the pre-test which were not significant but should be accounted for when the scores are not equal (Field 2009; Miller and Chapman 2001). The assumptions of ANCOVA, including the independence of the covariate and the homogeneity of regression slopes were met. Effect sizes in the repeated measures ANOVA were calculated using the formula for Cohen's d (Norris and Ortega 2000), while in ANCOVA the formula for r contrasts was used, based on t -statistics (Field 2009).

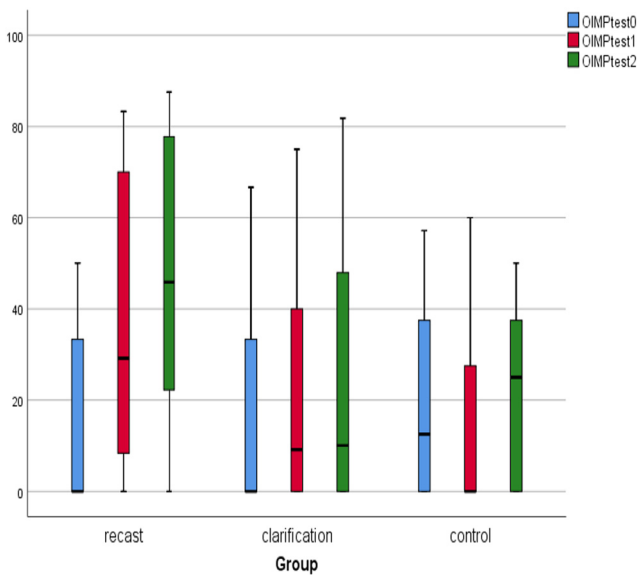


Figure 2: Boxplot of data distribution on three tests for the imparfait.

The data for IMP⁴ did not have normal distribution (Figure 2); therefore, it was analysed using non-parametric tests based on mean ranks rather than mean scores (Norris 2015). First, the Kruskal–Wallis H test on the pre-test was employed to check if the groups were comparable. The test was not significant, $H(2,50) = 0.234$, $p = 0.890$. A Friedman test was then run on each group separately, and where statistically significant result was obtained, a Wilcoxon-Signed Ranks test then calculated the differences between pairs of tests: pre-test to post-test1, pre-test to post-test2, and post-test1 to post-test2 (McManus and Marsden 2017). Since multiple (three) tests were run on the same set of data, alpha value was reduced to 0.017 (0.05/3), as recommended by Field (2009).

The use of G-Power software indicated that when conducting a between-within repeated measures ANOVA, in order to obtain a recommended Cohen's (1988) effect size of 0.65 and the power of 0.95, the total sample size would need to comprise at minimum 48 subjects. This requirement was satisfied with 52 participants in total (51 whose data were analysed because one participant was excluded due to having missed one test).

4 Results

4.1 Research question 1

Table 1 presents the descriptive statistics for PC for three groups (RE, CR, CN) at pre-test, post-test1, and post-test2. The scores were calculated in percentages.

The analysis of a repeated measures ANOVA revealed a significant group by time interaction indicating that the three groups demonstrated significantly different behaviour over time, $F(4, 96) = 4.11$; $p = 0.004$; $\eta^2 = 0.146$. There was also a significant effect for time, $F(2, 96) = 4.05$, $p = 0.020$, $\eta^2 = 0.78$. Follow-up pairwise comparisons using Bonferroni adjustments for multiple comparisons showed that for RE group there was a statistically significant mean difference between the pre-test and post-test1 of 21.47; $p = 0.000$; CI [10.29; 32.65] with a medium to large effect

Table 1: Descriptive statistics for PC at three points in time.

Group	Pre-test		Post-test 1		Post-test 2	
	Mean	SD	Mean	SD	Mean	SD
RE (N = 18)	29.35	26.44	50.82	30.10	48.49	30.86
CR (N = 17)	37.01	27.19	37.48	22.36	37.79	23.53
CN (N = 16)	36.62	17.33	37.59	15.12	34.14	17.28

size of $d = 0.76$, and the mean difference of 19.13 between pre-test and post-test2; $p = 0.002$; CI [5.95; 32.32] with a medium effect size of $d = 0.67$. The score on post-test2 slightly decreased ($d = -0.08$). In the CR group there was no evidence of any significant change over time: the mean difference from pre-test to post-test1 was 0.46; $p = 1.00$, CI [-11.04; 11.96] and from pre-test to post-test2, 0.79; $p = 1.00$, CI [-12.78; 14.35]. Effect sizes between each post-test and the pre-test were minimal: 0.03 and 0.08 respectively. A small increase on post-test1 and a decrease on post-test2 were observed in CN group: from pre-test to post-test1 the mean difference was 0.97; $p = 1.00$; CI [-10.88; 12.83] with an effect size of 0.06, and from pre-test to post-test2, -2.48; $p = 1.00$; CI [-16.46; 11.51] with a negative effect size $d = -0.14$.

