

## Using corpus-linguistic methods to track longitudinal development

Barron, Anne

*Published in:*  
Journal of Pragmatics

*DOI:*  
[10.1016/j.pragma.2018.08.015](https://doi.org/10.1016/j.pragma.2018.08.015)

*Publication date:*  
2019

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication](#)

*Citation for pulished version (APA):*  
Barron, A. (2019). Using corpus-linguistic methods to track longitudinal development: Routine apologies in the study abroad context . *Journal of Pragmatics*, 146, 87-105. <https://doi.org/10.1016/j.pragma.2018.08.015>

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



# Using corpus-linguistic methods to track longitudinal development: Routine apologies in the study abroad context

Anne Barron\*

Leuphana University of Lüneburg, Germany



## ARTICLE INFO

### Article history:

Available online 15 September 2018

### Keywords:

Corpus analysis  
Pragmatic development  
Study abroad  
Pragmatic routine  
Apology  
Longitudinal

## ABSTRACT

Despite the recent emergence of corpus pragmatics, the use of corpus linguistic methods in interlanguage pragmatics remains limited. This study employs corpus linguistic methods to shed light on recurring patterns of use within a speaker group over time and also between speaker groups. We examine the extent to which a group of 33 Anglophone learners of German develop their knowledge of pragmatic routines in realising apologies in study abroad. Data was elicited via a production questionnaire and baseline data was also gathered. Corpus-driven methods reveal the primacy of explicit apologies in the data and facilitate an in-depth, fine-grained quantitative and qualitative analysis of these pragmatic routines by learners and native speakers alike. As such, the analysis incorporates the traditional level of the strategy, but also goes beyond it to focus on the formal level and investigate routine variants, routine modifications and learner-specific realisations. Findings reveal several unchanging features of learner apology behaviour over time, including a stable and heightened learner preference for explicit apologies relative to an L2 norm and an unchanging dependency on the realisation of these explicit apologies via a single routine expression. Developments towards an L2 norm are also recorded, as are non-linear developments frequently involving increases in learner-specific realisations. The path followed by a routine is shown to be dependent on an array of factors, including whether another form fulfils the same function, how complex a particular routine is and whether an equivalent routine exists in the L1. The article closes with a discussion of the potential for using corpus linguistic methods as a means of investigating routine development.

© 2019 The Author. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

The importance of pragmatic routines in acquiring pragmatic competence and in communicating in a target language (L2) has long been extolled (cf. Barron, 2003a,b; Edmonds, 2014; Osuka, 2017; Roever, 2011). Acquiring L2 competence in the use of pragmatic routines, however, entails difficulties for learners. It has been found that learners use routines less than native speakers (NS), that they use only a limited range of routines relative to NS and that they sometimes use routines in an idiosyncratic, learner-specific manner (cf., e.g. Bardovi-Harlig, 2009). In the foreign language context, a lack of input and output opportunities influence development (Limberg, 2016). In the study abroad context, however, learners have the opportunity to experience and use routines in their situated contexts of use.

\* Institute of English Studies, Leuphana University Lüneburg, Universitätsallee 1, 21335 Lüneburg, Germany.

E-mail address: [barron@leuphana.de](mailto:barron@leuphana.de).

A number of longitudinal studies, focused predominantly on English as an L2, have tracked learners' competence in producing pragmatic routines over time spent in the target speech community (L2 English: Adolphs and Durow, 2004; Alcón Soler and Sánchez Hernández, 2017; Osuka, 2017; Sánchez Hernández, 2017; L2 Chinese: Taguchi et al., 2013; L2 Japanese: Marriott, 1995; L2 French: Hoffman-Hicks, 1999; L2 German: Barron, 2003a,b). In addition, a number of cross-sectional studies on L2 English examine the effect of length of residence, and less frequently the intensity of interaction, on learners' pragmatic routine competence (Kecskes, 2000; Bardovi-Harlig, 2009; Bardovi-Harlig and Bastos, 2011; Taguchi, 2013).

The focus of these developmental studies has been on learners' acquisition of a range of pre-targeted routines tied to specific language-use situations (cf., e.g. Bardovi-Harlig and Bastos, 2011; Taguchi et al., 2013; Sánchez Hernández, 2017). Only a small number examine the role of routine formulae in realisations of speech acts (Hoffman-Hicks, 1999: greetings, leave-takings and compliments; Barron, 2003a,b: requests, offers and refusals of offers and Osuka, 2017: requests, refusals and expressions of gratitude). Indeed, interlanguage pragmatic (ILP) speech act studies to date have predominantly focused on the functional level and disregarded the formal level. As Sell et al. (2019) go on to point out: "the functional and formal level of speech acts are connected, but in the relevant literature usually only one of the two is considered".

The present longitudinal study addresses the need for developmental studies on languages other than English as an L2 and focuses on the formal as well as on the functional level. It does so by investigating the development of productive competence in pragmatic routines realising L2 German apologies by a group of Irish learners of German over a ten month study abroad sojourn in the target speech community. Declarative data was elicited via a production questionnaire completed by 33 learners and base-line data was gathered from 34 NS of German and 27 NS of Irish English (IrE). The underlying research questions read:

- a) Does the production of pragmatic routines in realising apologies by Irish learners of German change in the course of a two-semester study abroad experience?
- b) Are any changes in routine production L2-like?
- c) What factors might explain developments/lack of developments?

In the data analysis, the study takes up Taguchi et al.'s (2013:45) call for more fine-grained analyses of learner productions of pragmatic routines to throw further light on the patterns of change over time in the stay abroad context and on the factors which impede or facilitate learners' production of L2-like routines (cf. also Tajeddin et al., 2017). Corpus linguistic methods are employed to this aim.

Corpus pragmatics, the use of electronic corpora for pragmatic research, is a recent addition to the field of pragmatics (cf. e.g. Aijmer and Rühlemann, 2015). However, to date, the use of corpus linguistic methods and corpora in interlanguage pragmatic research remains limited (cf. Barron, *this issue*; Callies, 2013; Sell et al., 2019). Given, however, that corpus linguistic methods can facilitate an analysis of recurring patterns of use and also enable contrastive analyses of lexical items key to a particular database, they offer many advantages for this study, and for fine-grained studies of learner pragmatics in general. Not only do they enable analyses of variant means of realising a speech act strategy and of mitigation patterns, they also draw attention to learner-preferred and learner-specific uses. In the present analysis, corpus-driven linguistic methods reveal the primacy of explicit apologies in the data and facilitate an in-depth fine-grained quantitative and qualitative analysis of routines which includes the traditional level of the strategy but which also goes beyond it to focus on routine variants, modification specific to a routine and learner-specific realisations.

In the following, an overview is given of the nature of pragmatic routines and of the research to date on their development during stay abroad. The focus then turns to routine apologies and specifically to research on the development of routine explicit apologies in the study abroad context (2). The data and the corpus linguistic methods adopted are then outlined (3). Following this, the findings are presented (4) and subsequently discussed in light of previous research (5).

## 2. Theoretical background

### 2.1. Pragmatic routines: development in the stay abroad context

Pragmatic routines are "... highly conventionalised prepatterned expressions whose occurrence is tied to more or less standardized communication situations" (Coulmas, 1981:2f).<sup>1</sup> Bardovi-Harlig (2012:208) limits the definition of pragmatic routines to utterances at least two morphemes in length (cf. also Bardovi-Harlig, 2013a:4530). However, a functional perspective on pragmatic routines is not bound to morpheme-length, but rather sees pragmatic routines as tried solutions to capturing illocutionary force (cf. Reiter et al., 2005:20; cf. also, e.g. Roever, 2011; Sánchez Hernández, 2017; Tajeddin et al., 2017, who all also include pragmatic routines one morpheme in length). In the present context, this latter broader conception is adopted. It is also supported by translations of multi-morpheme pragmatic routines in one language, such as *es tut mir leid* in German which is realised via a single morpheme 'sorry' in English.

<sup>1</sup> Routinised language has been discussed under a range of other terms also, such as "conversational routines" (Coulmas, 1981), "situation-bound utterances" (SBUs) (Kecskes, 2000) or "formulaic language" (Bardovi-Harlig, 2012), some with identical, others more specific definitions (cf. Bardovi-Harlig, 2012).

Pragmatic routines play an important role in acquiring pragmatic competence and in communicating in a second language. They offer an efficient means of performing face-threatening pragmatic or discourse functions in recurring situations with a minimum of risk. In addition, their use aids entry into a community by signalling learners' understanding of and adaptation to societal practices. Routines also give learners' speech a sense of proficiency due to their status as standardised solutions, but also due to the fact that routines are retrieved quickly and thus free up cognitive capacity. On the other hand, a lack of competence in this area may lead to pragmatic failure due to omission of a routine where it is expected or due to an inappropriate use of a routine (cf. Barron, 2003a:136–139; Bardovi-Harlig, 2012:207; Osuka, 2017:277; Tajeddin et al., 2017:2–3).

One of the major questions addressed in this stay abroad routine research to date is whether stay abroad leads to a higher level of competence in the production of pragmatic routines. Findings are varied. A number of studies find that development occurs towards an L2-norm. Hoffman-Hicks (1999), for instance, in a study of 14 American learners of French in France, reported of the emergence of a more NS-like use of greeting and leave-taking routines in particular (cf. also House, 1996). Also, Barron (2003a,b) noted an overall increased L2-like reliance on pragmatic routines by her Irish learners of German over a ten month stay in Germany (cf. also Marriott, 1995). She also recorded decreases in learner-specific expressions transferred from the first language (L1) and an increased L2-like formulaicness of a number of other routines previously in a developmental stage (cf. also Taguchi, 2013, Taguchi et al., 2013 and Alcón Soler and Sánchez Hernández, 2017 on further L2-like developments over time in the target speech community).

Studies have also, however, recorded a lack of development. Osuka (2017), in a longitudinal study, for instance, found the development of thanking routines to be slow and insufficient, with many L2 routines used to realise speech acts not employed by learners. Also, Bardovi-Harlig (2009), a cross-sectional study of ESL students, reported of an inappropriate over-use of simple forms across proficiency despite a trend towards improvement and Taguchi (2013) found learners with stay abroad experience to use routines with word choice errors, verbosity and grammatical mistakes frequently. Finally, non-L2-like developments are also possible. Barron (2003a,b), for instance, reported an increase in creative uses and false generalisations of a number of routines.

These diverging findings in routine development are further developed by Taguchi et al. (2013). They conclude that routine development over time in the target speech community is a non-homogeneous process and they preliminarily identify four possible patterns of development for routines. The categories include:

- I. L2-like convergence towards target formulae
- II. L2-like convergence towards target-like slot-and-frame patterns
- III. Movement away from L2-formulae towards non-target formulae
- IV. Stabilised use of non-L2-like formulae

Many factors influence whether and how a particular routine develops in a particular way. Factors, such as prior knowledge of a routine may influence development, for instance (Taguchi et al., 2013). Similarly, early instruction in generic solutions for realising communicative functions may lead to a dependence on basic routines and thus to their over-generalisation. Such reliance may prevent learners from integrating alternative forms for use in a range of situations as the existence of such formulae means that there is no communicative need which might increase noticing of L2 pragmatic routines (cf. also Bardovi-Harlig, 2009; Osuka, 2017:288–290; cf. Taguchi et al., 2013). A further explanatory factor relates to insufficient input and output which may lead to a lack of pragmalinguistic and sociopragmatic knowledge of routine formulae (cf. Barron, 2003a:244–245; Osuka, 2017) and indeed, even when input is sufficient, there may be a lack of negative evidence, making it difficult to notice the gap (cf. Schmidt, 1993) between learners' realisations and L2 realisations, particularly in the area of sociolinguistic competence (cf. Barron, 2003a:245, cf. also Bardovi-Harlig and Bastos, 2011). Further factors include transfer from the L1 (cf. Barron, 2003a; Osuka, 2017:289), the relative syntactic complexity of formulae (cf. Taguchi, 2013:117; Osuka, 2017:289) and the relative prototypicality of the routines (cf. Alcón Soler and Sánchez Hernández, 2017). Cultural distance is an additional factor which may lead to a lower willingness to adopt routines as learners may reject the use of pragmatic routines which reflect values foreign to their L1 culture (cf. Kecskes, 2000; Osuka, 2017:289–290; Sánchez Hernández, 2017). Also related is the fact that routines perceived to be variety-specific may be rejected if the favoured standard is another (cf., e.g. Davis, 2007).

