The effect of input modality on German as a FL learners’ provision of recasts in oral peer interactions

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ABSTRACT

Interaction between learners is proven to be beneficial for second and foreign language acquisition. This article reports on a quasi-experimental study conducted in a German as a foreign language (GFL) classroom in a university in Spain. The study explored the effect of input modality on the provision of recasts in oral peer interactions. Two intact classes of GFL, one with 12 and the other with 16 learners, participated in six oral interaction tasks. The researchers divided the two classes into two groups: one group was only exposed to aural and visual input, while the other also received written input. Audio recordings and full written transcripts of learners’ oral peer interactions in the two groups were made and the frequency and nature of recasts were analysed quantitatively in order to examine the effect of input modality on the production of this corrective feedback type. Results suggested that input modality impacted the way learners interacted with each other. Findings showed that learners who were not provided with written input provided significantly more recasts to each other. Results also revealed that the nature of the recasts (i.e., form-, lexical- and pronunciation-focused recasts) that learners produced was input modality dependent. Since the provision of recasts is beneficial for second and foreign language acquisition, the results indicate that teachers and task designers should consider input modality as a relevant task design variable.

Keywords: Classroom tasks; corrective feedback; foreign language acquisition; input modality; peer interaction

INTRODUCTION

Over the past four decades, researchers have been examining the role of interaction in second and foreign language acquisition (SLA/FLA). They addressed different types of interaction (NS-learner, teacher-learner or peer interaction), second and foreign language (L2/FL) contexts, and different learning settings (naturalistic or instructional) in their research. Interactions in instructional settings that are aimed to facilitate L2/FL acquisition pertain to the research field of instructed second language acquisition (ISLA) (Han & Nassaji, 2019; Loewen, 2021; Loewen & Sato, 2017, 2018; Long, 2017). In instructional settings, where the class time is often quite limited, peer interactions play a crucial role. Especially in FL contexts, it is important for teachers to take full advantage of peer interactions as a pedagogical tool (Sato & Ballinger, 2016). In these contexts, the classroom is often the only place to practise the FL because outside the classroom the target language is not a language of communication. Furthermore, the class size is sometimes very large and it is difficult for each learner to have the opportunity to interact with the teacher. Peer interactions, however, allow everyone to interact.
This is particularly relevant in communicative approaches with a focus on oral communication.

Certain interactional modifications, such as negotiation for meaning, feedback and modified output, have been proven to benefit L2/FL acquisition (Iwashita & Dao, 2021; Loewen et al., 2022; Loewen & Sato, 2018; Sato, 2017). Researchers found that the frequency of these interactional modifications can be influenced by task design variables (e.g., task type, task characteristics or task complexity) (Y. Kim, 2015). Therefore, numerous recent studies in the field of SLA address the question of how task design variables could be manipulated in order to increase the frequency of interactional modifications in peer interactions (Adams & Oliver, 2019).

The Cognitive-Interactionist Approach
Interaction plays a significant role in second and foreign language (L2/FL) classrooms. The benefits of interaction for second and foreign language acquisition (SLA/FLA) are numerous. From the perspective of the cognitive-interactionist approach, there are four key components involved when learners interact with each other. These components include input, feedback, output and negotiation for meaning (e.g., Mackey, 2012; Loewen & Sato, 2018). When learners engage in interaction, they have the opportunity to obtain comprehensible input and feedback from their interlocutors. Moreover, interaction allows learners to produce output and to modify their output in response to their interlocutors’ feedback (Long, 1996; Swain, 1995). In addition, interaction allows learners to test out their hypotheses about the target language and to engage in negotiation for meaning (Long, 1996; Swain, 1995) as well as to notice possible gaps in their interlanguage (Schmidt & Frota, 1986).

The origins of the cognitive-interactionist approach can be traced back to Long’s (1981, 1983) first version of the interaction hypothesis. In this first version, Long stresses that negotiation for meaning during interaction makes input more comprehensible and, therefore, more beneficial for L2/FL acquisition. In his extended version of the interaction hypothesis, Long (1996) underlines the importance of feedback, attention, and modified output. During interaction, learners provide each other with feedback on their production. This feedback helps them to shift their attention to gaps in their interlanguage and to modify their output in response to the feedback from their interlocutors.

Long’s interaction hypothesis progressed over time into an approach to SLA due to significant advances in the field in terms of theoretical and empirical research (Gass & Mackey, 2015). Numerous empirical studies and meta-analyses support the claims of the interaction hypothesis revealing the benefits of interaction and negotiation on acquisition (see Gass, 2018; Loewen, 2020; Mackey, 2012; Mackey et al., 2012; Mackey & Goo, 2007; Pica, 2013; Ziegler, 2016 for reviews and meta-analyses).