An ANCOVA⁵ that used pre-test scores as a covariate was then computed on each post-test, so that the covariate appearing in the model was evaluated at 34.18. In the corrected model, the results on post-test1 indicated that there was a statistically significant group difference, $F(2, 47) = 6.16$, $p = 0.004$, $\eta^2 = 0.21$. Follow-up pairwise comparisons with Bonferroni adjustments for multiple comparisons showed that there was a significant mean difference between RE and CR group of 18.48; $p = 0.010$, CI [3.58; 33.37], and also a significant mean difference between RE and CN group of 18.09; $p = 0.014$, CI [2.98; 33.21], while no significant mean difference emerged between CR group and CN group: 0.38, $p = 1.00$, CI [-14.82; 15.58]. Effect sizes, measuring the effect of each treatment group in comparison with the control group, were $r = 0.37$ for RE, and $r = 0.14$ for CR group.

On post-test2, the tests of between-subject effect showed a statistically significant group difference: $F(2, 47) = 3.96$, $p = 0.026$, $\eta^2 = 0.14$. Pairwise comparisons with Bonferroni adjustments for multiple comparisons showed only a statistically significant mean difference between RE and CN group: 18.65, $p = 0.035$, [CI 0.982; 36.33] with an effect size of $r = 0.35$. Mean difference between RE and CR group was not significant: 15.24, $p = 0.105$, CI [-2.18; 32.65], and such was the difference between CR and CN group: 3.42, $p = 1.00$, CI [-14.35; 21.19], with an effect of $r = 0.07$.

Table 2: Descriptive statistics for IMP at three points in time.

Group	Pre-test			Post-test 1			Post-test 2		
	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median
RE (n = 18)	15.79	19.53	0.00	35.22	31.65	29.16	47.72	29.17	45.83
CR (n = 17)	17.21	22.16	0.00	22.66	25.47	9.09	23.81	29.64	10.00
Cn (n = 16)	18.48	21.85	12.5	16.11	23.31	0.00	19.72	20.26	25.00

4.2 Research question 2

Table 2 shows the descriptive data for IMP with the mean scores, standard deviations and median scores which were used in non-parametric tests.

In RE group, the Friedman test produced a statistically significant result $\chi(2, 18) = 22.18, p = 0.000$. The follow-up Wilcoxon Signed Ranks tests showed the following results: pre-test to post-test1: $Z(18) = -2.78, p = 0.005$, with a medium to large effect size $d = 0.76$; pre-test to post-test2: $Z(18) = -3.44, p = 0.001$, with a large effect $d = 1.05$; and post-test1 to post-test2: $Z(18) = -2.53, p = 0.011$, with a small effect $d = 0.41$.

Friedman tests in both CR group, $\chi(2, 16) = 2.33, p = 0.311$, and CN group, $\chi(2, 15) = 0.37, p = 0.832$, were not statistically significant, suggesting that the change between the pre-test and post-tests in these two groups was not above chance, so the follow-up tests were not carried out. Effect sizes for CR group were small: $d = 0.23$ on post-test1, $d = 0.26$ on post-test2 compared to the pre-test, and $d = 0.07$ on post-test2 compared to post-test1.

5 Discussion

Research questions were concerned with the effects of input-providing recasts and output-prompting clarification requests on L2 acquisition of French PC and IMP, as measured by oral production in context-constrained unscripted oral communicative tasks. The obtained results suggest that for both grammatical targets recasts were more effective than clarification requests. Therefore, the first hypothesis was confirmed: it predicted that recasts would be more effective for learning PC because of its morphologically complex form and higher levels of saliency. The second hypothesis was only partly confirmed: it predicted that both recasts and clarification requests would benefit the learning of IMP constructions which involve irregular verbs and are learnt in the early stages of language development as 'lexical chunks'. However, recasts were again shown to have an advantage over clarification requests in learning such linguistic targets via oral communicative tasks.