## 2.2. Routinised apologies: development in the stay abroad context

Apologies are expressive speech acts (Searle, 1976:12) which can be defined as “compensatory action(s) to an offense in the doing of which S was causally involved and which is costly to H” (Bergman and Kasper, 1993:82).<sup>2</sup> The present analysis focuses on explicit apologies, the most direct apology type. These are apologies realised with an illocutionary force indicating device (IFID) and they may be intensified or downgraded (Blum-Kulka et al., 1989b:289–294). Three basic IFID types are

<sup>2</sup> Less prototypical apologies not dealt with in the present context include face attack apologies which typically precede a face-threatening speech act (e. g. a request or criticism) or formulaic apologies which realise additional communicative functions beyond repair, such as attention getting (‘Sorry, can you pass me x?’) (cf. Leech, 2014:118).

identified, namely expressions of regret, requests for forgiveness and offers of apologies (cf. Vollmer and Olshtain, 1989:210). In the following we review research on German NS and English-language NS apologies and also research on the acquisition of explicit apologies in the stay abroad context.

House (1989) focused on apologies by advanced German learners of English and compared these realisations to both British English (BrE) and German NS apologies. She found a generally higher use of explicit apologies in BrE relative to German and explained this by suggesting that IFIDs are more “routinized in British English apology realizations than is the case in German” (1989:311). In British English, House (1989:322) found ‘sorry’ to be the IFID used with overriding frequency. She termed it “the standard routine formula used in British English apologies” (1989:312). House (1989:311) suggested this higher level of conventionalisation in BrE to possibly (partially) explain the lower imposition she reported her BrE NS to have felt to apologise in all situations. In contrast, a comparatively wider variety of IFID tokens is reported to be employed in German, with more adaptation to the specific context of apology (House, 1989). Indeed, Vollmer and Olshtain (1989) found 21 different IFID realisations in German and noted that the distribution of these forms across situation is difficult to generalise (Vollmer and Olshtain, 1989:207–208). Concerning the German English as a Foreign Language (EFL) data, House (1989) reported a lower use of explicit IFIDs relative to the BrE NS data. She explained this with reference to transfer from German. She also found a tendency for an over-use of intensification, particularly of exclams, and in a number of situations also of adverbial use. House (1989) explained such features to be due to learner insecurity. In addition, she found learners to employ a much narrower range of exclamations than BrE NS, a feature she attributed to teaching materials.

Studies of learners’ development of apologies in the stay abroad context generally focus primarily on frequencies of use of particular strategies. Many longitudinal studies report of IFID stability across time. Warg and Schölmlberger (2007) on L2 French and Shively and Cohen (2008) on L2-Spanish, for instance, found IFID frequencies to remain stable and L2-like across time. Similarly, Kondo (1997:270–271), a longitudinal study of Japanese L2 English students reported the IFID strategy to remain broadly stable – and in this case to exceed the L2 norm (cf. also Beckwith and Dewaele, 2008). Proficiency has also been suggested to play a role, with Shardakova (2005:435), for instance, in a cross-sectional study of L2 Russian, reporting IFID use to depend on proficiency rather than on stay abroad, with high proficiency learners producing more IFIDs than lower proficiency learners.

On the level of IFID intensification, changes both towards and away from the norm have been recorded. Beckwith and Dewaele (2008), for instance, in a cross-sectional study of L2 Japanese users with and without study abroad experience, found a lower level of negative pragmatic transfer in using repeated IFIDs among students with study abroad experience. On the other hand, Shively and Cohen (2008:96) recorded an increase in IFID intensification which brought learner utterances past the NS norm.

A number of studies also briefly note typical qualitative NS-like and erroneous or non-normative pragmalinguistic realisations of the individual strategies. On this pragmalinguistic level, some studies noted developments towards the L2 norm. Shively and Cohen (2008:97–99–8) reported, for instance, of a more diversified realisation of the expression of apology strategy (IFID) in the post-test, leading learners’ L2 Spanish apologies to become less repetitive and less dependent on the single chunk *lo siento* (‘I’m sorry’) (cf. similar findings by Shardakova, 2005, Beckwith and Dewaele, 2008). Also, Shardakova (2005:443–444) found learners with exposure to use a more diverse repertoire of upgraders. On the other hand, developments away from the norm include Warg and Schölmlberger’s (2007) report of the non-NS-like increases in the use of the upgrader *très* (‘very’) in the IFID, and non-L2-like decreases in the use of the upgrader *vraiment* (‘really’) with the IFID strategy. Some studies also noted a lack of development. Shively and Cohen (2008), for instance, showed that learners primarily intensified the IFID *lo siento* via the adverb *mucho* (‘a lot’) despite a larger variety employed by Spanish NS. They suggested that this trend may point to learners’ gaining control of more complex strategies than IFIDs. Finally, non-linear developments in apology realisations have also been noted. Warg and Schölmlberger (2007:230–231) found IFIDs expressing regret to be used in an L2-like manner in time 1 (beginning of stay) and time 5 (end of 10 month stay), but to be overused in time 2 (approx. 2 months after beginning) and time 3 (approx. 4 months after beginning) due to L1 transfer.

### 3. Methodology

#### 3.1. Questionnaire database

The learners in the present study are 33 Irish university learners of German as a foreign language (GFL) with L1 English. The group spent ten months on a study abroad sojourn in a German third level institution. The average age prior to the sojourn abroad was 19.3 years. Students’ proficiency was judged to be B2 based on their previous classroom experience with German and based on subjective evaluations of their level of German elicited via a background questionnaire. Previous exposure to German was limited to the foreign classroom context and previous time spent in the target speech community ranged from zero to six months. During the stay abroad itself, students attended GFL classes and also seminars and lectures in their chosen subjects (e.g. Commerce, French). Students reported conversing in German to German NS only an average of 29.1% of their time in the stay abroad context, to non-native speakers (NNS) in German 21.4% of their time. They reported spending approximately half of their time speaking English (43.4% to English NS and 6.1% to NNS). They all read German books/magazines/newspapers during their free-time and spent time listening to radio and television broadcasts in German.

The learner data consists of production questionnaire data elicited in time T1, prior to the sojourn abroad, and at time T2, at the end of the year abroad (T1 data, T2 data). Baseline data was also gathered from 34 German NS and 27 IrE NS (G data, IrE



data). The production questionnaire, also termed a discourse completion task (DCT) (Blum-Kulka et al., 1989a), requires respondents to first read a description of a speech act situation outlining the relationship between interactants and the context in which the apology occurs. In a second step, informants then complete a discourse sequence.

**Table 1**  
Apology DCT situations employed.

		Situational description	T1	T2	G	IrE
1	Driver	Driver apologies to another driver for crash	33	32	30	24
2	Book	Student apologies to professor for forgetting to bring book back as promised	33	33	30	27
3	Manager	Personnel manager apologises for being late to interview	31	33	30	27
4	Late	Friend is late again for meeting with classmate	33	33	30	25
5	Paper	Professor apologies for not having yet read students' paper	32	32	30	27
6	Shop	Woman pushing a trolley in a supermarket apologises for bumping into another women	27	33	30	24
7	Waiter	Waiter apologies for bringing wrong order	33	33	30	27
8	Insult	Colleague apologies to a fellow colleague for offending her earlier	25	33	30	24
	Total		247	262	240	205

Given its proven reliability in eliciting apologies and in order to allow comparability of previous findings, the DCT employed was that used in the Cross-Cultural Speech Act Realisation Patterns (CCSARP) project (Blum-Kulka et al., 1989a) with the exception of one newly developed situation. The newly developed situation, shop, was designed to replace the CCSARP situation “In the Bus” which Vollmer and Olshtain (1989:199) note was “highly unreliable in prompting an apology,” due they surmise, to the ambiguity of situational description and a possibly misleading stimulus (cf. also House, 1989:304). On the questionnaire, the apology situations were elicited interchanged with a number of other speech acts. The situations employed are described in Table 1.

### 3.2. Corpus analysis methodology

AntConc was the concordancer employed in the analysis of apologetic routines across the learner (T1, T2) and NS databases (cf. AntConc Concordancer). In a first step, to prepare the data for use with AntConc, the German letters ö, ä, ü and ß were replaced with ‘oe’, ‘ae’, ‘ue’ and ‘ss’ respectively. In addition, the AntConc setting “Treat all data as lower case” was switched on for all procedures (e.g. word list, keyword analysis, collocates) in the Tools Preferences tab. The word list function yielded total token numbers per database across all four databases (T1 (5106 tokens), T2 (5477 tokens), G (4627 tokens), IrE (4459 tokens)). Finally, in order to enable a high recall, misspellings in the data were identified via the word list and taken into account in searches (cf. also 4.1 on recall).

The aim of the analysis was to identify forms and patterns employed in apologising in the T1, T2 and G data. The IrE data was consulted in clarifications of L1 transfer. The analysis was based on a hybrid approach. In a first step, the data itself and the apologetic contexts therein served as the source of apologetic pragmatic routines and patterns (cf. also Bardovi-Harlig, 2012:210–213 on approaches to formulae identification). The initial word list analysis revealed the primacy of focal pragmatic elements in the data and the concordance function showed their use as routines. Supplementing this initial corpus-driven methodology, attention was also paid to the traditional level of the strategy (cf., e.g., Vollmer and Olshtain, 1989) and thus the explicit apology strategy was taken as the focus of the analysis. Keyword analysis highlighted further explicit apologies in the data, as did a search for realisations of German explicit apologies identified by Vollmer and Olshtain (1989). Automatic techniques then provided information on the co-occurrence of focal terms with other elements (collocation), on clusters which the search word builds (clusters/n-grams) and on the keyness of particular lexemes across informants groups (keywords). As such, the wordlist, collocational, cluster and keyword analyses techniques facilitated an in-depth fine-grained quantitative and qualitative analysis of routines which includes the traditional level of the strategy but which also goes beyond it to focus on routine variants, modification specific to a routine and learner-specific realisations.

## 4. Findings: focus on IFID routines

The study focuses on formulaic, routinised expressions used to apologise. As discussed in 3.2, the particular focus is on IFIDs, defined as routinised expressions which make a speaker's apologetic illocution explicit (cf. Blum-Kulka et al., 1989b:290). In the following, we focus on learners' use of a range of IFID types and on developments over time spent in the target speech community. IFID types are given in upper case to highlight that each may have variant realisations. Realisations of these IFIDs in German are given in italics.

Fig. 1 provides an overview of the overall IFID use across all three databases. Overall, explicit apologetic pragmatic routines are used in T1 and T2 to a significantly higher extent than in G (G: 0.86 IFIDs on average vs. T1: 0.97; T2: 0.94; T1 vs. G: Fisher's exact test,  $p < 0.0001$ ; T2 vs. G:  $p = 0.0015$ ). Time in the target speech community has no effect on the learners' levels of IFID use.

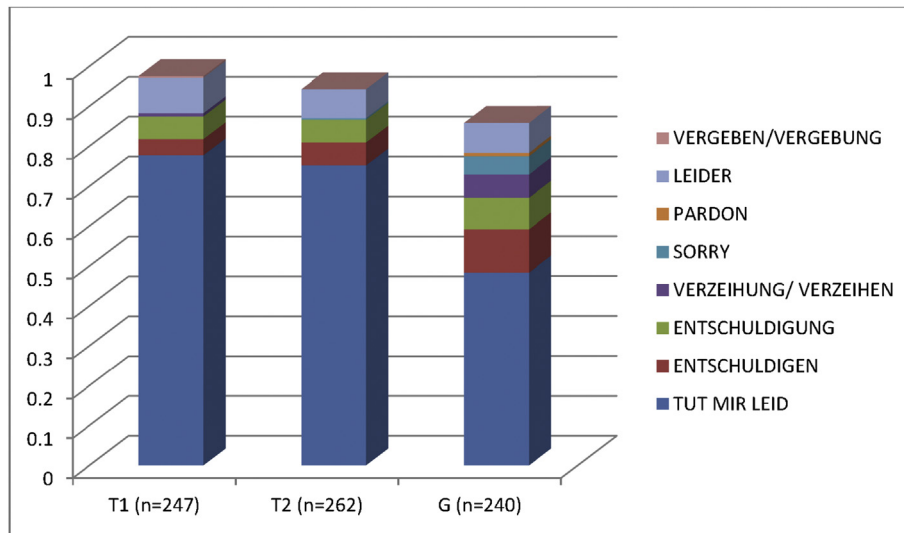


Fig. 1. Overall average IFID use by situation by database.

Despite lower levels of IFID use, the overall variety of IFID types employed in G is larger than that in T1 or T2: While both learners and NS reveal a clear preference for *TUT MIR LEID*, learners' use of this IFID is higher, and the variety of remaining IFIDs used extensively accordingly lower. In the following, we turn to each IFID in turn.

#### 4.1. *TUT MIR LEID*

The top five most frequent lexical words per database as yielded by the word list function in AntConc are displayed in Table 2 along with their normalised frequencies of use. As seen in Table 2, all three individual lexemes of the *TUT MIR LEID* IFID (approximately translated as 'SORRY') are ranked in equally high places across all three databases, with a slightly lower relative use of all three lexemes noted in G. The cluster/n-grams function in AntConc, set at 6L, 6R both right and left of the terms, showed a high occurrence of the individual words *tut*, *mir* and *leid* in the context of the *TUT MIR LEID* IFID (rather than in the context of their literal meaning (e.g. *tut* ('does'), *mir* ('me (dative)'), *leid* ('sorrow'))). Realisations took the forms (*Es* (literally 'it')/ *Das* (literally 'that') *tut mir leid* (approximately: 'I'm sorry', 'I'm sorry about that') (cf. also Vollmer and Olshtain, 1989:210). In addition, a collocational analysis of *tut*, *mir* and *leid* (cf. Table A.1) showing neighbouring words that occurred relatively frequently 5L or 5R of the search terms, returned high t-scores for an association between *tut*, *mir* and *leid* across all datasets far above the t-score of  $\geq 2$  for statistical significance.