Peer Interaction
Early interaction studies focused primarily on interactions between learners and native speakers as well as between learners and teachers. More recently, however, there is an increasing interest in interaction research for peer interaction and its link to acquisition (see García-Mayo, 2021; Sato & Ballinger, 2016 for reviews). Peer interaction research is highly relevant for SLA/FLA because, at least in communicative-oriented classrooms, learners can spend a considerable amount of time interacting with each other. Researchers found that peer interaction facilitates acquisition because learners are able to provide each other with comprehensible input, engage in negotiation, give each other feedback and modify their output in response to the feedback from other learners (Iwashita & Dao, 2021; Sato & Ballinger, 2016). Studies comparing the types and quantity of feedback provided in peer interaction and learner-native speaker interaction found significant similarities. Research has demonstrated that the quantity of feedback is similar in both interaction types (García-Mayo & Pica, 2000; Pica et al., 1996), and that there are also similarities in the feedback types that are preferentially used. In general, learners and native speakers provide more implicit corrective feedback to their interlocutors rather than explicit corrective feedback, which could be explained by the fact that giving implicit feedback is a less intimidating behaviour in both interaction types (Bowles & Adams, 2015). Also, research on teacher preferences for feedback showed that teachers are more inclined to provide implicit feedback, more precisely recasts, as a “social strategy for the maintenance of a supportive classroom atmosphere” (Yoshida, 2008, p. 89).

Recasts and Interaction Research
Recasts are one of the most studied feedback strategies in interaction research (Mackey & Goo, 2007; Zhang et al., 2021). Recasts signal learners indirectly and incidentally about their non-target-like language use and they usually do not interrupt the conversation (Long, 2007). A recast is “a reformulation of all or part of a learner’s immediately preceding utterance in which one or more non-target-like (lexical, grammatical, etc.) items is/are replaced by the corresponding target language form(s)” (Long, 2007, p. 77). An example of a recast is illustrated below from data collected by Pica et al. (1996, as cited in Pica, 1996, p. 8).

Example 1
Recast
(1) Learner 1: its wall is complete white

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Our first specific objective was to examine how input modality impacts the frequency of recasts in oral peer interaction tasks. The second specific objective was to explore how input modality influences the nature of recasts in oral peer interaction tasks. Hence, the following research questions guided our study:

Research Objectives and Questions
As there is a lack of research on how input modality impacts the provision of recasts in oral peer interactions, we designed a classroom-based quasi-experimental study to explore this task design variable. Our general objectives were to contribute to the input modality and task design research as well as to provide teachers with findings for evidence-based pedagogy (Sato & Loewen, 2019b). Since the provision of recasts has a positive impact on L2/FL acquisition, the findings could provide pedagogical implications for teachers and task designers regarding the usage of written input in oral peer interactions in the FL classroom.

Our first specific objective was to examine how input modality impacts the frequency of recasts in oral peer interaction tasks. The second specific objective was to explore how input modality influences the nature of recasts in oral peer interaction tasks. Hence, the following research questions guided our study:

1. How does input modality (aural vs. written) affect the frequency of recasts in oral peer interaction tasks?
2. How does input modality (aural vs. written) affect the nature of recasts in oral peer interaction tasks?

Modality
Task design variables also comprise the modality of learners’ output (oral vs. written) and the modality of the input that learners receive during the tasks (e.g., aural vs. written). Studies on output modality showed that written output tasks generally provide different opportunities for learners than oral output tasks (see García-Mayo & Azkarai, 2016 for a review; Payant & Kim, 2019). Research by Loewen and Wolff (2016) indicated that learners used considerably more feedback and negotiation strategies in oral output tasks than in the written output tasks. Concerning input modality, there is some evidence that the availability of written input during peer interaction leads learners to produce less interactional features in terms of negotiation, feedback, and collaboration (Kirchhoff, 2020; Loewen & Wolff, 2016).

However, to date, little attention has been paid to input modality. In SLA/FLA research, the impact of input modality has been mainly explored focusing on word recognition and acquisition as well as learners’ target language production (Colantoni et al., 2015; Feng & Webb, 2020; Fievez et al., 2020; Peters, 2019).

In instructional contexts, L2 and FL learners are exposed to different types of input during classroom tasks, including aural, written, or visual input (i.e., pictures or videos). VanPatten (1996) argues for the usage of both aural and written input in classroom tasks, because, in this way, they probably suit learners’ individual preferences and differences in learning styles. VanPatten points out that some learners “say they like to ‘see’ the language” (p. 68). However, results from studies examining the impact of aural and written input on word recognition and acquisition are mixed. Some studies found a positive impact of written input on word recognition and acquisition, while others found only a limited or a negative impact (e.g., Cerni et al., 2019; Cutler, 2015; Escudero, 2015; Escudero et al., 2008).
RQ1: How does input modality in oral peer interaction tasks affect the frequency of recasts?

RQ1: How does input modality in oral peer interaction tasks affect the nature of the recast that learners provide to each other?

METHOD
Study Design
A classroom-based quasi-experimental study was conducted in a university in Spain. The study was carried out in the learners’ authentic classroom environment during regular class time, in their usual classroom setting and with their regular GFL teachers. Two intact classes of students learning GFL participated in the study, one with 12 and the other with 16 learners. The participants were assigned to two groups. Both groups attended an 80-minute lesson and carried out six peer interaction tasks under two conditions: (1) in the aural input group (henceforth, A-group), learners only received aural and visual input in form of pictures during the classroom tasks; and (2) in the aural and written input group (henceforth, AW-group), learners were also exposed to written input.