The following discussion will consider several factors: the type of linguistic target with reference to its complexity and the related level of salience; the participants' overall proficiency including their communicative competence as well as prior knowledge of the target structures; and the frequency of CF provided during the treatment. Learners who received recasts demonstrated substantial gains in the acquisition of PC, as observed in oral production tasks. If we look at those learners

who achieved 75% and above (recall that on the pre-test there was only one such individual in RE group and two in CR group), on post-test1 there were six learners in RE group who scored above 75% and the same six learners achieved the same or higher results on post-test 2. In CR group, no one scored above 75% on post-test1, and on post-test2 there were again two learners who correctly used PC 75% of time.

PC is a morpho-phonologically and morpho-syntactically complex structure that presents considerable difficulties to L2 learners at initial and post-initial stages of their learning French FL. One reason why recasts as an input-providing strategy were effective in learning such constructions is that recasts reduce the processing load (Skehan 1998), leaving enough capacity for students to process not only the meaning but also the form at which their attention is briefly directed in conversation. As Skehan contends, recasts can be facilitative of managing the processing load of formally complex structures. In comparison, clarification requests usually help learners to retrieve and consolidate their existing knowledge, but this process may use up the learners' limited cognitive resources while they are primarily engaged with the meaning. For example, studies that showed the benefits of prompts and specifically clarification requests, usually tested their effects on features that were not complex in terms of form (e.g. Ammar 2008; Ammar and Spada 2006; Lyster 2004; Sato and Loewen 2018; Yang and Lyster 2010).

Morpho-syntactic and morpho-phonological complexity of the PC form is at the same time a source of saliency: in spite of the formal complexity as a source of difficulty, the perceived saliency of such complex constructions can be seen as a factor contributing to easier detection in oral communication, and consequently, to more successful learning. Formed as a compound morpho-syntactic feature consisting of an auxiliary and a past participle, PC is characterised by its morphological regularity (Goldschneider and DeKeyser 2005) and one-to-one form–meaning mapping, which both contribute to saliency (DeKeyser 2005). Saliency is closely related to grammatical categories (Mackey 2006; Mackey et al. 2000; Talmy 2008). For example, research shows that syntactic features are more salient and consequently more noticeable than inflectional morphology; hence syntactic features are easier to acquire than inflectional morphology, both in first language (Stoll 2015) and in second language (DeKeyser 2005; Lardiere 1998; Sorace 2003).

The utilisation of recasts as a means to induce noticing can present learners with 'psycholinguistic data that are optimized for acquisition' (Ellis 2005, p. 332). This occurs in the contrast between the learner's own non-target-like utterance and the corrective recast, when the relevant (corrected) element of the form is highlighted, and simultaneously linked to the meaning which is to be expressed. Noticing of recasts may have also assisted in learning IMP at this early stage. In addressing the second RQ related to IMP the data analysis in oral production tests

was limited to irregular verbs where it was clear that IMP of the verb was used: for example *être, avoir, faire, pouvoir, devoir, savoir, dormir, pleuvoir, vouloir* (see note 4). Irregular verbs are generally more salient than regular verbs due to their phonological or phonetic substance (Goldschneider and DeKeyser 2005; Talmy 2008) which makes them easier to notice. Some of these verbs are also used in ‘formulaic expressions’ that are present in French L2 early interlanguage. These expressions are usually acquired as ‘lexically bound chunks’ (Harley 1989, 1993). If nouns are perceived as more salient than verb forms (Talmy 2008), then it is not surprising that such formulaic sequences where meaning is encoded in the noun or adjective part of the construction are easier to notice and easier to acquire. These findings are consistent with research into French L2 suggesting early acquisition of formulaic sequences containing IMP (e.g. Dietrich et al. 1995; Harley 1989, 1993; Myles et al. 1999).

In brief, considering the participants’ rather low levels of the target structure prior knowledge estimated at 30% for PC and 17% for IMP on the pre-test, it is not surprising that recasts as CF strategy benefited the students at this level. With the basic knowledge of PC and IMP, they may have been developmentally ready to acquire PC, but needed assistance in terms of more input accounting for the variety of morpho-syntactic forms characteristic of PC. The forms of IMP are more likely to have been acquired as exemplars in context.