Table 2

Wordlist with frequencies and normalised frequencies per total number of items per database for T1, T2 and G.

Rank	T1 (n = 247)	T2 (n = 262)	G (n = 240)
1	<i>ich</i> 1.51 (374)	<i>ich</i> 1.58 (415)	<i>ich</i> 1.19 (286)
2	<i>es</i> 1.06 (263)	<i>es</i> 1.15 (301)	<i>mir</i> 0.59 (142)
3	<i>mir</i> 0.83 (206)	<i>mir</i> 0.79 (207)	<i>das</i> 0.56 (135)
4	<i>tut</i> 0.78 (194)	<i>leid</i> 0.75 (197)	<i>tut</i> 0.49 (117)
5	<i>leid</i> 0.78 (192)	<i>tut</i> 0.75 (197)	<i>leid</i> 0.48 (116)

The *TUT MIR LEID* IFID realises an expression of regret (Vollmer and Olshtain, 1989:210). The overall frequencies of use of this IFID were established for each database via a frequency analysis conducted via the concordance tab in AntConc. The search term used in the collocational tab was *leid* rather than *tut mir leid* given the higher recall of the former search term (cf. Jucker, 2009). The search for this single term namely yielded all instances of the IFID (*es/das*) *tut mir leid* ('I'm sorry (about that)') and also combinations of the IFID with upgraders (e.g. *tut mir wirklich leid* ('really sorry'), *tut mir wirklich sehr leid* ('really very sorry')). In addition, this search also returned instances of the IFID where *tut* and *mir* were separated with *es*, for instance, due to the German V2 rule, whereby the verb must appear in second position, such as in *wenn doch, tut es mir leid* ('if so, I am sorry') or in *wenn es so war, tut's mir leid* ('if it was so, I'm sorry').

The frequency data for *TUT MIR LEID* across database is shown in Fig. 2. As seen here, learner use of this IFID is constant across time (T1: 0.78; T2: 0.75) and in both cases significantly higher than in G at 0.48 (Fisher's exact test:  $p = 0.0020$ ;

$p = 0.0136$ ). The IrE NS data throws light on these high learner uses. As is the case for British English (cf. House, 1989, cf. 2.2), 'sorry' is by far the most routinised and frequently used IFID in the IrE data, being employed in 0.79 (163) of the total number of items (205). The similarly high levels of use across learner and IrE NS data suggest transfer, as well as communicative security, to play a role in the Irish learners' high use of such apologies.

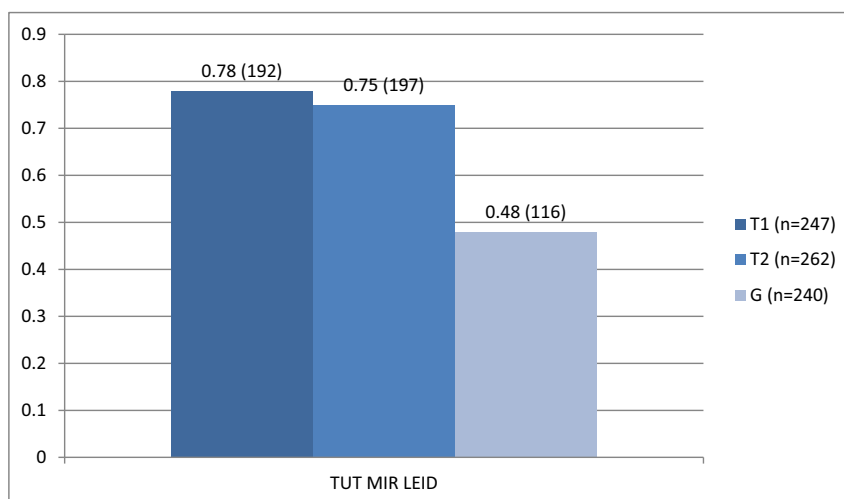


Fig. 2. Use of *TUT MIR LEID* IFID per individual item across database.

A concordance analysis of the data then allowed information to be gained on the position of the *TUT MIR LEID* IFID in the apology data. As Fig. 3 reveals, most informants across all datasets used this IFID in initial position (T1: 81.25% (156); T2: 86.8% (171); G: 81.9% (95)). Any differences in figures were not significant. Initial use with another IFID, such as in the case of *Entschuldigung. Es tut mir leid* (T1) ('Excuse me. I'm sorry'), was also recorded in a minority of cases.

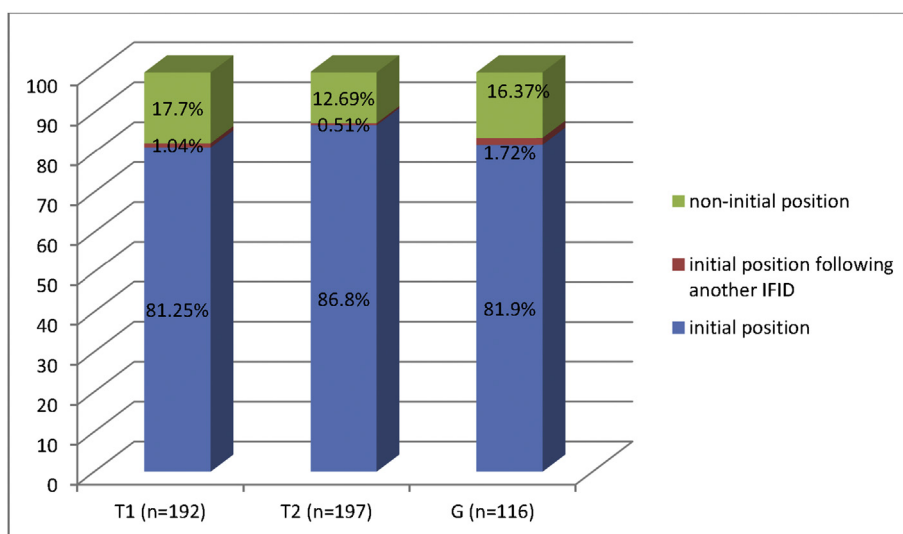


Fig. 3. Position of *TUT MIR LEID* IFID in apologies across database.

When sorted to the left, the concordance data for *leid* revealed four different syntactic variants of the IFID, namely *tut mir leid* ('sorry'), *es tut mir leid* ('I'm sorry'), *das tut mir leid* ('I'm sorry about that') showing a thematic designation and an infrequently used learner-specific variant *Ich tut mir leid* ('I sorry'). This data proved interesting also in the context of the collocational analysis presented in Table A.1 which reveals a stronger association between *es* (literally 'it') and *tut*, *mir* and



*leid* in T1 and T2 relative to in G and a stronger association between *das* ('that' [demonstrative]) and *tut mir leid* and *leid* in G relative to T1 in particular, but also to T2. Fig. 4 displays the use of the three constructions (without upgrading). There is a clear preference in the learner data across time for the construction *Es tut mir leid* ('I am sorry') (T1: 81.25% (156), T2: 86.29% (170)). Use of *tut mir leid* ('sorry') is low at 18.23% (35) in T1 and 13.2% in T2. The third routinised variant *Das tut mir leid* ('I'm sorry about that') is not employed at all in T1 and is only employed by 0.51% (1) in T2. In contrast, use of all three variants is spread relatively equally across the three constructions *Tut mir leid* ('sorry'), *Es tut mir leid* ('I'm sorry') and *Das tut mir leid* ('I'm sorry about that') in G. Fisher's exact test shows the differences recorded here to be statistically significant ( $p < 0.0001$ ).

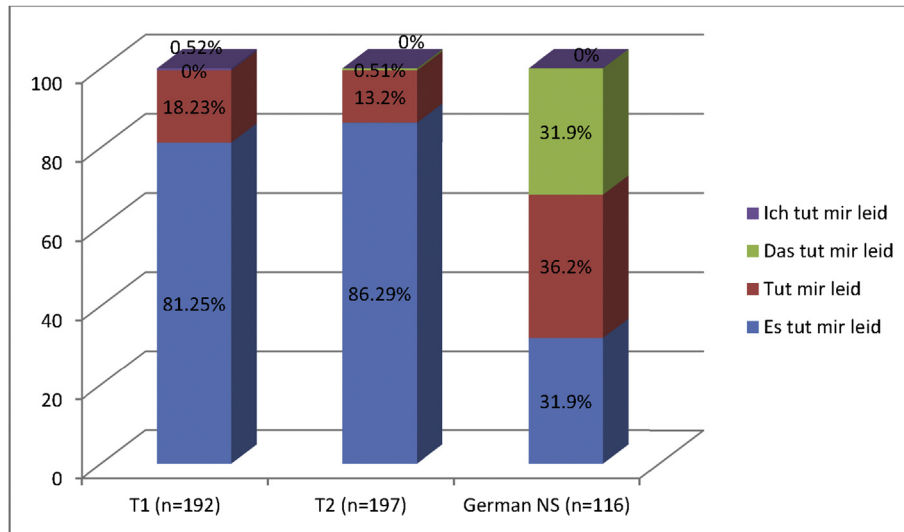


Fig. 4. Syntactic variants of TUT MIR LEID across database as a percentage of the total number of TUT MIR LEID IFIDs per database.

Table 3

Distribution of TUT MIR LEID IFID syntactic realisations across individual situations in G as a percentage of total individual syntactic realisations ( $n = 116$ ).

	Driver	Book	Manager	Late	Shop	Waiter	Paper	Insult
<i>Tut mir leid</i> ( $n = 42$ )	11.9% (5)	9.52% (4)	11.9% (5)	21.43% (9)	23.81% (10)	—	9.52% (4)	11.9% (5)
<i>Das tut mir leid</i> ( $n = 37$ )	21.62% (8)	16.22% (6)	2.7% (1)	10.81% (4)	8.11% (3)	18.92% (7)	21.62% (8)	—
<i>Es tut mir leid</i> ( $n = 37$ )	10.81% (4)	13.51% (5)	18.92% (7)	13.51% (5)	8.11% (3)	2.7% (1)	16.22% (6)	16.22% (6)

A situational analysis of use of *das tut mir leid* ('I'm sorry about that') in G is provided in Table 3. Here we see that the demonstrative *das* ('that') in this routine is predominantly used in situations in which the offence has been previously addressed despite the fact that it is possible to use *das* also with a subordinate clause (SC) as in *Das tut mir leid, dass ... /wenn ...* ('I'm sorry that ... /if ...'). In the insult situation, informants apologise to a colleague for a remark made earlier which may have caused offence. In this situation, *das* is not used given that the potential offence has happened earlier and it is the apologise who mentions the offence. Where this IFID realisation is employed, its thematic designation has been suggested to be upgrading given that the expression of regret is very focused on the particular offence at hand (cf. Vollmer and Olshtain, 1989:215).

In contrast, the realisation *Es tut mir leid* ('I'm sorry') communicates a general feeling of regret. *Tut mir leid* ('sorry') is the most informal realisation of the IFID. It occurs most in the late situation and in the shop situation, two of the most informal situations and it does not occur at all in the formal waiter situation. Its use in the remaining situations is limited (cf. Table 3). Overall then, learners' low levels of uses of the IFID realisation *das tut mir leid* ('I'm sorry about that') reveal that they have not mastered this intensification type at the end of their sojourn abroad. We now look to other means of upgrading, namely lexical upgrading and exclamations (cf. House, 1989:309; Vollmer and Olshtain, 1989:212).

Fig. 5 shows the levels of use of lexical upgrading across the three database. Table 4 shows the lexical upgraders employed across database as established via a qualitative analysis of concordance lines. In T1, T2 and G, upgrading is employed to a similar degree, any differences between groups lacking statistical significance (Fisher's exact test). Over time, thus, there is no change in levels of upgrading.

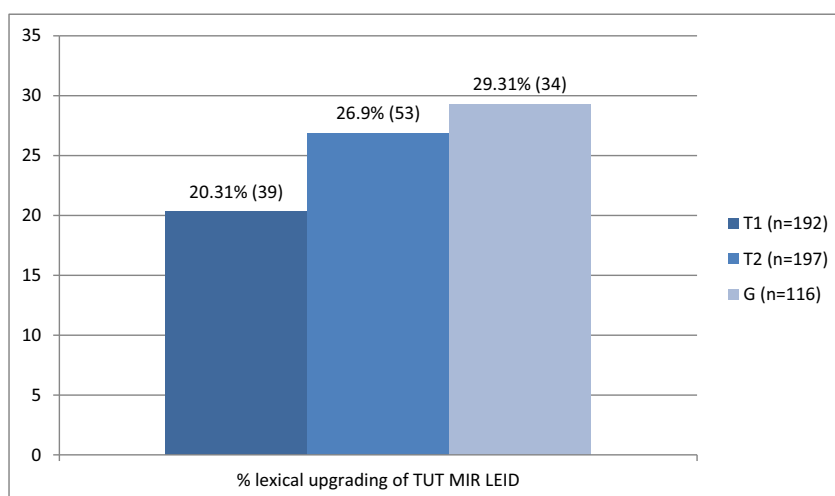


Fig. 5. Lexical upgrading of *TUT MIR LEID* IFID as a percentage of *TUT MIR LEID* IFIDs across database (n = 76).