Participants
The participants were learners from two intact parallel GFL classes. All students enrolled in the two classes participated in this study. They were twenty-eight learners (12 males and 16 females) with a mean age of 20.9 years. Two groups were formed, each with 14 learners. The participants of the groups were matched on individual difference variables. The group assignment involved equating the groups on a case-by-case basis on identified variables, including gender, age, L1, mono- or multi-linguality, proficiency level and the contact with the target language outside the classroom. Active consent of all participants was sought prior to the study. Learners shared a similar proficiency level in German, which could be estimated as below A2 of CEFR (Council of Europe, 2020). The research was conducted in a FL setting and learners’ target language practice was limited almost exclusively to the classroom or to tasks offered by the teachers in a virtual environment outside the classroom. They reported studying German previously for a mean of around 18 months. The first language (L1) of most participants was Spanish and only three students had other L1 backgrounds, including Ukrainian and Italian. The authors of this study were the regular teachers of the GFL course and they also taught the classroom lesson of the experiment. Several meetings were held between the teacher-researchers to go through the teaching materials, including a script with detailed instructions for the teachers to conduct each task (see Appendix).

Materials and Task Design
The researchers created the six tasks of the experiment in accordance with learners’ usual classroom tasks. The material for the interaction tasks was beamed onto a big screen during the classroom lesson. The two groups of the experiment saw the same pictures during each task, but only the AW-group had also written input on their screen. The following figures show an example of the material that learners saw on the screen during the first task in the A-group (figure 1) and in the AW-group (figure 2).

Figure 1
Task 1 (A-group)
All six tasks of this study were structured according to three stages: (1) teacher-guided task presentation with the whole-class, (2) peer interactions and (3) teacher-guided summary with the whole-class. Concerning task type, in this study, learners carried out six conversation-consensus tasks. Conversation tasks are classroom activities that facilitate a naturalistic interaction (Loewen & Wolff, 2016) by allowing learners to talk about their favourite things (e.g., restaurant, film, books, etc.) and consensus tasks are activities where participants eventually have to reach some sort of agreement (e.g., Gass et al., 2005). In this study, the participants engaged with their peers in different dialogues about possible recreational activities. They took turns, asked questions and revealed information about their favourites. Furthermore, they were asked to reach agreements about future trips.

In every task, learners engaged in dyadic interactions with several different interlocutors. In five of the six tasks, learners changed their interlocutors twice, with the result that every learner participated in three different interactions in each of these tasks. As a consequence, twenty-one different dyadic interactions ($n=21$) were carried out in each of these tasks in the A-group and AW-group. In the fifth task, learners carried out the interaction with only one interlocutor and, therefore, we got a total number of 7 different dyadic interactions per group in this task. By way of illustration, the following table shows the total number of dyadic interactions that were formed in each task.

As seen in Table (1), altogether, one hundred and twelve different dyadic interactions ($n=112$) were formed in the A-group and also one hundred and twelve dyadic interactions ($n=112$) in the AW-group. On average, every learner engaged in interactions thirty minutes and twenty-one seconds during the whole experiment and one dyadic interaction took averagely one minute and fifty-four seconds.

<table>
<thead>
<tr>
<th>Task</th>
<th>Dyadic interactions (A-group)</th>
<th>Dyadic interactions (AW-group)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$(n = 21)$</td>
<td>$(n = 21)$</td>
</tr>
<tr>
<td>2</td>
<td>$(n = 21)$</td>
<td>$(n = 21)$</td>
</tr>
<tr>
<td>3</td>
<td>$(n = 21)$</td>
<td>$(n = 21)$</td>
</tr>
<tr>
<td>4</td>
<td>$(n = 21)$</td>
<td>$(n = 21)$</td>
</tr>
<tr>
<td>5</td>
<td>$(n = 7)$</td>
<td>$(n = 7)$</td>
</tr>
<tr>
<td>6</td>
<td>$(n = 21)$</td>
<td>$(n = 21)$</td>
</tr>
<tr>
<td></td>
<td><strong>Total $(n = 112)$</strong></td>
<td><strong>Total $(n = 112)$</strong></td>
</tr>
</tbody>
</table>
Coding
Audio recordings and full written transcripts of the oral peer interactions in the two groups were made in order to examine the impact of input modality on the provision of recasts. The current study follows the research of J. H. Kim and Han (2007) and Mackey et al. (2000) by subclassifying recasts based on their linguistic target, namely the aspect of language they corrected. In this study, we distinguished recasts that focus on form (henceforth, F-recasts), lexis (henceforth, L-recasts) or pronunciation (henceforth, P-recasts). F-recasts address morphosyntactic issues, L-recasts deal with word choice and P-recasts focus on pronunciation. The next figure shows the categorisation of recasts in the current study.

Figure 3
Categorisation of Recasts

<table>
<thead>
<tr>
<th>Recast:</th>
<th>- F-recast</th>
<th>- L-recast</th>
<th>- P-recast</th>
</tr>
</thead>
</table>

The following examples of recasts are taken from the current study. In example (2), two learners are discussing details about a weekend trip (Task 5). In turn (3), Learner 1 provides two recasts: an F-recast that corrects her interlocutor’s previous error with a preposition (‘for mountains’) and an L-recast that corrects his or her interlocutor’s previous lexical error (‘time free park’).

Example 2
F-recast and L-recast
(1) Learner 1: Wohin fahren wir?
Where are we going?
(2) Learner 2: Ich denke (1 sec) was findest du besser? Einen Ausflug für Berge oder ein Zeitfreipark ((Freizeitpark))?
I think (1 sec) what do you think is better? A trip for mountains or a time free park ((amusement park))?
(3) Learner 1: Mmh ((thoughtful)) in die Berge oder Freizeitpark? [F-recast and L-recast]
Hmmm to the mountains or amusement park?
(4) Learner 2: Freizeitpark.
Amusement park.
(5) Learner 1: Freizeitpark.
Amusement park.