One of the factors that contributed to the advantage for recasts over clarification requests may have been the frequency of the target forms heard during the treatment, since the exposure to the target structures was considerably, but not significantly, higher in the RE group than in the CR group (see Appendix C). This was due, on the one hand to the input-providing nature of recasts, but on the other hand, to the different number of errors produced in each group (68 in RE group, 39 in CR group). This may be considered a limitation of the study; however, it is worth noting that corrective feedback is by definition contingent on errors so it is provided only when an error has been committed. This is particularly relevant for incidental focus on form, and the current study is not an exception in that regard. For example, in Ellis (2007), the recasts group received in total 66 corrections, whilst the metalinguistic group received in total 44 corrections. In Loewen and Nabei’s (2007) study, the RE and the CR group each received 18 corrections while the metalinguistic group had fewer than six corrections on average.

It is interesting that in the current study the learners in the CR group made noticeably fewer errors than the learners in the RE group even though the pre-tests indicated that there were no statistically significant differences between the two groups for either structure prior to the treatment. During the treatment tasks, the class who received clarification requests gave the impression that the students volunteered to take part in interaction only when they were sure that they would

not make an error. This may be linked to Foster's and Ohta's (2005) observation that there is a possible face-threatening side-effect of clarification requests. The students in CR group seemed to have had a hard time to figure out what they were required to do.

For a high school learner it is very difficult to master a variety of PC forms without abundant target-like input. Considering the learners' prior knowledge of the linguistic target it is not surprising that they needed much input. A different result was seen in Sato and Loewen (2018) recent study which also compared recasts and clarification requests, but the latter appeared to be superior to recasts. This difference could be explained by a different type of tasks used in the two studies and a different type of learner performance. The participants in the current study were clearly oriented to meaning during the task performance in both treatment and tests, while in Sato and Loewen (2018) study the participants were more oriented to form, with considerably higher levels of metalinguistic awareness during the task performance. Such differences between the results of two studies point to the roles that the context of learning and the type of task, along with linguistic target and the learner proficiency level play in evaluating the effects of implicit CF. For example, Gass et al. (2011) pointed to the differences between the tasks because some tasks are such that they require more interaction, while some tasks can be completed with only minimal interaction. In classroom-based research, learners' proficiency level involving their communicative competence will certainly shape the efficacy of recasts in classroom interaction: if learners are able to comprehend the context in which recasts appear, they will be more able to interpret the feedback as corrective (Doughty and Williams 1998; Mackey 2006). In contrast, if their comprehension fails, implicit input-providing feedback will have no effect on FL learning. Future research into the effects of CF in classrooms would need to account for the differences between instructional contexts, by involving more classroom instructed FL learners who are developing their language skills in communicative classrooms, working with meaningful interactive tasks towards the development of communicative language skills.

Notes

1. English and French both have grammatical aspect, but their aspectual systems differ considerably, so it is not possible to directly compare, for example, emergence of past activity verbs in English with the emergence of perfective aspect in French activity verbs. For a more detailed explanation see Comrie (1976), Bardovi-Harlig (2000).

2. Apart from being complex in terms of meaning, IMP also has a complex form-meaning relationship, which (due to the participants' proficiency level in the current study and the space limitations) is not in the focus of this paper.
3. Described as unscripted oral communication tasks in language learning contexts (Bygate 1999; Skehan 1998), such tasks differ from scripted and pre-planned activities in which the number of obligatory contexts is predicted and equal for all participants. In unscripted communicative tasks based on picture prompts, students are asked to narrate or describe what they see in the pictures and they themselves create obligatory contexts for the use of grammatical structures. Thus it is not possible to have an equal number of obligatory contexts for all students. For such tasks, Pica's TLU analysis (1983) is considered to be most appropriate, and it has been used in a number of studies, e.g. Iwashita (2003), Sato and Loewen (2018), Sheen (2008).
4. Data analysis in oral production tests for IMP did not include verbs ending in *-er* where it is not clear which grammatical category of the verb was used. The reason for such a decision was the fact that in spoken French L2 interlanguage it is impossible to distinguish IMP forms from the infinitive and the past participle of verbs ending in *-er*, since in learner language they all have the same final phoneme [e]. While native French distinguishes an 'open e' in IMP endings *-ais*, *-ait*, *-aient*, from a 'closed e' in infinitive ending *-er* and the past participle ending in *-é*, in learner language it is not possible to see this difference because all these endings sound the same. This is generally a characteristic of early interlanguage.
5. Since there was some difference between the groups on pretest (though not significant), the use of ANCOVA with pretest scores as a covariate calculates an average pretest score for all three groups, so that they can be compared on a more precise basis. In this case ANCOVA was used to annulate the differences on the pretest such that for each group the pretest score was calculated as 34.18 and the appropriate changes made elsewhere.