Table 4

Lexical upgraders with *TUT MIR LEID* by database as a percentage of total upgraders employed with *TUT MIR LEID* per database.

	T1 (n = 39)	T2 (n = 53)	G (n = 34)
<i>jetzt aber</i> (1) <sup>a</sup>	—	—	8.82% (3)
<i>außerordentlich</i> ('remarkably')	—	—	2.94% (1)
<i>echt</i> ('really')	—	9.43% (5)	8.82% (3)
<i>furchtbar</i> ('dreadfully')	15.38% (6)	5.66% (3)	5.88% (2)
<i>schrecklich</i> ('terribly')	—	—	11.76% (4)
<i>sehr</i> ('very')	17.95% (7)	7.55% (4)	29.41% (10)
<i>so</i> ('so')	5.13% (2)	15.09% (8)	2.94% (1)
<i>wirklich</i> ('really')	58.97% (23)	62.26% (33)	23.53% (8)
<i>ganz</i> ('completely')	2.56% (1)	—	—
<i>echt total</i> ('really really')	—	—	2.94% (1)
<i>wirklich furchtbar</i> ('really dreadfully')	—	—	2.94% (1)

<sup>a</sup> A translation of *jetzt aber* (literally 'now but') is difficult. Its use serves to upgrade an apology.

Of those lexical upgraders employed, G shows most variety, employing ten different modifiers or combinations of modifiers (cf. Table 4). In contrast, the learners employed only five upgrader types at T1 prior to their stay abroad, one of these, *ganz*, having the status of a learner-specific upgrader in the present context given its absence from G (cf. also Barron, 2007 on *ganz*). In T2, learners also use five different upgraders. However, the learner-specific routine *ganz* has disappeared and a new target language upgrader, *echt* ('really'), has appeared. Overall, there is a G preference for *sehr* ('very', 29.41%) and for *wirklich* ('really', 23.53%). *Sehr* is used in both T1 and T2 but at T2, the lower levels of use of *sehr* ('very') relative to the G norm (T2: 7.55%; G: 29.41%) is statistically significant (Fisher's exact test:  $p = 0.0142$ ), revealing a non-linear development away from the L2 norm. *Wirklich* ('really'), on the other hand, is the learners' preferred lexical upgrader choice and this preference remains stable over time. However, at both T1 and T2, learners' high use of *wirklich* ('really') represents an overgeneralisation relative to the G norm (T1: 58.97%; T2: 62.26%; G: 23.53%; Fisher's exact test: T1 vs. G:  $p = 0.0005$ ; T2 vs. G: 0.0041), a feature also highlighted in the lower t-scores *wirklich* ('really') returned in the collocational analysis of *tut*, *mir*, *leid* and *wirklich* in G relative to the t-scores in T1 and T2 (cf. Table A.1). Table 5 shows the L1 upgrader preferences for SORRY, the preferred IFID type in the IrE NS data. Here, both 'really' and 'very' are used to a similar degree. Hence, L1 transfer may explain the use of *wirklich* ('really') but it does not explain the differences in use of *wirklich* ('really') and *sehr* ('very') in the learner data. Similarly, the high use of 'so' in the L1 data is not reflected in the learner data.

Table 5

Individual upgraders with SORRY in L1 database as a percentage of the total upgraders with SORRY.

	IrE (n = 76)
awfully	2.63% (2)
really	25% (19)
so	42.1% (32)
terribly/terrible	5.26% (4)
very	25% (19)

The use of exclamations is a further type of apology upgrading (cf. Vollmer and Olshtain, 1989:212). Fig. 6 provides an overview of the exclamations employed with *TUT MIR LEID* as an IFID given as a percentage of the total number of *TUT MIR LEID* IFIDs occurring in initial position in the database at hand (cf. Fig. 3 above). Overall, exclamations are used to a significantly higher degree in G than in either of T1 or T2 (T1: 12.82%; G: 36.84%; Fisher's exact test:  $p = 0.0003$ ; T2: 16.37%; G: 36.84%; Fisher's exact test,  $p < 0.0001$ ), a finding also explaining the differences in collocational strength of *tut*, *mir* and *leid* with *Oh* ('oh') apparent in Table A.1.

The IrE use of exclamations with initial SORRY is lower than G use (Fisher's exact test,  $p = 0.0420$ ). However, transfer is not the only factor at play here since the use of exclamations in T1 is lower still (Fisher's exact test:  $p = 0.0164$ ). This low use of exclamations by Irish learners is contrary to findings by House (1989) on an overuse of exclamations in apologies by German learners of English due to insecurity. It is suggested that differences on this level are explained by a high dependency on the use of an explicit IFID in the IrE context, similar to in learners' L1. Over time there is no change in learner's use of exclamations.

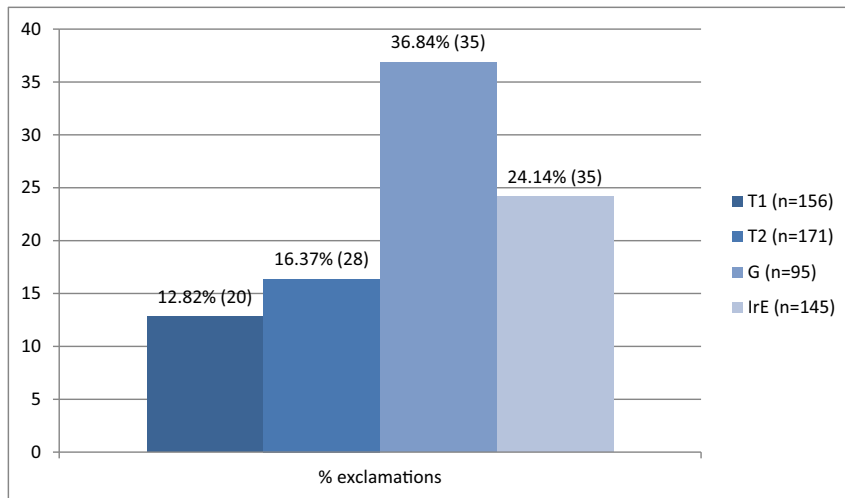


Fig. 6. Exclamations with *TUT MIR LEID* IFID across database as a percentage of the total IFIDs in initial position.

Table 6

Exclamations with *TUT MIR LEID* IFID across database as a percentage of total exclamations employed with IFIDs in initial position.

	T1 (n = 20)	T2 (n = 28)	G (n = 35)
<i>Ach</i> ('oh')	—	6 (21.43%)	2 (5.71%)
<i>Ach Mensch</i> ('oh gosh' [literal: oh person])	—	—	1 (2.86%)
<i>Ah</i> ('ah')	—	1 (3.57%)	1 (2.86%)
<i>Ey</i> ('eh')	—	—	1 (2.86%)
<i>Mein Gott</i> ('my God')	1 (5%)	1 (3.57%)	—
<i>O/Oh</i> ('oh')	18 (90%)	17 (60.71%)	24 (68.57%)
<i>Och Scheisse</i> ('oh shit')	—	1 (3.57%)	—
<i>Verdammt oh</i> ('damn oh')	—	1 (3.57%)	—
<i>Oh Gott</i> ('oh God')	—	—	1 (2.86%)
<i>Oh Mann</i> ('oh man')	—	—	2 (5.71%)
<i>Oh Mensch</i> ('oh gosh' [literal: oh person])	—	—	1 (2.86%)
<i>Oh nein</i> <sup>a</sup> ('oh no')	1 (5%)	—	1 (2.86%)
<i>Oh weh</i> ('oh dear')	—	—	1 (2.86%)
<i>Wie sieht es aus</i> ('Look at it' [literally: how does it look])	—	1 (3.57%)	—

<sup>a</sup> *Nein* ('no') is only counted as an explanation where it is not the answer to a question.

The exclamations employed are broadly similar across database (cf. Table 6), with a preference in the learner and G data for the exclamation *oh* ('oh'), also given as *o* ('o') in the learner data (cf. also House, 1989 on a narrow range of exclamations). The use of *oh/o* ('oh'/'o') is very high in the T1 database at 90%, reflecting a high use of 82.86% in the IrE NS database. This high use of *oh/o* ('oh'/'o') decreases over time to approach the G norm (Fisher's exact test: T1: 90%, T2: 60.71%;  $p = 0.0458$ ). At the same time, the variety of the learner responses increases over time spent in the study abroad context in the direction of G (T1: 3 types; T2: 7 types; G: 10 types). Notable in the IrE data is the realisation *Mein Gott*, which shows pragmatlinguistic transfer from the IrE form 'Oh my God', employed in 8.57% of exclamations. This form is not used in G.

#### 4.2. ENTSCULDIGEN

The corpus linguistic procedure, keyword analysis, provides information on how key, or particular, a given word is for a database. A log likelihood score of 3.84 and up indicates statistical significance. *Entschuldigen* ('to excuse'/'to apologise') is one

of the keywords particularly associated with G compared to T1 (log likelihood keyness: 11.339) or T2 (log likelihood keyness: 4.950). Fig. 7 shows the use of all combined variants of the *ENTSCULDIGEN* IFID, i.e. of all forms (infinite or conjugated) in the database realised via the verb *entschuldigen* ('to excuse'/'to apologise'). Use of this IFID in G is statistically higher than in T1 (Fisher's exact test,  $p = 0.0051$ ) or T2 ( $p = 0.0493$ ). The form is employed across a range of situations in all databases. In the German data, its use is, however, particularly frequent in the manager situation (50% (12)). Over time, learners approach this sociopragmatically appropriate use (T1: 30% (3); T2: 53.34% (8)).

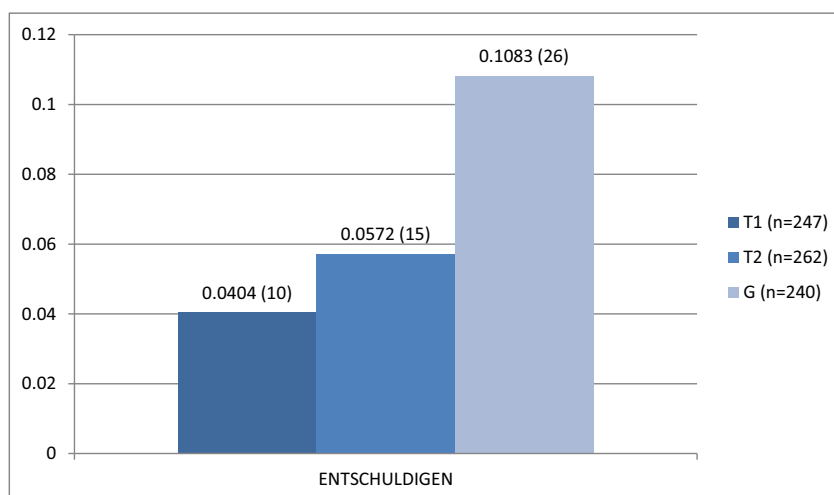


Fig. 7. Use of the *ENTSCULDIGEN* IFID by database per individual item per database.

Table 7

Realisations of the *ENTSCULDIGEN* IFID across database as a percentage of the total use of each IFID in each database.