The next example shows an interaction between two learners who are discussing which means of transport they could use on their weekend trip (Task 3). In this example, Learner 2 repeatedly provides a recast which corrects a morphosyntactic error from his or her interlocutor [turns (4) and (6)].

Example 3
F-recast
(1) Learner 1: Acht Uhr? Okay, einverstanden.
Acht Uhr. Und wie fahren wir hin?
Eight o’clock? Okay, agreed.
Eight o’clock. And how shall we get there?
(2) Learner 2: Äh mmm ((thoughtful)) … mit dem Bus?
Ah hmm … by bus?
(3) Learner 1: Mmh ((thoughtful)) ich nicht einverstanden. Besser mit Zug!
Hmmm I disagree. Better with train!
(4) Learner 2: Mit dem Zug? Äh ((thoughtful)) okay. Und wie fahren wir zurück? [F-recast]
By train? Ah okay. And how shall we get back?
(5) Learner 1: Ähm ((thoughtful)) zum Beispiel, mit Zug auch?
Umm, for example, with train too?
(6) Learner 2: Mit dem Zug? Okay. Okay. [F-recast]
By train? Okay. Okay.
(7) Learner 1: Okay. Bis Freitag.
Okay. See you on Friday.

In the next example, the learners are talking about plans for the weekend (Task 1). In turn (1), Learner 1 mispronounces the word ‘weekend’. In response, Learner 2 provides his or her interlocutor with a recast which corrects the error in pronunciation.

Example 4
P-recast
(1) Learner 1: Äh hast du schon Pläne für äh Wochenende? ((trouble with pronunciation of ‘Wochenende’))
Ah do you already have plans for the weekend?
(2) Learner 2: Äh Wochenende. ((correct pronunciation)) [P-recast]
Ah weekend.
(3) Learner 1: Äh, ja. Wo Wochenende. Hast du Pläne? ((correct pronunciation))
Ah, yes. We weekend. Do you have plans?
(4) Learner 2: Nein.
No.

Data Analysis
The frequency and nature of recasts were analysed quantitatively. A one-way analysis of variance (ANOVA) was conducted on the data using recasts as dependent variable. The effect sizes were interpreted as large effect (0.14), moderate effect (0.06) and small effect (0.01) (Dörnyei, 2007).
FINDINGS
Frequency of Recasts
Concerning the frequency of recasts, the learners of the A-group outperformed the learners of the AW-group. Findings showed a significant main effect of input modality for recasts. The following table provides descriptive statistics for the frequency of recasts in the oral peer interactions. The total numbers, means per dyadic interaction and standard deviations for the A-group and AW-group are illustrated.

Table 2
Frequency of Recasts

<table>
<thead>
<tr>
<th>Group</th>
<th>Number Of Recasts</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-group (n = 112)</td>
<td>107</td>
<td>0.95</td>
<td>0.74</td>
</tr>
<tr>
<td>AW-group (n = 112)</td>
<td>33</td>
<td>0.29</td>
<td>0.50</td>
</tr>
</tbody>
</table>

As seen in table (2), the learners of the A-group averaged 0.95 recasts per dyadic interaction (SD = 0.74). In contrast, the learners of the AW-group only averaged 0.29 recasts (SD = 0.50). Main effects for input modality were significant ($F (3,88) = 61.63$, p < 0.000) and the effect size was also large ($\eta^2 = 0.22$). These results, as illustrated in the figure 4, indicated that there were significantly more recasts in the A-group.

Figure 4
Frequency of Recasts

![Frequency of Recasts](image)

Nature of Recasts
The oral peer interactions also were analysed for the nature of the recasts learners provided to each other. In the data of both input modalities (A-group and AW-group), three types of recasts were found: F-recasts, L-recasts and P-recasts. F-recasts dealt mainly with prepositions, article choice and word order, L-recasts addressed word choice and P-recasts corrected the pronunciation of words, especially of the words the teacher previously introduced during the tasks of the experiment. Table (3) provides descriptive statistics for the nature of the recasts learners provided to each other in the oral peer interactions. It illustrates the total amount of recasts in both input modalities and the percentages of the different recast types calculated in comparison to the total amount (see also Figures 5 and 6).

Table 3
Types of Recasts

<table>
<thead>
<tr>
<th>Group</th>
<th>Total</th>
<th>F-recasts</th>
<th>L-recasts</th>
<th>P-recasts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>A</td>
<td>107</td>
<td>100</td>
<td>46.43</td>
<td>18.16</td>
</tr>
<tr>
<td>AW</td>
<td>33</td>
<td>100</td>
<td>6.18</td>
<td>5.15</td>
</tr>
</tbody>
</table>

As seen in Table (3), the learners in the A-group frequently produced F-recasts and P-recasts. On a percentage basis, 43% of total recasts corrected form and 40.2% of total recasts corrected pronunciation. L-recasts were less frequent, with 16.8% of total recasts. By comparison, in the AW-group clearly predominated P-recasts, with 66.7% of total recasts. F-recasts and L-recasts, however, were less frequent, 18.2% of the total recasts provided by the learners of the AW-group corrected form and 15.2% corrected word choice.