References

- Ammar, Ahlem. 2008. Prompts and recasts: Differential effects on second language morphosyntax. *Language Teaching Research* 12(2). 183–210.
- Ammar, Ahlem & Nina Spada. 2006. One size fits all? Recasts, prompts, and L2 learning. *Studies in Second Language Acquisition* 28(4). 543–574.
- Andersen, Roger W. & Yasuhiro Shirai. 1994. Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition* 16(02). 133–156.
- Ayoun, Dalila. 2001. The role of negative and positive feedback in the second language acquisition of the *passé composé* and the *imparfait*. *The Modern Language Journal* 85(2). 226–243.

- Ayoun, Dalila. 2004. The effectiveness of written recasts in the second language acquisition of aspectual distinctions in French: A follow-up study. *Modern Language Journal* 88. 31–55.
- Bardovi-Harlig, Kathleen. 2000. *Tense and aspect in second language acquisition: Form, meaning and use*. Oxford: Blackwell.
- Bartning, Inge & Suzanne Schlyter. 2004. Itinéraires acquisitionnels et stades de développement en français L2. *Journal of French Language Studies* 14. 281–299.
- Brown, Dan. 2016. The type of linguistic foci of oral corrective feedback in the L2 classroom: A meta-analysis. *Language Teaching Research* 20(4). 436–458.
- Bygate, Martin. 1999. Quality of language and purpose of task. *Language Teaching Research* 3(3). 185–214.
- Carpenter, Helen, Seon K. Jeon, David MacGregor, & Alison Mackey. 2006. Learners' interpretations of recasts. *Studies in Second Language Acquisition* 28(2). 209–236.
- Carroll, Susanne. 2001. *Input and evidence. The raw material of second language acquisition*. Amsterdam/Philadelphia: John Benjamins.
- Carroll, Susanne, Merrill Swain, & Yves Roberge. 1992. The role of feedback in adult second language acquisition: Error correction and morphological generalizations. *Applied Psycholinguistics* 13(02). 173–198.
- Cohen, Jacob. 1988. *Statistical power analysis for the behavioral sciences*, 2nd edn. New York: Lawrence Erlbaum Associates.
- Comrie, Bernard. 1976. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge, New York: Cambridge University Press.
- DeKeyser, Robert. 2005. What makes learning second-language grammar difficult? A review of issues. *Language Learning* 55(S1). 1–25.
- Dietrich, Robert, Wolfgang Klein, & Colette Noyau. 1995. *The acquisition of temporality in a second language*. Amsterdam/Philadelphia: John Benjamins.
- Doski, Pawan Muhajir & Filiz Cele. 2018. The effect of oral corrective feedback on article errors in L3 English: Prompts vs. recasts. *English Language Teaching* 11(8). 143.
- Doughty, Catherine. 2001. Cognitive underpinnings of focus on form. In Peter Robinson (Ed.), *Cognition and second language instruction*, 206–257. Cambridge: CUP.
- Doughty, Catherine & Elizabeth Varela. 1998. Communicative focus on form. In Catherine Doughty & Jessica Williams (eds.), *Focus on form in classroom second language acquisition*. Cambridge: CUP.
- Doughty, Catherine & Jessica Williams. 1998. *Focus on form in classroom: Second language acquisition*. New York: Cambridge University Press.
- Egi, Takako. 2007. Interpreting recasts as linguistic evidence: The roles of linguistic target, length, and degree of change. *Studies in Second Language Acquisition* 29(4). 511–537.
- Ellis, Nick C. 2005. At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition* 27(2). 305–352.
- Ellis, Rod. 2003. *Task-based language learning and teaching*. Oxford: OUP.
- Ellis, Rod. 2007. The differential effects of corrective feedback on two grammatical structures. In Alison Mackey (Ed.), *Conversational interaction in second language acquisition: A collection of empirical studies*, 339–360. Oxford: OUP.
- Ellis, Rod. 2012. *Second language research and language pedagogy*. Malden, MA: Wiley-Blackwell.
- Ellis, Rod, Helen Basturkmen, & Shawn Loewen. 2001. Learner uptake in communicative ESL lessons. *Language Learning* 51(2). 281–318.