	T1 (n = 10)	T2 (n = 15)	G (n = 26)
<b>L2-LIKE FORMS OF ENTSCULDIGEN</b>			
<i>Entschuldigen Sie bitte</i> ('please excuse me'/'sorry')	30% (3)	—	23.08% (6)
<i>Entschuldigen Sie bitte, dass + SC</i> ('please excuse me/sorry for')	10% (1)	—	3.85% (1)
<i>Entschuldigen Sie bitte oftmals</i> ('please please excuse me')	—	—	11.54% (3)
<i>Entschuldigen Sie bitte NP</i> ('Please excuse me/sorry for NP')	—	—	42.31% (11)
<i>Entschuldige (bitte), (dass/wegen/wenn + SC)</i> ('please excuse me/sorry for/if' (informal you))	—	—	15.38% (4)
<i>Ich möchte mich bei Dir entschuldigen</i> ('I would like to apologise to you')	—	—	3.85% (1)
<i>Ich entschuldige mich (für)</i> ('I apologise (for)')	30% (3)	13.33% (2)	—
<i>Ich muss mich (bei Ihnen) entschuldigen, (dass + SC)</i> ('I have to apologise to you (for)')	10% (1)	26.67% (4)	—
<b>Total L2-like forms</b>	80% (8)	40% (6)	—
<b>LEARNER-SPECIFIC FORMS OF ENTSCULDIGEN</b>			
<i>Entschuldigen</i>	10% (1)	—	—
<i>(Bitte) entschuldigen Sie mich (bitte)</i>	10% (1)	6.67% (1)	—
<i>Entschuldigen Sie mir</i>	—	13.33% (2)	—
<i>Entschuldige mir</i>	—	6.67% (1)	—
<i>Ich hoffe, dass Sie mir entschuldigen können</i>	—	6.67% (1)	—
<i>Sie müssen/Du musst mich (für NP) entschuldigen</i>	—	26.67% (4)	—
<b>Total learner-specific forms</b>	20% (2)	60% (9)	—

Looking now to the realisations of the *ENTSCULDIGEN* IFID: the top three collocates of *entschuldigen* ('excuse'/'apologise') in G are *Sie* (t-score: 4.71751), *ich* (t-score: 3.66004) and *bitte* (t-score 3.28222). Two of these collocates, *Sie* (literally formal you) and *bitte* (literally 'please') are seen in the clear preference in G for the standardised and routinised performative verb form *Entschuldigen Sie bitte* ('excuse me please'/'sorry' (formal)) (cf. Table 7). In this realisation, the IFID realises a request for forgiveness (Vollmer and Olshtain, 1989:210). The collocate *ich* ('I') is explained for the most part by explanatory comments following the IFID. The routine performative verb form *Entschuldigen Sie bitte* is accompanied optionally by the upgrader *vielmals* (11.54%), by a noun phrase (NP) explicitly stating the offence at hand (e.g. *die Verspätung* ('the delay')) (42.31%) or by a SC detailing the offence (e.g. *dass* (3.85%)) making up a total use of 80.77% use of this form. Its more informal counterpart takes the basic form of *entschuldige* (15.38%).

The *ENTSCULDIGEN* IFID is also used as a reflexive verb in *sich für etwas entschuldigen* ('to apologise for something') (cf. inflected reflexive form *mich* in Table 7). This form of the IFID realises an offer of apology (Vollmer and Olshtain, 1989:210). Such realisations are more formal and much more infrequently used in the data than request for forgiveness realisations of the forms *Entschuldige(n)*

(Sie) (cf. also Vollmer and Olshtain, 1989:208 for similar findings). In the present G dataset, there is only one instance of the formal realisation (*Ich möchte mich (bei Dir) entschuldigen* ('I would like to apologise to you')) here combined with the modal verb *mögen*.

Learners use *ENTSCULDIGEN* infrequently. Those forms used show lower collocational t-scores in T1 relative to the G data discussed above. The T1 collocates, *bitte* ('please') (t-score: 2.22976) and *Sie* (literally: 'formal you') (t-score: 2.20033), are the same as the G collocates for this IFID, a fact that is reflected in the L2-like use of the routine *Entschuldigen Sie bitte* ('Please excuse me'/'sorry') (40%) in T1 (cf. Table 7: 30% + 10%). However, overall, learners' use of this IFID is more highly formal than in G as the more informal realisation *Entschuldige* is not used at all. In addition, learners also employ the most highly formal realisation of *ENTSCULDIGEN*, namely the use of *entschuldigen* reflexively as in *ich entschuldige mich* ('I apologise')/*Ich muss mich entschuldigen* ('I have to apologise'). In T2, the conventionalised NS-like realisation *entschuldige(n) Sie bitte* ('please excuse me') was not employed at all. Rather, only the more formal reflexive form with and without the modal verb *müssen* ('to have to') (*ich entschuldige mich* ('I apologise'), *ich muss mich entschuldigen* ('I have to apologise'))).

In addition to the L2 appropriate routine realisations, the T1 and T2 data revealed several learner-specific realisations (cf. Table 7). Over time spent in the target speech community, the use of L2-like routines decreases (T1: 80%, T2: 40%) in a non-linear movement and the use of learner-specific routines increases from T1 (20%) to T2 (60%). The learner-specific routines include the realisation (*bitte*) *entschuldigen Sie mich (bitte)* which reveals transfer from the English-language routine 'excuse me please' as it includes an accusative pronoun *mich* not required in German, but required in English. In addition, there appears to be confusion here with the conventionalised routine *entschuldige(n) (Sie)* ('excuse me'/'sorry') and the use of the reflexive verb *sich entschuldigen* ('to apologise') which also makes use of the form *mich* in the first person singular, but then as a reflexive pronoun. This form, *Ich entschuldige mich*, is only conventionalised when employed to apologising for oneself for not being attentive or for having to exit. In contrast, apologies for offences caused, such as in the present case, the reflexive pronoun is employed with reference to the offence, as in *Ich entschuldige mich (für ...)* ('I apologise for +SC'). With no such reference, the routine employed is simply *entschuldigen Sie* ('excuse me'/'sorry', formal) or *entschuldige* ('excuse me'/'sorry', informal). Two further routines employed in T2 can also be explained with recourse to transfer and a lack of grammatical competence, namely the forms *Entschuldigen Sie mir* (formal) and *Entschuldige mir* (informal). As was the case with (*bitte*) *entschuldigen Sie mich (bitte)*, both of these forms are also reminiscent of the English-language routine 'excuse me'. In these two cases, a first person dative pronoun has been employed. In German, however, the dative pronoun *mir* is only used where an accusative object is present, as in *Bitte entschuldigen Sie mir meinen Fehler* ('please excuse my mistake'). This was not the case in the present data. Further formal errors in the use of the routine include the use of *Entschuldigen* without the formal pronoun *Sie*. Similarly, the form *Ich hoffe, dass Sie mir entschuldigen können* ('I hope that you can excuse me') is pragmatically suitable but includes a grammatical error with the use of the dative (*mir*) rather than the accusative case (*mich*). Finally, the T2 routine *Sie müssen/du musst mich entschuldigen* ('You have to excuse me') is grammatically correct but the use of the modal verb (*müssen* ('to have to')) makes the realisation pragmatically inappropriate in that it puts pressure on the recipient of the apology to accept the apology.

### 4.3. ENTSCULDIGUNG

*ENTSCULDIGUNG* is an IFID realising a request for forgiveness (cf. Vollmer and Olshtain, 1989:210). It is a keyword in G relative to the T1 reference data (log likelihood keyness: 4.704). Fig. 8 shows the use of *ENTSCULDIGUNG* by database. Levels of use of the IFID are similar across T1, T2 and G, any differences being non-significant. Use is distributed across several situations in all database. However, the German NS reveal a preference for use in the shop situation which was not seen in T1 but which appeared in T2 (G: 57.89% (11), T1: 21.42% (3), T2: 40% (6)).

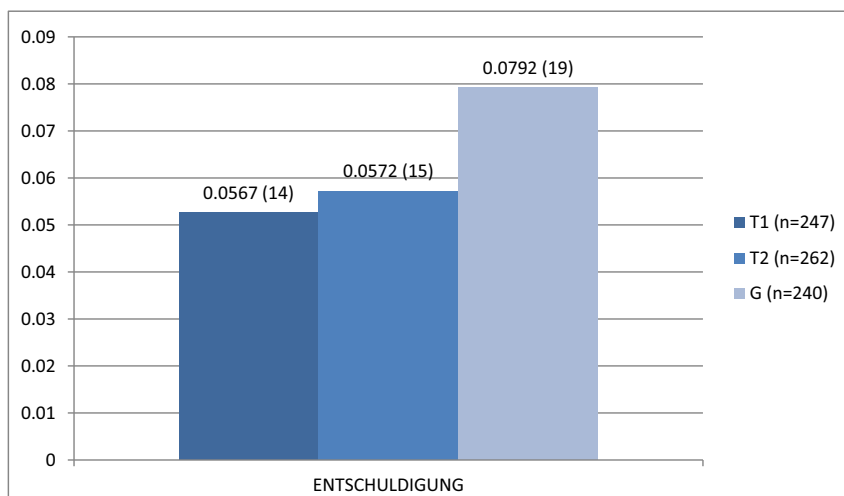


Fig. 8. Use of the *ENTSCULDIGUNG* IFID across database per total items per database.

Realisations of *ENTSCULDIGUNG* are given in Table 8. Similar to the German NS informants, most learners in T1 and T2 employ the routine realisation *Entschuldigung* ('excuse me'/'sorry'). A small number of NS use a formal realisation (*bitten um Entschuldigung* ('to apologise')). In addition, the learner data shows the use of learner-specific forms in T1 and T2. In T1, these include a number of forms showing transfer from English. The formal IFID realisation *Nehmen Sie meine Entschuldigung* ('take my apology'), for instance, is reminiscent of English-language 'please accept my apology'. Also, *Entschuldigung sagen über was ....* ('to say sorry for +SC') is similar to the collocation 'to say sorry about something' in English. This type of transfer was limited to T1. Further learner-specific routines are the result of an inappropriate lexical choice, as in the case of *wieder* (T2) instead of the collocation *nochmals* ('again') which is present in G. Other learner-specific routines, including the realisation *Entschuldigung Sie* used in T1 and T2, are inappropriate in their use of the formal pronoun *Sie*. Indeed, such cases represent a lack of clear differentiation in the learner data between the *ENTSCULDIGUNG* IFID and the request for forgiveness realisation of the *ENTSCULDIGEN* IFID (cf. 4.2).

**Table 8**

Realisations of the *ENTSCULDIGUNG* IFID across database as a percentage of its total use in each database.<sup>a</sup>

	T1 (14)	T2 (15)	G (19)
( <i>nochmals</i> ) <i>Entschuldigung</i> ('excuse me (again)')/'sorry (again)')	71.42% (10)	73.33% (11)	89.47% (17)
<i>Ich bitte vielmals um Entschuldigung</i> ('I do apologise')	—	—	10.53% (2)
LEARNER-SPECIFIC FORMS OF <i>ENTSCULDIGUNG</i>			
<i>Vielmals um Entschuldigung</i>	7.14% (1)	—	—
<i>Nehmen Sie meine Entschuldigung</i>	7.14% (1)	—	—
<i>Ich muss Entschuldigung sagen über was ...</i>	7.14% (1)	—	—
<i>Wieder Entschuldigung</i>	—	6.67% (1)	—
<i>Entschuldigung Sie</i> (NP)	—	20% (3)	—
<i>Entschuldigung Sie bitte!</i>	7.14% (1)	—	—

<sup>a</sup> The abbreviated casual form of this IFID, *Tschuldigung* ('excuse me'/'sorry'), is not recorded in the database (cf. also Vollmer and Olshtain, 1989:208).

In T1 and T2, the t-scores for collocates of *Entschuldigung* are below the recognised level of 2 of collocational strength (T1: 0.9524; T2: 1.67410). In G, *Oh* ('oh') is a collocate of *Entschuldigung* (t-score: 3.36690). An analysis of the use of exclamations with *ENTSCULDIGUNG* reveals that 10 of the 17 (58.82%) *Entschuldigung* realisations in G included an exclamation, realised by *Oh* ('oh'). In the T1 in contrast, only 10% (1) of such realisations included this exclamation (or any exclamation). Similarly low levels of exclamations are seen in the T2 data where the exclamations *oh nein* ('oh no') and *oh* ('oh') are each used once (18.18%).

#### 4.4. VERZEIHUNG/VERZEIHEN, SORRY, PARDON, LEIDER, VERGEBEN

Four further IFIDs, namely *VERZEIHUNG/VERZEIHEN*, *SORRY*, *PARDON*, *LEIDER* and *VERGEBEN* were used to a limited extent in the data. We deal with each in turn in the following.

*VERZEIHUNG/VERZEIHEN*, like *ENTSCULDIGEN* (non-reflexive) and *ENTSCULDIGUNG*, represents a request for forgiveness (cf. Vollmer and Olshtain, 1989:210). *VERZEIHUNG/VERZEIHEN* is employed to a limited extent in G, namely on average 0.0583 times per situation. Use of the IFID is significantly lower in T1 (Fisher's exact test:  $p = 0.0018$ ) and absent from T2 (cf. Fig. 1). Realisations of *VERZEIHUNG/VERZEIHEN* include the nominal form *Verzeihung* ('excuse me'/'sorry') and the verbal form *verzeihen Sie mir* ('forgive me', formal) and *verzeih mir* ('forgive me', informal) (cf. Table 9), both forms keywords in G. Both the nominal and verbal forms are employed in T1 and in G. Situationally, 11 of the total 14 forms in G were employed in the formal waiter situation. The informal verbal realisations were recorded in the notes situation.

**Table 9**

Realisations of the *VERZEIHUNG/VERZEIHEN* IFID across database as a percentage of the total use of the IFID.

