“The message is clear”: An L1 business perspective on non-target-like formulaic expressions in L2 German

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Abstract

This study examines how non-target-like formulaic expressions used by advanced second language (L2) speakers of German are perceived by first language (L1) German business professionals in an intercultural workplace setting. By using an experimental design, we explore how L1 business professionals ($N = 84$) perceive the appropriateness and acceptability of the non-target-like expressions as well as how they perceive the communicative competence of the writer in two conditions: one in which the writer is explicitly described as an L2 user of German (intercultural condition), and one in which the writer is not (German condition). Moreover, by first establishing recurrent unconventionalities when L2 users create their own formulaic expressions (i.e., misspellings, grammatical errors, pragmalinguistic and sociopragmatic infelicities), we examine the effect of the type of unconventionality. Our experimental stimuli are based on authentic student responses to situations in an intercultural workplace setting which were elicited through a written discourse completion task. Our results indicate that in both conditions expressions containing a grammatical error are judged as least acceptable, followed by those with a pragmatic infelicity. Ratings were significantly higher in the intercultural condition, suggesting tolerance of the L1 professionals towards non-target-like expressions of L2 users.

Keywords: formulaic expressions, intercultural workplace communication, judgment task, German

1. Introduction

Research on formulaic language has received growing interest in the past few decades. Scholars generally agree that formulaic expressions (e.g., *I'm sorry I'm late, It's been a pleasure meeting you*, *Thank you for inviting me)* are indispensable in L1 and L2 acquisition and use (Wray 2002). At the same time, they have been found difficult for even very advanced L2 learners to master perfectly, especially in language production (e.g., Bardovi-Harlig 2009; Boers and Lindstromberg 2012; Schmitt 2004). It has been shown that even very advanced L2 learners produce expressions that sound odd or unnatural to L1 speakers, which might be caused by inadequate knowledge of L2 phraseology or interlanguage transfer (e.g., Barron 2003; Kecskes 2007). Particularly in the case of expressions which can be produced formulaically in variants (e.g., *Do you have the time?*, *Can you tell me what the time is?*), there is room for inappropriate use and errors (Taguchi 2013; Taguchi and Roever 2017). Moreover, it has been suggested that learners creatively build their own non-target-like formulaic expressions (e.g., *I'm sorry for late)* reflecting their interlanguage competence (e.g., Bardovi-Harlig 2009; Bardovi-Harlig and Stringer 2017; Kecskes 2007).

Against this background, it is not surprising that in intercultural workplace settings, second (L2) or third language (L3) users – even the ones formally trained as language professionals – use expressions that do not always reflect the norms of the target speech community. In the case of English, the most widely used lingua franca in the world, non-target-like communication has shown not to be necessarily problematic (Kecskes 2007). Research on English as a Lingua Franca (ELF) and on Business

English as a Lingua Franca (BELF) indicate that target-like competence is not considered a prerequisite for successful interactions, since getting the message across is valued over language proficiency (House 2002; Kankaanranta et al. 2018; Kecskes 2007; Kecskes and Kirner-Ludwig 2019). However, ELF, used between people of different languages and cultures, can be considered rather "a language use mode" than a language or even a variety of language (Kecskes 2007: 214). Thus, the question arises whether the same findings from (B)ELF research apply to communication between L1 speakers and L2 users of a language other than English with linguistic rules and norms that are usually followed. A focus on German, for instance, may prove highly interesting here, since German is an important language in global business and trade (Byrnes 2012). Although it has been suggested that linguistic imperfections tend to be acceptable in L2 written business communication in German (Decock et al. 2020), more evidence is needed to confirm this suggestion.

Additionally, regarding the production of formulaic expressions, Second Language Acquisition (SLA) and L2 pragmatics research has typically focused on judging L2 production of formulaic expressions from an L1 native teacher's perspective and/or comparing L2 production of formulaic expressions with the target-like norms (see, for reviews, Boers and Lindstromberg 2012; Bardovi-Harlig 2012). Surprisingly, how non-target-like formulaic expressions are perceived by L1 professionals has, to the best of our knowledge, not yet been tested empirically.

In this study, we adopt an experimental design to explore how L1 business professionals perceive non-target-like formulaic expressions in terms of appropriateness, acceptability, and writer's communicative competence. We also examine whether the participating L1 professionals are more tolerant when they know that the expressions were written by L2 users. Moreover, after having established four

recurrent types of unconventionality (i.e., misspellings, grammatical errors, pragmalinguistic and sociopragmatic infelicities)[1] when L2 users create their own formulaic expressions, we examine if L1 business professionals perceive these unconventionalities differently in terms of appropriateness, acceptability and writer's communicative competence. In doing so, we aim to contribute to the investigation of formulaic expressions in interlanguage pragmatics from an L1 workplace perspective.