- Ellis, Rod, Shawn Loewen, & Rosemary Erlam. 2006. Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition* 28(2). 339–368.
- Ellis, Rod & Younghee Sheen. 2006. Reexamining the role of recasts in second language acquisition. *Studies in Second Language Acquisition* 28(4). 575–600.
- Field, Andy P. 2009. *Discovering statistics using SPSS*, 3rd edn. London: Sage.
- Foster, Pauline & Amy Snyder Ohta. 2005. Negotiation for meaning and peer assistance in second language classrooms. *Applied Linguistics* 26(3). 402–430.
- Gass, Susan. 2003. Input and interaction. In Catherine J. Doughty & Michael H. Long (eds.), *The handbook of second language acquisition*, 224–255. Oxford, UK: Basil Blackwell.
- Gass, Susan, Alison Mackey, & Lauren Ross-Feldman. 2011. Task-based interactions in classroom and laboratory settings. *Language Learning* 61. 189–220.
- Goldschneider, Jennifer M. & Robert DeKeyser. 2005. Explaining the “natural order of L2 morpheme acquisition” in English: A meta-analysis of multiple determinants. *Language Learning* 55(S1). 27–77.
- Goo, Jaemyung. 2012. Corrective feedback and working memory capacity in interaction-driven L2 learning. *Studies in Second Language Acquisition* 34(03). 445–474.
- Goo, Jaemyung & Alison Mackey. 2013. The case against the case against recasts. *Studies in Second Language Acquisition* 35(1). 127.
- Harley, Birgit. 1989. Functional grammar in French immersion: A classroom experiment. *Applied Linguistics* 10(3). 331–360.
- Harley, Birgit. 1993. Instructional strategies and SLA in early French immersion. *Studies in Second Language Acquisition* 15(02). 245–259.
- Havranek, Gertrude. 2002. When is corrective feedback most likely to succeed? *International Journal of Educational Research* 37. 255–270.
- Hulstijn, Jan H. 2011. Language proficiency in native and non-native speakers: An agenda for research and suggestions for second language assessment. *Language Assessment Quarterly* 8. 229–249.
- Ishida, Midori. 2004. Effects of recasts on the acquisition of the aspectual form -te i-(ru) by Learners of Japanese as a foreign language. *Language Learning* 54(2). 311–394.
- Iwashita, Noriko. 2003. Negative feedback and positive evidence in task-based interaction: Differential effects on L2 development. *Studies in Second Language Acquisition* 25(1). 1–36.
- Jackendoff, Ray. 1991. Parts and boundaries. *Cognition* 41(1–3). 9–45.
- Kaplan, Marsha A. 1987. Developmental patterns of past tense acquisition among foreign language learners of French. In Bill VanPatten, Trisha Dvorak, & James F. Lee (eds.), *Foreign language learning: A research perspective*, 52–60. Cambridge, New York: Newbury House.
- Lardiere, Donna. 1998. Case and tense in the “fossilized” steady-state. *Second Language Research* 14. 1–26.
- Leeman, Jennifer. 2003. Recasts and second language development: Beyond negative evidence. *Studies in Second Language Acquisition* 25(1). 37–63.
- Li, Shaofeng. 2010. The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning* 60(2). 309–365.
- Li, Shaofeng. 2014. The interface between feedback type, L2 proficiency, and the nature of the linguistic target. *Language Teaching Research* 18. 373–396.
- Li, Shaofeng, Rod Ellis, & Yan Zhu. 2016. Task-based versus task-supported language instruction: An experimental study. *Annual Review of Applied Linguistics* 36. 205–229.