	T1 (n = 2)	G (n = 14)
Nominal		
<i>Verzeihung</i> ('excuse me'/'sorry')	50% (1)	35.71% (5)
<i>Ich bitte Sie vielmals um Verzeihung</i> ('I do apologise')	—	7.14% (1)
Verbal		
( <i>bitte</i> ) <i>Verzeihen Sie (mir) (bitte) (vielmals)</i> ('forgive me')	50% (1)	35.71% (5)
( <i>Bitte</i> ) <i>verzeih' mir</i> ('(please) forgive me')	—	14.28% (2)
<i>Ich hoffe, Sie können mir noch einmal verzeihen</i> ('I hope you can still forgive me')	—	7.14% (1)

The English loanword *sorry* is also a keyword in G relative to both the T1 and T2 data, with a keyness t-score of 16.359 relative to the T1 data and of 11.523 relative to T2 as a reference database. The *SORRY* IFID, similar to *TUT MIR LEID*, realises an expression of regret. Use of *SORRY* is significantly different in G relative to both learner data-sets (Fisher's exact test: T1 vs. G:  $p = 0.0004$ ; T2 vs. G:  $p = 0.0022$ ) (cf. also Fig. 1). In G, it is used mostly to apologise to a friend in the late situation but it also appears in the shop and insult situation; in the T2 data it is used only once in the shop situation.



*PARDON* is a further IFID type in the present data based on the French loanword *pardon*. It realises an expression of regret (cf. Vollmer and Olshtain, 1989:210). Its use is limited to G and its occurrence is low (cf. Fig. 1). Further IFIDs include *LEIDER* ('unfortunately') (cf. Blum-Kulka et al., 1989b:290), an expression of regret which is used across learner and NS databases to a similar degree. Also, the *VERGEBEN/VERGEBUNG* IFID ('forgive'/'forgiveness'), a request for forgiveness (cf. Blum-Kulka et al., 1989b:290; Vollmer and Olshtain, 1989:210), is present in the T1 database, occurring in verbal form in the phrase *Können Sie bitte mir vergeben?* ('can you please forgive me?').

## 5. Concluding discussion

The research questions guiding the present study asked whether the production of apologetic pragmatic routines by Irish learners of German changes in the course of a two-semester study abroad experience, whether any changes in routine production were L2-like and how learners' routine competence in apologising may be explained. Corpus linguistics methods were employed in answering these questions and the focus was on explicit apologies. Overall, three patterns of development were recorded, a) stable non-L2-like use, b) development towards the L2 norm, c) developments away from the L2 norm. In the following, we deal with each pattern in turn and, following this, discuss the significance of and the reasons for these findings.

Many aspects of learners' routine competence in L2 apologies remained stable. Some of these features, such as the high use of explicit apologies and the preferred use of *TUT MIR LEID* were L2-like. However, in all cases there was potential for change in T1 relative to the G norm. The stable features include:

- High use of explicit apologies (IFIDs)
- High use of the *TUT MIR LEID* IFID by learners
- Low uses of IFIDs other than *TUT MIR LEID*, particularly low use of *ENTSCHULDIGEN*, *VERZEIHUNG/VERZEIHEN* and *SORRY*
- No upgrading via syntactic means despite widespread use of upgrading via the demonstrative pronoun, *das* in *das tut mir leid* (I'm sorry about that) in G
- Low use of informal realisations of *TUT MIR LEID* and *ENTSCHULDIGEN*
- Low use of exclamations with *TUT MIR LEID* and *ENTSCHULDIGUNG*
- High use of the upgrader *wirklich* in *TUT MIR LEID* realisations.
- Individual cases of learner confusion between the realisations of the *ENTSCHULDIGUNG* and *ENTSCHULDIGEN* IFIDs

On the other hand, some developments were recorded towards the L2 norm. These are, however, limited overall and include only:

- Some decrease in overgeneralisation of *oh/o* ('oh') as an exclamation employed with *TUT MIR LEID* and an increased variety of upgrading exclamations (though exclamation use overall remained low).
- Some increases in sociopragmatic appropriateness of routine use across situation for *ENTSCHULDIGEN* and *ENTSCHULDIGUNG*
- Slightly more diverse use of lexical upgraders with the preferred *TUT MIR LEID* IFID despite continued overgeneralisation of *wirklich*.
- Disappearance of the individual cases of transfer as an explanatory phenomenon in learner-specific forms of *ENTSCHULDIGUNG*

Finally, there were some non-linear developments away from the L2-norm. These include:

- Decrease in use of the upgrader *sehr* ('very') employed with *TUT MIR LEID*
- Decrease in L2-like routines
- Increase in learner-specific realisations of *TUT MIR LEID* and *ENTSCHULDIGEN*.

These developments and lack of developments are discussed in the following and the factors impeding L2-like development are discussed in detail. Let us turn first to the consistently higher levels of routine IFID production relative to the L2 norm. Learner use here reflects previous research by Shardakova (2005) on American learners of Russian and Kondo (1997) on L2 English apologies by Japanese students, both of which also found learners to continue to exceed L2 levels of IFID use. The lack of change over time in the target speech community also partly reflects findings of studies on IFID use by Waga and Schölmberger (2007) for Austrian learners of French and Shively and Cohen (2008) for American learners of Spanish. However, in both of these cases, the stability recorded is target-like. In the present German learner data produced by IrE NS, the higher levels of IFID use relative to the L2 norm are suggested to relate to transfer from the L1 (cf. Waga and Schölmberger, 2007; Kondo, 1997; Beckwith and Dewaele, 2008; Osuka, 2017; cf. also House, 1989:311 on IFID use by English/German speakers). Apart from transfer, the constancy in reports of learners' stable IFID use across time and across these studies can also be explained by learners' dependency on routines as islands of security. Ease of IFID decoding means that they represent an efficient way of realising an apology in an explicit manner. Finally, the high and stable use of IFIDs may relate to

instruction given that Limberg (2016), for instance, finds EFL textbooks to focus their teaching of apologies on a small number of IFID forms.

Learners stable and preferred use of the *TUT MIR LEID* IFID, and the overgeneralisation relative to G contrasts with previous research on apology IFIDs which shows a more diversified L2-like realisation of IFIDs over time in the target speech community (cf. Shively and Cohen, 2008:97–98; Shardakova, 2005; cf. also Beckwith and Dewaele, 2008). This lack of diversification of IFID use is reminiscent of the one-to-one principle in early stages of SLA whereby learners employ one form to realise one function. This stage generally precedes the multifunctionality stage, where remappings occur and whereby multiple forms are available to realise one overriding function (cf. Andersen, 1990; Bardovi-Harlig, 2013b:78). In the present case, this deviation is rather suggested to relate firstly to the existence of the highly routinised all-purpose token ('sorry') in the learners' L1 (cf. also House, 1989:322; Sabaté i Dalmau and Curell i Gotor, 2007:298). In addition, there is a mismatch between the EXCUSE ME and SORRY IFIDs in English and the *ENTSCHULDIGUNG/ENTSCHULDIGEN SIE* and *TUT MIR LEID* IFIDs in German, with EXCUSE ME in English only used for minor offences (cf. Leech, 2014:122; cf. also House, 1989:315 on negative transfer in the use of 'excuse me' by German learners of English). Learners may, thus, not even consider use of an *ENTSCHULDIGUNG/ENTSCHULDIGEN SIE* IFID in several situations. Indeed, the form 'excuse me' is only employed in the shop and interview situations in the present IrE data, and here only to a very limited extent (2.43% (5)) in the database as a whole. Added to such reasons is also research which reports of a tendency among learners (also advanced learners) to rely on and also overuse familiar expressions rather than expanding their repertoire (cf. Bardovi-Harlig, 2009, cf. also Osuka, 2017). Such familiar expressions not only represent a strategy of least effort whereby those forms and functions which are highly automated and easily produced are selected, they also serve a "playing-it-safe" strategy in which explicitness and clarity is sure (cf. Faerch and Kasper, 1989:245). Their use, however, consequently also reduces the opportunity to use more target-like expressions.

Low uses of the anglicised form *Sorry* ('sorry') can be explained with reference to beliefs on transferability, and in particular to psycholinguistic markedness (Kellerman, 1983). In other words, it is suggested that learners regard 'sorry' as unique to their L1, English, particularly as this form was not given in these learners' German textbooks. In addition, they may have been unsure of its use, given that this form is socio-pragmatically very different to 'sorry' in English. Its use nearly exclusively in informal situations in G is in contrast to the all-purpose L1 use.

Learners' use of upgraders also yields interesting findings on the level of development. Upgrading via thematic designation (*Das tut mir leid* ('I'm sorry about that')) as extensively used by the German NS did not develop in the learner data over time possibly because of the lack of equivalent in the L1. However, developments were noted in the exclamations and lexical upgrading employed. Learners' range of exclamations employed with *TUT MIR LEID* increased over time. The narrow use of *oh* ('oh') prior to the year abroad was reminiscent of findings by House (1989) and is possibly related to a lack of attention to exclamations in the language classroom and (cf. House, 1989:318). Although the textbook input received by the present learners was not analysed, Limberg (2016:709) in an analysis of textbook representations of apologies notes that interjections are only used occasionally in EFL textbooks despite the fact that apologies are expressive speech acts. Such developments in exclamations represented an L2-like development which corresponds to Taguchi et al.'s (2013:38) description of Category I routines, i.e. those routines showing L2-like convergence towards the target formulae. Convergence may involve simplification of a routine formula via dropping of redundant components or expansion of a previously acquired formula towards a more pragmatically appropriate L2-like use of routines. A similar development in the same category is a slight increase in the diversity of the range of lexical upgraders used over time in the target speech community. Such increases in upgrader type supports research by Shardakova (2005:443–444) who finds American learners of Russian with exposure to use a more L2-like diverse repertoire of upgraders. It is possible that some learners paid attention to upgrader forms in their input given a desire for learner security. The upgrader *echt* ('really') which does not appear until T2 is a point in case. Similarly, the inappropriate use of *ganz* as an upgrader disappears over time. This form is not a collocative of *TUT MIR LEID* in G. Indeed, as Barron (2007:145) notes, this adverb has an upgrading function in some contexts but when left unstressed, it may also serve a downgrading function. Hence, it is possible that the learner met with negative feedback in intending this form to be used as an upgrader but using it in unstressed form. Such experiences may, thus, have led to a decrease in the use of *ganz* as an upgrader.

However, as well as such changes in the forms taken to upgrade *TUT MIR LEID* IFIDs, the data also shows continuous overgeneralisation of *wirklich* relative to the L2 norm (cf. also Shively and Cohen, 2008 on learners' reliance on the adverb *mucho* ('a lot') with IFID use). The continued high employment of *wirklich* might be potentially explained via transfer from the L1. On the other hand, the decreases in the use of the "potential all-purpose" form of *sehr* ('very') over time represent a movement away from the norm despite the fact that use of the equivalent upgrader in the L1, 'very' is just as high as of 'really' (equivalent to *wirklich*). This development of *sehr* represents an instance of non-linear development where an initial NS-like use becomes increasingly non-L2-like (cf. also Waga and Schölmerberger, 2007 on a similar development away from the L1 and L2 norm with the use of *vraiment* ('really') with IFIDs).

Realisations of the *ENTSCHULDIGEN* IFID follow a similar non-linear path, with a decrease in the use of L2-like routines and an increase in the use of learner-specific routines increasing over time (cf. also Barron, 2003a,b). Such increases in learner-specific formulae reveal the priority of meaning over form for many learners. Learner creativity is also present and many of the formulae created fit in Taguchi et al.'s (2013:40) category III: Movement away from L2-formulae toward non-target formulae. This category is characterised by a divergent developmental pattern at the surface level but a parallel increase in the production of L2-like constituent elements making up the target routine. The target formulae include the correct form

of the critical verb *sich entschuldigen* ('to apologise') but used in an overly verbose manner in T2 for the first time (*Ich hoffe, dass Sie mir entschuldigen können* ('I hope that you can excuse me')). Similarly, the form *Sie müssen/Du musst mich entschuldigen* ('you have to excuse me') is another case in point given that it employs core lexis in a syntactically well-formed utterance but in a sociopragmatically inappropriate manner. Here, meaning is prioritised over form. Other learner-specific forms belong to Taguchi et al.'s (2013:40) category IV, stabilised non-target formulae use. This category involves expressions employed in a non-target manner due to inadequate pragmalinguistic and/or sociopragmatic knowledge. The forms *Entschuldigen Sie mich* and the related forms *Entschuldigen Sie/entschuldige mir* belong to this category given their origins in grammatical oversights and L1 transfer of grammatical categories. Such forms increase over time in the *ENTSCULDIGEN* data.

Overall, then the development of learners' apologetic routine competence is complex and, similar to Taguchi et al.'s (2013) analysis, it can be described as non-homogeneous. The present study has shown that the development trajectory of a particular routine in the stay abroad context will depend on the presence/absence of a prior form fulfilling the same function, on the complexity of a particular routine and on its relative equivalence or lack of it with similar routines in the L1. Further factors which influence development include the presence/absence of prior instruction, potential beliefs in language specificity and potential negative feedback on learner-specific realisations.