The findings suggest that input modality impacted the nature of recasts in the oral peer interactions, as there were substantial differences in
the percentages between input modality. The A-group, in percentages, produced more F-recasts than the AW-group. In contrast, the learners of the AW-group, on a percentage basis, provided more P-recasts than the A-group. Both input modalities, however, have in common that L-recasts were the most infrequent type.

**Figure 5**
*Types of Recasts in the A-group*

![A-group Recast Diagram]

**Figure 6**
*Types of Recasts in the AW-group*

![AW-group Recast Diagram]

**DISCUSSION**

**Frequency of Recasts**

The first research question focused on how input modality impacts the frequency of recasts in oral peer interaction. The data showed that there was an effect for input modality on the frequency of recasts, with statistically more recasts in the A-group. Thus, learners who only received aural and visual input produced significantly more recasts in the oral peer interactions than learners who also were provided with written input.

As mentioned before, recasts are implicit error corrections. They are reformulations of a learner’s non-target-like utterance into a more target-like form and they can potentially occur whenever a learner produces a non-target-like utterance. The learners of the AW-group provided significantly less recasts to each other than the learners of the A-group. It can be suggested that learners of this modality, thus, produced less non-target-like utterances. The fact that the learners had access to written models visible on a big screen during the tasks might have led them to struggle less with, for example, morphosyntactic or word choice. As a consequence, the learners of the AW-group might have had less opportunities to provide each other with corrective feedback in the form of recasts. Moreover, it can also be argued that the learners expected their interlocutors to struggle less and to make less errors and, therefore, they were less attentive to their interlocutors.

In the current study, a relatively high quantity of recasts could be found in the A-group. The learners of this group provided a mean of 0.95 recasts per dyad ($SD = 0.74$), whereas the learners of the AW-group only averaged 0.29 recasts ($SD = 0.50$).

The relatively high quantity of recasts in the data is not in line with previous research. In a study by Fujii et al. (2016), where corrective feedback in peer interactions was explored with low-intermediate proficiency learners, the researchers found that learners produced recasts very infrequently. They suggested that due to their relatively low proficiency level the learners might not have been able to produce more recasts (Fujii et al., 2016). In the aforementioned study by Loewen and Wolff (2016), recasts were infrequent in all interaction modalities (oral face-to-face, oral face-to-face computer-mediated and written computer-mediated) and tasks. The dyads in their study produced a mean of less than one per task. A task in this study took about 20 minutes. In the current study, dyads of the A-group averaged nearly one recast in almost 2 minutes and dyads of the AW-group almost 0.30.

The participants of the study frequently practised a particular technique to buy themselves time in their oral interactions in the GFL course. In many classroom lessons as well as during the tasks of the experiment, learners were motivated by the teachers to repeat part of their interlocutors’ previous utterance to gain time while thinking of an answer. The relatively high amount of recasts might be attributed to the fact that learners often repeat part of what their interlocutors have said previously. These repetitions might have led learners to consciously or unconsciously correct their interlocutors’ errors. Learners were not instructed by the teachers to focus on their interlocutors’ mistakes, but this strategy might have allowed them
to be able to provide recasts in a relatively high quantity. The following example from the current data shows a typical interaction between two learners in the first task. It illustrates how the learners repeat part of their interlocutors’ previous utterances. There are two recasts and two other-repetitions. The recast in turn (9) allows Learner 2 in the next turn to modify his output, which shows the positive impact of recasts in oral peer interactions. The recast in turn (2), as well as the other-repetitions in turns (4) and (7), are also potentially beneficial for the feedback receivers. They provide positive evidence about the learners’ previous utterances with which they seemed to have struggled.

**Example 5**

**Recasts and Other-repetitions**

1. Learner 1: Hast du Pläne von... für die... von Wochenende?
   Do you have plans of... for the... of weekend?
3. Learner 1: Okay. Wie findest du in Kino äh (1 sec) ins Kino gehen?
   Okay. How would you like to go to movies ah (1 sec) to the movies?
4. Learner 2: Ins Kino gehen? Äh... gut. Und du? [other-repetition]
   To go to the movies? Ah... good. And you?
5. Learner 1: Gut. Okay.
   Good. Okay.
6. Learner 2: Ähm wie findest du zu Mittag… äh essen?
   Umm how would you like to go for… ah lunch?
   Lunch with friends? Good. And you?
8. Learner 2: Gut. Äh das macht mascht mascht Spaß. ((trouble with pronunciation of ‘macht’))
   Good. Ah that’s fun.
9. Learner 1: Macht Spaß? Ja. ((correct pronunciation)) [recast]
   That’s fun? Yes.
10. Learner 2: Macht Spaß. Ja, ja. ((correct pronunciation)) [modified output]
    That’s fun. Yes, yes.

There is evidence that it is possible to train learners through metacognitive instruction to be better interactional feedback receivers (Kartchava, 2019; Sato & Loewen, 2019a) and providers (Fujii et al., 2016; Sato & Ballinger, 2012). In their study, Fujii et al. (2016) proposed that possibly “more focused training or more extended training is a necessary condition for a higher quantity of recasts” (Fujii et al., 2016, p. 82). On the basis of findings of prior research on interaction that provided evidence for the facilitative role of recasts in L2/FL acquisition, it seems that the oral interactions of the learners who had no access to written input were more beneficial regarding this corrective feedback type. Maybe the training that the learners of the GFL course received in providing repetitions of parts of their interlocutors’ utterances made them better recast providers, at least in terms of quantity.