- Loewen, Shawn & Toshiyo Nabei. 2007. Measuring the effects of oral corrective feedback on L2 knowledge. In Alison Mackey (ed.), *Conversational interaction in second language acquisition: A collection of empirical studies*. Oxford: OUP.
- Loewen, Shawn & Jenefer Philp. 2006. Recasts in the adult English L2 classroom: Characteristics, explicitness, and effectiveness. *The Modern Language Journal* 90(4). 536–556.
- Long, Michael H. 1996. The role of the linguistic environment in second language acquisition. In William C. Ritchie & Tej K. Bhatia (eds.), *Handbook of second language acquisition*, 413–468. San Diego: Academic Press.
- Long, Michael H. 2007. *Problems in SLA*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Long, Michael H., Shunji Inagaki, & Lourdes Ortega. 1998. The role of implicit negative feedback in SLA: Models and recasts in Japanese and Spanish. *The Modern Language Journal* 82(3). 357–371.
- Long, Michael H. & Peter Robinson. 1998. Focus on form: Theory, research, and practice. In Catherine Doughty & Jessica Williams (eds.), *Focus on form in classroom: Second language acquisition*, 15–63. New York: Cambridge University Press.
- Lyster, Roy. 1998. Recasts, repetition, and ambiguity in L2 classroom discourse. *Studies in Second Language Acquisition* 20(1). 51–81.
- Lyster, Roy. 2004. Differential effects of prompts and recasts in form-focused instruction. *Studies in Second Language Acquisition* 26(3). 399–432.
- Lyster, Roy & Hirohide Mori. 2006. Interactional feedback and instructional counterbalance. *Studies in second language acquisition* 28(2). 269–300.
- Lyster, Roy & Jesus Izquierdo. 2009. Prompts versus recasts in dyadic interaction. *Language Learning* 59(2). 453–498.
- Lyster, Roy & Leila Ranta. 1997. Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition* 19(1). 37–66.
- Lyster, Roy & Leila Ranta. 2013. Counterpoint piece: The case for variety in corrective feedback research. *Studies in Second Language Acquisition* 35. 167–184.
- Lyster, Roy & Kazuya Saito. 2010. Oral feedback in classroom SLA. *Studies in Second Language Acquisition* 32(2). 265–302.
- Lyster, Roy, Kazuya Saito, & Masatoshi Sato. 2013. Oral corrective feedback in second language classrooms. *Language Teaching* 46. 1–40.
- Mackey, Alison. 2006. Feedback, noticing and instructed second language learning. *Applied Linguistics* 27(3). 405–430.
- Mackey, Alison, Gass Gass, & Kim McDonough. 2000. How do learners perceive interactional feedback? *Studies in Second Language Acquisition* 22(04). 471–497.
- Mackey, Alison & Jaemyung Goo. 2007. Interaction research in SLA: A meta-analysis and research synthesis. In: Alison Mackey (ed.), *Conversational interaction in second language acquisition: A collection of empirical studies*. Oxford: OUP.
- Mackey, Alison & Jenefer Philp. 1998. Conversational interaction and second language development: Recasts, responses, and red herrings? *The Modern Language Journal* 82(3). 338–356.
- McDonough, Kim. 2006. Interaction and syntactic priming: English L2 speakers' production of dative constructions. *Studies in Second Language Acquisition* 28(02). 179–207.
- McDonough, Kim. 2007. Interactional feedback and the emergence of simple past activity verbs in L2 English. In Alison Mackey (ed.), *Conversational interaction in second language acquisition*, 323–338. Oxford: OUP.