## 6. Directions for future research

Corpus linguistic methods allowed a comprehensive picture to be drawn of learners' developing routine competence in realising the speech act of apologies over a sojourn abroad. In a bottom-up approach to the data, the quantitative wordlist method highlighted those lexical items of particular relevance in each database and set the focus on routine realisations of explicit apologies. The quantitative keyword analysis drew attention to lexis particular to an individual database and a qualitative fine-grained analysis of collocations shed light on the routine nature of the phrases used. The study revealed the strengths of corpus linguistic procedures in facilitating fine-grained analyses of routine pragmalinguistic speech act realisations at the formal level and in shedding light on the company a particular IFID conventionally keeps. It, thus, enabled an analysis combining both form and function. Further analyses might move to other pragmatic functions and examine conventionalised routine formulations outside of those which realise an explicit apology and conduct further in-depth analyses on learner-specific conventionalised forms via keyword analysis. In addition, the present analysis aggregated all informants' realisations and thus did not leave room for inter-speaker contrasts of either the German NS or learner data. Further supporting qualitative analyses might move towards an analysis of inter-individual development, ideally accompanied with analyses of individual variables (cf., e.g., Kuriscak, 2010).

The present study used corpus linguistic methods with a database of written DCTs. The DCT data offered many advantages for the present analysis. First, DCT data reflects the content of oral data despite the written form and yields the semantic formulas used to realise a particular speech act (cf. Bodman and Eisenstein, 1988; Eisenstein and Bodman, 1993; Beebe and Cummings, 1996; cf. also Félix-Brasdefer and Hasler-Barker, 2017:29). Second, the production questionnaire format offered access to larger quantities of apologies quickly, apologies themselves being difficult to gather ethnographically (cf. Grainger and Harris, 2007:2–3; cf. also Labben, 2016:70). Third, the DCT allowed comparable data to be elicited within a longitudinal research design and also enabled the comparison of data with L1 German and L1 English data in an efficient manner. Fourth, the identification of the elicited speech act – and thus the establishment of illocutionary sameness – was unproblematic thanks to the situational description given and to the possibility given to include a hearer response or dialogue initiation (cf. also Grainger and Harris, 2007:2–3). Fifth, the written form of the DCT and the time informants have for contemplation yield off-line data and thus enabled the researcher to investigate learners' explicit knowledge – or declarative knowledge – of apology pragmatic routines (cf. Bardovi-Harlig, 2013b:73–74). Effects, such as stress as a result of potential fatigue, complex interpersonal relationships or cognitive overload caused by potential difficulties interacting in "on-line" situations thus did not effect the data (cf. Barron, 2003a:83–93, 2006:69–71; cf. Barron, 2007:139). This off-line form meant also that the data represented what learners believe to be pragmatically appropriate apologies rather than what they might actually say in a real-life situation (although apologies themselves are frequently planned even when in spoken form (cf. Labben, 2016:74)) (cf. Barron, 2003a; Golato, 2003). Similarly, the native speaker data represented what counts as appropriate behaviour in a particular situation in a particular culture rather than what NS would actually say in a particular situation (cf. Schneider, 2012:1034, Sweeney and Zhu, 2016).

Nonetheless, there were a number of limitations on the DCT data underlying the present analysis, many of them related to the written mode, to the lack of face-to-face interaction in the DCT context, role enactment and also to the insufficient social and situational information with which informants are provided (cf. Cyluk, 2013). Responses have been generally found to be more direct than in naturally-occurring data (Hartford and Bardovi-Harlig, 1992; Yuan, 2001; Golato, 2003). Also, many features of interactional discourse, such as laughter, pauses, hesitations and repetitions, are lacking (cf. Schauer and Adolphs, 2006:130). Finally, the length of responses has also been questioned. While Eisenstein and Bodman (1993) and Beebe and Cummings (1996) found that DCT responses were shorter than natural data, Golato (2003) found DCT responses to be longer. Billmyer and Varghese (2000) suggested that the length of the situational descriptions may increase the length of DCT responses.

Triangulation with naturally-occurring data in the form of learner corpora represents a possible means of overcoming some of these limitations of DCT data. The number of learner corpora available is continually growing (cf. Université Catholique de Louvain (UCL), cf. also Romero-Trillo, 2018 for an overview), with many corpora still under development.

There are a number of longitudinal corpora of learner data focussing on spoken language use, such as the telecollaborative corpora The Language LINC Corpus (Barron and Black, 2015) and The Telecollaborative Learner Corpus of English and German Telekorp (Belz and Kinginger, 2002), both for English and German, the former consisting of spoken skype interactions, the latter of written chat discourse. However, to date much research in L2 corpus pragmatics deals with contrasts between learner language use and NS language use most frequently focussing on discourse marker uses (cf. Romero-Trillo, 2018). L2 speech act studies are limited (cf. Romero-Trillo, 2018), as are acquisitional studies. Indeed, there are no freely available corpora of spoken study abroad interactions, not to speak of longitudinal data in study abroad. This remains a desideratum.

The focus on the conventionalised routines employed to realise speech acts highlighted areas in which learners have difficulty. The large extent of stability in apology realisations in the analysis underlines the need to dedicate time to pragmatic routines in the foreign language context prior to study abroad. Thus, the specific findings have applications in the development of the particular case of GFL language teaching materials and in the GFL classroom, but the broader findings can be applied to language classes beyond the German context. Previous instructional research into the teaching of pragmatic routines, by House (1996), for instance, in a study focused on teaching conversational routines in English communication courses for advanced learners using an implicit and explicit teaching method reveals that teaching (both methods) does lead to an improvement in learners' use of routines in the L2 (cf. also Bardovi-Harlig and Vellenga, 2012; Bardovi-Harlig et al., 2015; cf. also Bardovi-Harlig, 2012:219; Basturkmen and Nguyen, 2017 for an overview). Romero-Trillo (2002:771) discusses the difficulty of teaching pragmatics in the classroom. He points out that NS acquire the grammatical and semantic rules of language hand in hand with its social use in different contexts and registers. They learn in a function to form manner, with the need to communicate preceding its acquisition. NNS, on the other hand, acquire the L2 in a form-to-function manner given that the form is acquired in the decontextualised context of the classroom. Romero Trillo puts forward the use of corpora in the classroom as a method of bringing context into the classroom (cf. also Romero Trillo, 2018). The database underlying the present study, or indeed corpora of language use, specialised or general purpose, could be put to such use.

## Appendix

Table A.1 Collocates of *mir* ('to me'), *tut* ('does') and *leid* ('sorrow').<sup>a</sup>

Collocates of <i>mir</i> ('to me')			Collocates of <i>tut</i> ('does')			Collocates of <i>leid</i> ('sorrow')		
T1	T2	G	T1	T2	G	T1	T2	G
Tut 13.44094	Es 13.81504	Tut: 10.72028	Mir: 13.44094	Mir: 13.54712	Mir: 10.72028	Tut: 13.40464	Es: 13.96029	Mir: 10.67637
Leid: 13.37224	Tut: 13.54212	Leid: 10.67637	Leid: 13.40464	Leid: 13.49387	Leid: 10.163982	Mir: 13.37224	Mir: 13.50520	Tut: 10.63982
Es: 12.97224	Leid: 13.50520	Ich: 8.84627	Es: 12.59269	Es: 13.33926	Ich: 8.37609	Es: 13.10469	Tut: 13.49387	Ich: 8.38283
Ich: 10.55691	Ich: 11.101180	Das: 7.34784	Ich: 10.34828	Ich: 10.71001	Das: 6.35772	Ich: 10.96442	Ich: 11.07347	Das: 6.74176
Habe: 7.33165	Habe: 8.74185	Es: 6.73747	Habe: 6.95896	Habe: 8.31261	Es: 6.19496	Habe: 7.24558	Habe: 8.94618	Es: 6.66334
Aber: 5.91630	Aber: 6.24056	Oh: 5.92666	Aber: 5.94008	Aber: 6.18318	Oh: 5.38362	Aber: 6.19044	Aber: 6.79710	Oh: 5.10190
Nicht: 5.52303	Wirklich: 5.83423	Aber: 5.38663	Wirklich: 5.09045	Wirklich: 5.67289	Habe: 4.70725	Nicht: 5.47694	Nicht: 6.10351	Habe: 4.91721
Wirklich: 5.07802	Nicht: 5.28745	Habe: 4.83332	Dass: 4.21249	Dass: 4.29333	Aber: 4.44257	Wirklich: 4.89253	Wirklich: 5.67289	Aber: 4.66506
Sie: 4.77304	So: 4.68394	Sie: 4.51511	Sie: 4.01878	So: 4.26098	Sie: 3.77180	Dass: 4.76919	So: 4.70399	Sie: 4.02927
Dass: 4.73806	Sie: 4.52379	Noch: 3.74350	Oh: 3.87430	Oh: 4.03917	dass: 3.11840	Bin: 4.72292	Dass: 4.29333	Nicht: 3.77800
.....	.....	.....	.....	.....	.....	.....	.....	.....
So: 3.92883	Dass: 4.38209	Wirklich: 3.35779	So: 3.40656	Das: 3.27635	Dass: 3.23376	So: 4.07422	Das: 3.83522	Dass: 3.42477
Oh: 3.85891	Oh: 4.02884	So: 307429	Das: 1.60738		Wirklich: 2.90996	Oh: 3.87686	Oh: 3.65009	Hab: 3.23251
Das: 2.08154	Das: 2.76787				So: 2.19584	Das: 2.11989		So: 3.14567
								Wirklich: 3.06714

<sup>a</sup> The table shows the first ten collocates of the terms *mir*, *tut* and *leid*. In addition, it shows comparative figures for those collocates not shared in the top ten across database.

## References

- Adolphs, Svenja, Durow, Valerie, 2004. Social-cultural integration and the development of formulaic sequences. In: Schmitt, N. (Ed.), *Formulaic Sequences: Acquisition, Processing and Use*. John Benjamins, Amsterdam/Philadelphia, pp. 107–126.
- Aijmer, Karin, Rühlemann, Christoph (Eds.), 2015. *Corpus Pragmatics: a Handbook*. Cambridge University Press, Cambridge.
- Alcón Soler, Eva, Sánchez Hernández, Ariadna, 2017. Learning pragmatic routines during study abroad: a focus on proficiency and type of routine. *Atlantis* 39 (2), 191–210.
- Andersen, Roger W., 1990. Models, processes, principles and strategies: second language acquisition inside and outside the classroom. In: VanPatten, B., Lee, J.F. (Eds.), *Second Language Acquisition – Foreign Language Learning*. Multilingual Matters, Clevedon, pp. 45–78.
- AntConc Concordancer. <http://www.laurencethony.net/software.html>. (Accessed 1 September 2017).
- Bardovi-Harlig, Kathleen, 2009. Conventional expressions as a pragmalinguistic resource: recognition and production of conventional expressions in L2 pragmatics. *Lang. Learn.* 59 (4), 755–795.
- Bardovi-Harlig, Kathleen, 2012. Formulas, routines, and conventional expressions in pragmatics research. *Annu. Rev. Appl. Ling.* 32, 206–227.
- Bardovi-Harlig, Kathleen, 2013a. Pragmatic routines. In: Chappelle, Carol A. (Ed.), *The Encyclopedia of Applied Linguistics*, vol. VIII. Pr-Se: Wiley-Blackwell, Malden MA/Oxford/Chichester, pp. 4528–4534.
- Bardovi-Harlig, Kathleen, 2013b. Developing L2 pragmatics. *Lang. Learn.* 63 (1), 68–86.