Our first specific objective was to explore how input modality influences the frequency of recasts in oral peer interaction tasks. The finding that learners who only received aural and visual input produced significantly more recasts than learners who also had access to written input contributes to the input modality and task design research. Recasts during peer interaction have been proven to benefit L2/FL acquisition. Therefore, the study finding has implications for classroom pedagogy. In oral peer interaction tasks, the absence of written input has a positive impact on learners’ provision of recasts. Teachers and task designers who want FL learners to benefit from this particular feedback type may prefer oral peer interaction tasks without written input.

**Nature of Recasts**

The second research question concerned the nature of recasts and asked, more precisely, how input modality impacts the nature of recasts in oral peer interactions. Descriptive data analysis was carried out in order to explore, on a percentage basis, the different types of recasts used in both input modalities. Results suggested that input modality impacted the nature of recasts that were produced in the oral peer interactions of the different groups. Findings indicated that learners in the A-group provided a higher percentage of recasts that corrected form than learners of the AW-group. By comparison, learners of the AW-group, on a percentage basis, produced more recasts that corrected pronunciation than learners of the A-group. However, no considerable differences in the percentage could be found concerning L-recasts. Recasts that corrected lexical errors were infrequent in both input modalities.

With regard to F-recasts, in the A-group, recasts that corrected form accounted for 43% of total recasts, whereas in the AW-group only 18.2% of total recasts were F-recasts. It seems that interactions in the AW-group generated few opportunities for learners to provide their interlocutors with recasts that correct form. It might be that learners who had access to written input struggled infrequently with morphosyntactic issues and, as a result, made few errors. Moreover, it can also be argued that learners expected their interlocutors not to struggle with morphosyntax, and...
therefore, they were not particularly attentive to morphosyntactic errors.

Concerning P-recasts, in the AW-group, recasts that corrected pronunciation clearly predominated with 66.7% of all recasts, whereas in the A-group the percentage was much smaller (40.2%). In the A-group, percentages of P-recasts and F-recasts were similar (40.2% and 43%). It can be argued that learners who had access to the written models might have made more errors on pronunciation than on morphosyntax and, as a result, might have provided their interlocutors with a higher percentage of P-recasts. Learners of the AW-group might have been less attentive to pronunciation during the teacher-guided task presentation or during the peer interactions due to the fact that they could read the written models from the screen at any time. It might also be that during the peer interactions the reading from the screen had negatively influenced learners’ pronunciation and led them to make more errors. This would be in line with previous research on the impact of orthographic forms on oral L2/FL pronunciation. There is evidence that the presence of orthographic forms during oral production has a negative impact on oral L2/FL pronunciation, both for beginners (e.g., Bassetti, 2006; Young-Scholten & Langer, 2015) and more advanced learners (e.g., Bassetti et al., 2020; Cerni et al., 2019). By comparison, it can be suggested that learners who had no access to written input memorised with more attention the pronunciation of the new input. As a consequence, maybe learners of the A-group made less errors on pronunciation and, thus, were provided with a similar amount of P-recasts and F-recasts.

Regarding the small number of L-recasts in both input modalities, results are in line with previous research on learner-teacher or learner-native speaker interaction. Studies found that recasts were provided more frequently as a response to learners’ phonological or grammatical errors than to lexical errors (see Nabei & Swain, 2002 for a review). Oliver (1995, cited in Nabei & Swain, 2002), for example, explored non-native speaker-native speaker child interactions and found that native speakers produced recasts more often as a response to non-native speakers’ grammatical errors than to their lexical errors. Oliver argued that grammatical errors often resulted in less comprehension difficulties than lexical errors. When the non-native speakers’ utterance was understandable, native speakers were more likely to provide recasts. This is an interesting finding. Further research on peer interaction and the provision of recasts is needed to better understand the nature of recasts in interactions between learners. Maybe lexical errors in peer interaction also generate more comprehension difficulties than grammatical or phonological errors and learners, therefore, are not able to provide recasts or prefer to solve the comprehension difficulties in another way, for example through negotiation. In a study by Lyster (1998), the researcher found that teachers frequently responded to learners’ grammatical and phonological errors with recasts, while they were more likely to respond to lexical errors with negotiation, such as elicitation or clarification requests. With regard to errors in pronunciation, it has been argued that they cause few comprehension difficulties in peer interactions with learners who share the same L1, because these learners tend to understand each other quite well (Collins & White, 2019). In the current study, maybe learners were capable of responding to pronunciation errors with recasts because these errors did not generate comprehension difficulties. In both input modalities, learners were able to provide a considerable amount of recasts on pronunciation, although, as mentioned before, the percentage was significantly much higher in the AW-group.

One specific objective of our study was to examine how input modality impacts the nature of recasts in oral peer interaction tasks. Findings indicated that input modality influenced the nature of recasts in the oral peer interactions. Results showed that input modality had an impact on learners’ provision of recasts concerning two types of recast, namely form-focused and pronunciation-focused recasts. Learners who were only provided with aural and visual input, on a percentage basis, produced more recasts that corrected form. Learners who also received written input, on a percentage basis, produced more recasts that corrected pronunciation. This study, therefore, contributes to the research on recasts in oral peer interaction tasks by providing evidence that the nature of recasts is input modality dependent.