- McDonough, Kim & Alison Mackey. 2006. Responses to recasts: Repetitions, primed production, and linguistic development. *Language Learning* 56(4). 693–720.
- McManus, Kevin & Emma Marsden. 2017. L1 explicit instruction can improve L2 online and offline performance. *Studies in second language acquisition* 39(3). 459–492.
- Miller, Gregory A. & Jean P. Chapman. 2001. Misunderstanding analysis of covariance. *Journal of Abnormal Psychology* 110(1). 40–48.
- Muranoi, Hitoshi. 2000. Focus on form through interaction enhancement: Integrating formal instruction into a communicative task in EFL classrooms. *Language Learning* 50(4). 617–673.
- Myles, Florence, Rosamund Mitchell, & Jenet Hooper. 1999. Interrogative chunks in French L2. *Studies in Second Language Acquisition* 21(01). 49–80.
- Nakatsukasa, Kimi. 2016. Efficacy of recasts and gestures on the acquisition of locative prepositions. *Studies in Second Language Acquisition* 38(4). 1–29.
- Nassaji, Hossein. 2010. The occurrence and effectiveness of spontaneous focus on form in adult ESL classrooms. *Canadian Modern Language Review* 66. 907–933.
- Nassaji, Hossein. 2016. Anniversary article: Interactional feedback in second language teaching and learning: A synthesis and analysis of current research. *Language Teaching Research* 20(4). 535–562.
- Nassaji, Hossein. 2017. The effectiveness of extensive versus intensive recasts for learning L2 grammar. *The Modern Language Journal* 101(2). 353–368.
- Nassaji, Hossein & Eva Kartchava. 2017. *Corrective feedback in second language teaching and learning*. New York: Routledge.
- Norris, John. 2015. Statistical significance testing in second language research: Basic problems and suggestions for reform. *Language Learning* 65(S1). 97–126.
- Norris, John M. & Lourdes Ortega. 2000. Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning* 50(3). 417–528.
- Oliver, Rhonda. 1995. Negative feedback in child NS-NNS conversation. *Studies in Second Language Acquisition* 17(4). 459–481.
- Philp, Jenefer. 2003. Constraints on “noticing the gap”: Non-native speaker’s noticing of recasts in NS-NNS interaction. *Studies in second language acquisition* 25(1). 99–126.
- Pica, Teresa. 1983. Methods of morpheme quantification: Their effect on the interpretation of second language data. *Studies in Second Language Acquisition* 6(01). 69–78.
- Révész, Andrea. 2009. Task complexity, focus on form, and second language development. *Studies in Second Language Acquisition* 31(3). 437–470.
- Révész, Andrea. 2012. Working memory and the observed effectiveness of recasts on different L2 outcome measures. *Language Learning* 62(1). 93–132.
- Russell, Jane & Nina Spada. 2006. The effectiveness of corrective feedback for the acquisition of L2 grammar. A meta-analysis of the research. In John M. Norris & Lourdes Ortega (eds.), *Synthesizing research on language learning and teaching*, 133–164. Amsterdam: Benjamins.
- Saito, Kazuya. 2013. The acquisitional value of recasts in instructed language speech learning: Teaching the perception and production of English /ɹ/ to adult Japanese learners. *Language Learning* 63(3). 499–529.
- Sato, Masatoshi & Shawn Loewen. 2018. Metacognitive instruction enhances the effectiveness of corrective feedback: Variable effects of feedback types and linguistic targets. *Language Learning* 68(2). 507–545.
- Schmidt, Richard. 1990. The role of consciousness in second language learning. *Applied Linguistics* 11(2). 129–158.

- Schmidt, Richard. 2001. Attention. In Peter Robinson (ed.), *Cognition and second language instruction*, 3–32. Cambridge: Cambridge University Press.
- Sheen, Younghee. 2004. Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research* 8(3). 263–300.
- Sheen, Younghee. 2006. Exploring the relationship between characteristics of recasts and learner uptake. *Language Teaching Research* 10(4). 361–392.
- Sheen, Younghee. 2008. Recasts, language anxiety, modified output, and L2 learning. *Language Learning* 58(4). 835–874.
- Sheen, Younghee & Rod Ellis. 2011. Corrective feedback in language teaching. In Eli Hinkel (ed.), *Handbook of research in second language teaching and learning*, Vol. 2, 593–610. New York: Routledge.
- Skehan, Peter. 1998. *A cognitive approach to language learning*. Oxford, New York: Oxford University Press.
- Sorace, Antonella. 2003. Near-nativeness. In Catherine J. Doughty & Michael H. Long (eds.), *Handbook of second language acquisition*, 130–151. Oxford, UK: Blackwell.
- Spencer, Andrew & Gergana Popova. 2015. Periphrasis and inflection. In Mathew Baerman (ed.), *The Oxford handbook of inflection*, 197–230. Oxford: OUP.
- Stoll, Sabine. 2015. Inflectional morphology in language acquisition. In Mathew Baerman (ed.), *The Oxford handbook of inflection*, 351–374. Oxford: OUP.
- Talmy, Leonard. 2008. Aspects of attention in language. In Peter Robinson and Nick C. Ellis (eds.), *Handbook of cognitive linguistics and second language acquisition*, 27–38. London & New York: Routledge.
- Vendler, Zeno. 1967. *Linguistics in philosophy*. Ithaca, NY: Cornell University Press.
- Yang, Yingli & Roy Lyster. 2010. Effects of form-focused practice and feedback on Chinese EFL learners' acquisition of regular and irregular past tense forms. *Studies in Second Language Acquisition* 32(2). 235–263.
- Yilmaz, Yucel. 2012. The relative effects of explicit correction and recasts on two target structures via two communication modes. *Language Learning* 62. 1134–1169.

Supplementary material: The online version of this article offers supplementary material (<https://doi.org/10.1515/iral-2019-0149>).