- Bardovi-Harlig, Kathleen, Bastos, Maria-Therese, 2011. Proficiency, length of stay, and intensity of interaction and the acquisition of conventional expressions in L2 pragmatics. *Intercult. Pragmat.* 8 (3), 347–384.
- Bardovi-Harlig, Kathleen, Mossman, Sabrina, Vellenga, Heidi E., 2015. The effect of instruction on pragmatic routines in academic discussion. *Lang. Teach. Res.* 19 (3), 324–350.
- Bardovi-Harlig, Kathleen, Vellenga, Heidi E., 2012. The effect of instruction on conventional expressions in L2 pragmatics. *System* 40, 77–78.
- Barron, Anne, 2003a. Acquisition in Interlanguage Pragmatics. Learning How to Do Things with Words in a Study Abroad Context. John Benjamins, Amsterdam/Philadelphia.
- Barron, Anne, 2003b. 'Nein, ich brauche keine Hilfe': Zum Erwerb pragmatischer Routinen während eines Auslandsaufenthalts. In: Eckerth, J. (Ed.), *Empirische Arbeiten aus der Fremdspracherwerbsforschung*. AKS-Verlag, Bochum, pp. 203–238. Beiträge des Hamburger Promovierendenkolloquiums Sprachlehrforschung.
- Barron, Anne, 2006. Learning to say 'you' in German: the acquisition of sociolinguistic competence in a study abroad context. In: DuFon, M.A., Churchill, E. (Eds.), *Language Learners in Study Abroad Contexts*. Multilingual Matters, Clevedon, pp. 59–88.
- Barron, Anne, 2007. "Ah no honestly we're okay": learning to upgrade in a study abroad context. *Intercult. Pragmat.* 4 (2), 129–166.
- Barron, Anne, Black, Emily, 2015. Constructing small talk in learner-native speaker voice-based telecollaboration: a focus on topic management and backchanneling. *System* 48, 112–128.
- Barron, Anne, 2019. Pragmatic development and Stay Abroad. *J. Pragmat.* 146, 43–53.
- Basturkmen, Helen, Nguyen, Thi Thuy Minh, 2017. Teaching pragmatics. In: Barron, A., Gu, Y., Steen, G. (Eds.), *The Routledge Handbook of Pragmatics*. Routledge, London/NY, pp. 563–574.
- Beckwith, Seonaid, Dewaele, Jean-Marc, 2008. The development of apologies in the Japanese L2 of adult English native speakers. *Birkbeck Stud. Appl. Linguist. (BISAL)* 1–26.
- Beebe, Leslie M., Cummings, Martha Clark, 1996. Natural speech act data versus written questionnaire data: how data collection method affects speech act performance. In: Gass, S.M., Neu, J. (Eds.), *Speech Acts Across Cultures: Challenges to Communication in a Second Language*. Mouton de Gruyter, Berlin, pp. 65–86.
- Belz, Julie A., Kinginger, Celeste, 2002. The cross-linguistic development of address form use in telecollaborative language learning: two case studies. *Can. Modern Lang. Rev. (La revue canadienne langues vivantes)* 59 (2), 189–214.
- Bergman, Marc L., Kasper, Gabriele, 1993. Perception and performance in native and nonnative apology. In: Kasper, G., Blum-Kulka, S. (Eds.), *Interlanguage Pragmatics*. Oxford University Press, New York, pp. 82–107.
- Billmyer, Kristine, Varghese, Manka, 2000. Investigating instrument-based pragmatic variability: effects of enhancing discourse completion tests. *Appl. Linguist.* 21 (4), 517–552.
- Blum-Kulka, Shoshana, House, Juliane, Kasper, Gabriele (Eds.), 1989a. *Cross-Cultural Pragmatics: Requests and Apologies*. Ablex, Norwood, NJ.
- Blum-Kulka, Shoshana, House, Juliane, Kasper, Gabriele, 1989b. The CCSARP coding manual. In: Blum-Kulka, S., House, J., Kasper, G. (Eds.), *Cross-Cultural Pragmatics: Requests and Apologies*. Ablex, Norwood, NJ, pp. 273–294.
- Bodman, Jean, Eisenstein, Miriam, 1988. May God increase your bounty: the expression of gratitude in English by native and non-native speakers. *Cross Currents* 15 (1), 1–21.
- Callies, Marcus, 2013. Advancing the research agenda of interlanguage pragmatics: the role of learner corpora. In: Romero-Trillo, J. (Ed.), *Yearbook of Corpus Linguistics and Pragmatics 2013: New Domains and Methodologies*. Springer, Heidelberg/New York/London, pp. 9–36.
- Coulmas, Florian, 1981. Introduction: conversational routine. In: Coulmas, F. (Ed.), *Conversational Routine*. De Gruyter Mouton, The Hague, Netherlands, pp. 1–17.
- Cyluk, Agnieszka, 2013. Discourse completion task: its validity and reliability in research projects on speech acts. *Anglica* 22 (2), 101–112.
- Davis, John McE., 2007. Resistance to L2 pragmatics in the Australian ESL context. *Lang. Learn.* 57 (4), 611–649.
- Edmonds, Amanda, 2014. Conventional expressions. Investigating pragmatics and processing. *Stud. Sec. Lang. Acquis.* 36, 69–99.
- Eisenstein, Miriam, Bodman, Jean, 1993. Expressing gratitude in American English. In: Kasper, G., Blum-Kulka, S. (Eds.), *Interlanguage Pragmatics*. Oxford University Press, NY, pp. 64–81.
- Faerch, Claus, Kasper, Gabriele, 1989. Internal and external modification in interlanguage request realization. In: Blum-Kulka, S., House, J., Kasper, G. (Eds.), *Cross-cultural Pragmatics: Requests and*. Ablex, Norwood NJ, pp. 221–247.
- Félix-Brasdefer, J. César, Hasler-Barker, Maria, 2017. Elicited data. In: Barron, A., Guo, Y., Steen, G. (Eds.), *The Routledge Handbook of Pragmatics*. Routledge, London/New York, pp. 27–40.
- Golato, Andrea, 2003. Studying compliment responses: a comparison of DCTs and recordings of naturally occurring talk. *Appl. Linguist.* 24 (1), 90–121.
- Grainger, Karen, Harris, Sandra, 2007. Special issue: apologies: introduction. *J. Politeness Res.* 3 (1), 1–9.
- Hartford, Beverly S., Bardovi-Harlig, Kathleen, 1992. Experimental and observational data in the study of interlanguage pragmatics. In: Bouton, L., Kachru, Y. (Eds.), *Pragmatics and Language Learning*. University of Illinois at Urbana-Champaign, Division of English as an International Language, Urbana, IL, pp. 33–52.
- Hoffman-Hicks, Sheila D., 1999. The Longitudinal Development of French Foreign Language Pragmatic Competence: Evidence from Study Abroad Participants (Unpublished Ph.D. dissertation). Indiana University, Bloomington.
- House, Juliane, 1989. 'Oh excuse me please ...': apologizing in a foreign language. In: Bierbaumer, P., Fill, A., Karpf, A., Kettemann, B. (Eds.), *Englisch als Zweitsprache*. Narr, Tübingen, pp. 303–327.
- House, Juliane, 1996. Developing pragmatic fluency in English as a foreign language: routines and metapragmatic awareness. *Stud. Sec. Lang. Acquis.* 18 (2), 225–252.
- Jucker, Andreas H., 2009. Speech act research between armchair, field and laboratory: the case of compliments. *J. Pragmat.* 41 (8), 1611–1635.
- Kecskes, Istvan, 2000. Conceptual fluency and the use of situation-bound utterances in L2. *Links Lett.* 7, 145–161.
- Kellerman, Eric, 1983. Now you see it, now you don't. In: Gass, S.M., Selinker, L. (Eds.), *Language Transfer in Language Learning*. Newbury House, Rowley MA, pp. 112–134.
- Kondo, Sachiko, 1997. The development of pragmatic competence by Japanese learners of English: longitudinal study of interlanguage apologies. *Sophia Linguist.* 41, 265–284.
- Kuriscak, L., 2010. The effect of individual-level variables on speech act performance. In: Martínez-Flor, A., Usó-Juan, E. (Eds.), *Speech Act Performance: Theoretical, Empirical and Methodological Issues*. John Benjamins, Amsterdam, pp. 23–39.
- Labben, Afef, 2016. Reconsidering the development of the discourse completion test in interlanguage pragmatics. *Pragmatics* 26 (1), 69–91.
- Leech, Geoffrey, 2014. *The Pragmatics of Politeness*. Oxford University Press, Oxford.
- Limberg, Holger, 2016. Teaching how to apologize: EFL textbooks and pragmatic input. *Lang. Teach. Res.* 20 (6), 700–718.
- Marriott, Helen, 1995. The acquisition of politeness patterns by exchange students in Japan. In: Freed, B.F. (Ed.), *Second Language Acquisition in a Study Abroad Context*. John Benjamins, Amsterdam, pp. 197–224.
- Osuka, Naoko, 2017. Development of pragmatic routines by Japanese learners in a study abroad context. In: Kecskes, I., Assimakopoulos, S. (Eds.), *Current Issues in Intercultural Pragmatics*. John Benjamins, Amsterdam/New York, pp. 275–296.
- Reiter, Rosina M., Rainey, Isobel, Fulcher, Glenn, 2005. A comparative study of certainty and conventional indirectness: evidence from British English and Peninsular Spanish. *Appl. Linguist.* 26 (1), 1–31.
- Roever, Carsten, 2011. What learners get for free: learning of routine formulae in ESL and EFL environments. *ELT J.* 4 (8), 1–12.
- Romero Trillo, Jesús, 2002. The pragmatic fossilization of discourse markers in non-native speakers of English. *J. Pragmat.* 34, 769–784.
- Romero-Trillo, Jesús, 2018. Corpus pragmatics and second language pragmatics: a mutualistic entente in theory and practice. *Corpus Pragmat.* 2, 113–127.
- Sabaté i Dalmau, Maria, Curell i Gotor, Hortènsia, 2007. From "sorry very much" to "I'm ever so sorry:" acquisitional patterns in L2 apologies by Catalan learners of English. *Intercult. Pragmat.* 4 (2), 287–315.

- Sánchez Hernández, Ariadna, 2017. Acculturation and Acquisition of Pragmatic Routines in the Study Abroad Context (Unpublished Ph.D. thesis submitted to the Universitat Jaume I: Castellón de la Plana).
- Schauer, Gila A., Adolphs, Svenja, 2006. Expressions of gratitude in corpus and DCT data: vocabulary, formulaic sequences, and pedagogy. *System* 34, 119–134.
- Schmidt, Richard, 1993. Consciousness, learning, and interlanguage pragmatics. In: Blum-Kulka, S., Kasper, G. (Eds.), *Interlanguage Pragmatics*. Oxford University Press, Oxford, pp. 21–42.
- Schneider, Klaus P., 2012. Appropriate behavior across varieties of English. *J. Pragmat.* 44 (9), 1022–1037.
- Searle, John R., 1976. A classification of illocutionary acts. *Lang. Soc.* 5 (1), 1–23.
- Sell, Friederike, Renkwitz, Katrin, Sickinger, Pawel, Schneider, Klaus P., 2019. Measuring pragmatic competence on the functional and lexical level: The development of German high-school students' requests during a stay abroad in Canada. *J. Pragmat.* 146, 106–120.
- Shardakova, Maria, 2005. Intercultural pragmatics in the speech of American L2 learners of Russian: apologies offered by Americans in Russian. *Intercult. Pragmat.* 2 (4), 423–451.
- Shively, Rachel L., Cohen, Andrew D., 2008. Development of Spanish requests and apologies during study abroad. *Ákala Rev. Leng. Cult. (J. Lang. Cult.)* 13 (20), 57–118.
- Sweeney, Emma, Zhu, Hua, 2016. Discourse completion tasks. In: Hua, Z. (Ed.), *Research Methods in Intercultural Communication: a Practical Guide*. Wiley Blackwell, Hoboken, N.J.
- Taguchi, Naoko, 2013. Production of routines in L2 English: effect of proficiency and study-abroad experience. *System* 41, 109–121.
- Taguchi, Naoko, Li, Shuai, Xiao, Feng, 2013. Production of formulaic expressions in L2 Chinese: a developmental investigation in a study abroad context. *Chin. Sec Lang. Res.* 2 (1), 23–58.
- Tajeddin, Zia, Alemi, Minoo, Pashmforoosh, Roya, 2017. Acquisition of pragmatic routines by learners of L2 English: investigating common errors and sources of pragmatic fossilization. *Electron. J. Eng. Sec. Lang.* 21 (2), 1–21.
- Université Catholique de Louvain (UCL). Learner Corpora around the World. <https://uclouvain.be/en/research-institutes/ilc/cecl/learner-corpora-around-the-world.html>. (Accessed 21 September 2017).
- Vollmer, Helmut J., Olshtain, Elite, 1989. The language of apologies in German. In: Blum-Kulka, S., House, J., Kasper, G. (Eds.), *Cross-Cultural Pragmatics. Requests and Apologies*. Ablex, Norwood NJ, pp. 197–218.
- Warga, Muriel, Schölmlberger, Ursula, 2007. The acquisition of French apologetic behaviour in a study abroad context. *Intercult. Pragmat.* 4 (2), 221–251.
- Yuan, Yi, 2001. An inquiry into empirical pragmatics data-gathering methods: written DCTs, oral DCTs, field notes, and natural conversations. *J. Pragmat.* 33, 271–292.

**Anne Barron** is Professor of English Linguistics at the Leuphana University of Lüneburg, Germany. Her research focuses on interlanguage pragmatics, variational pragmatics, the pragmatics of Irish English, and contrastive genre analysis. Most important publications include *Acquisition in Interlanguage Pragmatics* (Benjamins, 2003), *Public Information Messages* (Benjamins, 2012), the co-edited volumes *The Pragmatics of Irish English* (Mouton de Gruyter, 2005) and *Variational Pragmatics* (Benjamins, 2008) and the co-edited handbooks *Pragmatics of Discourse* (De Gruyter, 2014) and *The Routledge Handbook of Pragmatics* (Routledge, 2017). She has also edited/co-edited Special Issues on L2 pragmatic development (*Intercultural Pragmatics* 2007) and on variational pragmatics (*Multilingua* 2015 and *Intercultural Pragmatics* 2009).