Limitations

The findings of this research brought some insights into the effect of input modality on the frequency and nature of recasts in oral peer interactions. There are, however, some limitations.

The first limitation concerns task implementation, more precisely, social structure. In the current study, learners only formed dyads to carry out the classroom tasks. The methodological decision to examine only interactions of a particular social structure was taken to achieve best comparability between the different interactions. In the German classes of the participants of the study, learners most commonly form dyads in order to engage in interaction with each other. Fernández-Dobao (2016) pointed out that many teachers and also learners prefer peer interaction in dyads than in small groups because dyads provide more possibilities for each learner to produce the target language. However, research on peer interaction in small groups revealed interesting findings regarding learner relationships (Choi & Iwashita, 2016) and...
the role of silent learners who observe other learners interacting with each other (Fernández-Dobao, 2016). There is evidence that even silent observers are positively affected by interactions between learners (Fernández-Dobao, 2016).

With regard to data collection and analysis, in this study learners’ classroom interactions were audio recorded, transcribed and coded for quantitative data analysis. A quantitative research approach was used to examine the frequency and nature of specific interactional features. However, with mixed-method approaches, namely integrating quantitative and qualitative methods, we would be able “to gain a richer and more nuanced picture of the phenomenon under investigation” (Gass & Mackey, 2015, as cited in Philp, 2016, p. 383). An example of mixed-method research is an aforementioned study by Fujii et al. (2016), where the link between metacognitive instruction and interactional behaviour is explored. Results of the quantitative analysis showed the benefits of metacognitive instruction on interaction. In addition, the qualitative analysis of exit questionnaires indicated that learners were aware of the benefits of metacognitive instruction for language learning. Other methods to conduct a qualitative analysis in interaction research are stimulated recalls or retrospective interviews, which provide insights, for example, into learners’ perceptions of feedback (e.g., Mackey et al., 2000; Sato, 2013) in peer interactions. With respect to the current study, exit questionnaires, stimulated recalls or retrospective interviews could have provided interesting findings about learners’ perceptions and opinions about input modality and peer interaction.

The next limitation also concerns data collection. In the current study, the methodological decision to use only audio recordings was made, among others, in order to minimise the risk that learners feel themselves observed and alter their behaviours. However, the collection of non-verbal information via video recording could have been useful to gain better understanding of how learners interact with each other.

Another limitation concerns the methodological perspective. This study examined the effect of input modality on oral peer interactions from a particular perspective: the cognitive-interactionist perspective. Besides research within the cognitive-interactionist approach, interaction is also often explored from the perspective of socio-cultural theory (Fernández-Dobao, 2020; Storch & Aldossary, 2019; Storch & Alshuraidah, 2020). From this perspective, learners’ cooperation and assistance to each other in order to solve their language-related problems facilitate L2/FL acquisition (Fernández-Dobao, 2016). Socio-cultural theory emphasises the benefits of co-construction of knowledge. Researchers who draw on this theory commonly use qualitative measures in order to analyse interactions and show special interest in the social context where the interactions take place (Foster & Ohta, 2005). Further research that investigates the impact of input modality on oral peer interactions, including the perspective of socio-cultural theory, would be enriching. Examples of studies where both approaches were used are Foster and Ohta (2005) and Sato and Ballinger (2012). In the study by Foster and Ohta (2005) the researchers first conducted a quantitative analysis of the negotiation for meaning instances in peer interactions. Subsequently, the interactions were also analysed qualitatively, which brought more insight in learners’ collaborative behaviour in the moments when they were not negotiating for meaning.

CONCLUSION
In sum, ANOVA conducted on the coded data found statistically significant input modality effects for recasts. All effect sizes were large. The learners of the A-group, who only were provided with aural input, outperformed the learners of the AW-group, who also had access to written input. In terms of the nature of the recasts produced in both groups, the results suggest that input modality affected the nature of recasts in the oral peer interactions. On a percentage basis in comparison to the total amount of recasts that arose in both groups, the learners of the A-group provided more recasts that corrected form than the learners of the AW-group. Moreover, the learners of the AW-group, in percentages, provided more recasts to their interlocutors that addressed pronunciation than the learners of the A-group. However, in both groups, recasts that focused on lexis were very rare.

This study aimed to explore how input modality affects the frequency of a particular corrective feedback type in oral peer interactions, namely recasts. Therefore, the results add to the research on recasts by providing evidence that input modality, more precisely, the availability or unavailability of written input in oral peer interactions tasks in the classroom, has an impact on the provision of recasts. Learners of this study who had no access to written input on the big screen provided significantly more recasts to each other than learners who did have access to written input.

The study also set out to examine how input modality impacts the nature of recasts in oral peer interactions. Results showed that the availability or unavailability of written input on the screen influenced the nature of the recasts learners provided to each other. On the basis of their total recasts, learners who only received aural and visual input produced a similar number of recasts that focused on form and recasts that addressed pronunciation, whereas recasts that addressed lexical issues were less frequent. By comparison,
learners who had access to written input provided considerably more recasts that dealt with pronunciation than recasts that focused on form and lexical issues. This study, therefore, contributes to the research on recasts in oral peer interactions by providing evidence that the nature of recasts is input modality dependent.

The production of recasts promotes L2/FL acquisition; therefore, the findings of this study clearly have an implication for pedagogy in instructed L2/FL settings, more precisely for task design. This study suggests that the absence of written words and utterances in oral peer interaction tasks leads to interactions which are richer in interactional feedback in form of recasts. Teachers and task designers should consider the variable of input modality when creating oral peer interaction tasks, since it might have an impact on the benefits of interaction. However, subsequent research is necessary to better understand the impact of input modality on different interactional features that have been proven to facilitate acquisition, such as negotiation for meaning, language-related episodes and modified output.

REFERENCES


Pica, T. (2013). From input, output and comprehension to negotiation, evidence, and attention: An overview of theory and research on learner interaction and SLA. In M. P. García-Mayo, J. Gutiérrez-Mangado, & M. Martínez-Adrián (Eds.), *Contemporary
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PHOTOGRAPHY REFERENCE LIST


## APPENDIX

### Script of task 1

#### Task 1: Weekend plans

<table>
<thead>
<tr>
<th>I. Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Asking and answering questions about opinions, preferences and dislikes; reacting to statements of the interlocutor.</td>
</tr>
<tr>
<td>● Repetition of known utterances: ‘Do you already have plans for the weekend?’, ‘How would you like...?’; ‘Yes, good idea!’; ‘I think so too!’ and ‘Not me!’;</td>
</tr>
<tr>
<td>● Introduction of the new utterances: ‘Yes, that’s fun’, ‘That’s not fun’ and ‘That’s boring!’;</td>
</tr>
<tr>
<td>● Introduction of new words: ‘trip with friends’, ‘games evening’ and ‘watching TV all night’.</td>
</tr>
<tr>
<td>● Training repetitions as ‘echo’.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Social structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole-group + Dyads + Whole-group</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Act 01 Screen weekend plans’ (LibreOffice Impress)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Task presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Contextualisation: The teacher (T) first asks the learners (L) ‘Do you already have plans for the weekend?’.</td>
</tr>
<tr>
<td>● T gives L possible answers: ‘Yes, of course!’; ‘For the weekend? No!’.</td>
</tr>
<tr>
<td>● T, then, asks individual L: ‘Do you already have plans for the weekend?’.</td>
</tr>
<tr>
<td>● T gives L possible answers: ‘Yes, of course!’ or ‘No!’.</td>
</tr>
<tr>
<td>● T, then, explains that we are organising an excursion in class today.</td>
</tr>
<tr>
<td>● T beams ‘Act 01 Screen weekend plans’ onto the screen.</td>
</tr>
<tr>
<td>● T introduces the task using the presentation slides as a visual help.</td>
</tr>
<tr>
<td>● T asks L: ‘Do you see a trip with friends?’, ‘Where?’, ‘Where do you see the picture?’.</td>
</tr>
<tr>
<td>● T, then, asks individual L questions about the other leisure activities following the same scheme:</td>
</tr>
<tr>
<td>◦ ‘Do you see a party with friends?’</td>
</tr>
<tr>
<td>◦ ‘Do you see lunch?’</td>
</tr>
<tr>
<td>◦ ‘Do you see a games evening?’</td>
</tr>
<tr>
<td>◦ ‘Do you see watching TV all night?’</td>
</tr>
<tr>
<td>◦ ‘Do you see a concert?’</td>
</tr>
<tr>
<td>◦ ‘Do you see a cinema?’</td>
</tr>
<tr>
<td>◦ ‘Do you see a theatre?’</td>
</tr>
<tr>
<td>● T encourages L to repeat the eight different activities aloud in chorus.</td>
</tr>
<tr>
<td>● T, then, asks individual L how they find certain activities: ‘How would you like a trip with friends?’.</td>
</tr>
<tr>
<td>● T encourages L to make an echo first and then give an answer.</td>
</tr>
<tr>
<td>● T gives L possible answers:</td>
</tr>
<tr>
<td>◦ ‘A trip? Yes, good idea!’;</td>
</tr>
<tr>
<td>◦ ‘A trip? Yes, that’s fun!’;</td>
</tr>
<tr>
<td>◦ ‘A trip? Well ... so-so!’;</td>
</tr>
<tr>
<td>◦ ‘A trip? No, it’s not fun!’;</td>
</tr>
<tr>
<td>◦ ‘A trip? That’s boring’.</td>
</tr>
<tr>
<td>● T then asks another L: “And you?”.</td>
</tr>
<tr>
<td>● T gives L possible answers: ‘I think so too!’; ‘Not me! I think …!’;</td>
</tr>
<tr>
<td>● T, then, asks individual L about the other activities according to the same scheme.</td>
</tr>
</tbody>
</table>
| ● T, then, makes a complete example dialogue with one of the L:"
V. Working phases

Peer interactions:

- T explains that L should now engage in interactions with three different interlocutors and, in each dyad, ask each other one question in turns. T also motivates L to elaborate when possible.
- T reminds L that they should always begin their interactions with a greeting and finish them with a goodbye.

  L (A): ‘Hey! Do you already have plans for the weekend?’
  L (B): ‘For the weekend? No! And you?’
  L (A): ‘Neither do I! How would you like a trip with friends?’

... (see sample dialogue).

Brief summary:

- After the peer interaction phase, T makes a short summary with the whole group.
- T asks L if they have questions or want to make comments. T also asks for answers and results from the peer interaction phase.

VI. Duration

Approximately 12 minutes in total; peer interaction phase: 4 minutes.

[The structure is based on a fixed scheme by Haidl-Dietlmeier (unpublished)]