2. Literature review

2.1. Formulaic language in SLA and L2 pragmatics

Formulaic language units, also often called formulaic sequences (Schmitt 2004) or chunks (Ellis 2002) is a term which covers a wide range of multi-word units, including collocations, phrasal verbs, discourse markers, situation-bound utterances, and idioms (e.g., Kecskes 2000; Wray 2002). These units have conventionalized meanings which are used by the members of a speech community in certain situations. Because each type of multi-word unit has a functional aspect that is different in nature, Kecskes (2003) uses the hypothesis of a *formulaic continuum* with grammatical units (e.g., *be going to*) on the left, fixed sematic units (e.g., *as a matter of fact*), phrasal verbs (e.g., *put up with*), speech formulas (e.g., *not bad*) in the middle, and pragmatic expressions (e.g., situation-bound utterances: *welcome aboard*) and idioms (e.g., *kick the bucket*) on the right. On the far right of the continuum, where idioms can be found, the gap between compositional meaning and actual situational meaning is the widest.

In this paper, we will focus on the broad category of formulaic pragmatic

[1] In this paper it is not the aim to adopt a normative or evaluative approach to L2 production, but to explore how non-target-like L2 production, as observed in a corpus of L2 production data, is perceived by L1 business professionals. For ease of reading, we will refer to the deviations from the target-like norm with the terms 'unconventionality/unconventionalities'.

expressions, which have been discussed under a variety of labels, including formulas (Coulmas 1981), conventional expressions (Bardovi-Harlig 2009) and situation-bound utterances (Kecskes 2000). Although a wide array of labels and definitions have been used, most definitions of formulaic expressions in pragmatics share that they "include components of recurrent sequences, social contract, and importance of context" (Bardovi-Harlig 2012: 208). Based on relevant characteristics outlined in the literature, formulaic expressions (also in this study) are (1) multi-word units of at least two morphemes; (2) fixed strings of language that may have slots to allow flexibility in use; (3) phonologically coherent, (4) situationally dependent; and (5) community-wide in use (e.g., Bardovi-Harlig 2012).

The importance of L1 and L2 formulaic expressions has been recognized for some time in the applied linguistics literature (e.g., Kecskes 2000; Wray 2002). Formulaic expressions are important not only because of their pervasiveness in spoken and written discourse (e.g., Erman and Warren 2000), but also because they are indispensable to a fluent and idiomatic command of the language (e.g., Pawley and Syder 1983). They are not only said to hold a processing advantage over creatively generated language (e.g., Conklin and Schmitt 2012), but are also fundamental to successful participation in a linguistic community. According to Coulmas, formulas are "tacit agreements, which the members of a community presume to be shared by every reasonable co-member. In embodying societal knowledge they are essential in the handling of day-to-day situations" (Coulmas 1981: 4).

2.2. Formulaic expressions as a challenge for L2 learners

It has been shown that formulaic expressions are helpful for L2 learners and users, as they are safe phrases or 'islands of reliability' (Dechert 1980). However, researchers generally agree that only very advanced learners come close to target-like formulaic

knowledge and that highly advanced L2 learners with good receptive skills may still experience difficulties in using these units in target-like ways due to limited classroom time or limited exposure during the acquisition process (Bardovi-Harlig 2012; Boers and Lindstromberg 2012; Gries and Ellis 2015).

When it comes to the processing of formulaic sequences, an often cited definition of Wray implies that there is a processing advantage for these sequences, which are "stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar" (Wray 2002: 9). However, Kecskes (2007) suggests that formulaic expressions might not benefit L2 processing in the same way they benefit L1 processing, because L2 speakers are generally unaware of "how flexible the formulas are linguistically, i.e., what structural changes they allow without losing their original function and/or meaning." (Kecskes 2007: 12). Kecskes (2007) suggests that L2 speakers may create their own formulaic expressions if the need arises, resulting in non-target-like expressions. Examples are: *It is almost skips from my thoughts* or *We connect each other very often* (Kecskes 2007: 11).

A number of studies, most of them with a focus on L2 English, have discussed interlanguage forms of formulaic expressions produced by students in relatively advanced stages of learning. Some earlier studies suggest that the source of difficulty to produce formulaic expressions in a target-like way lies in L2 learners' pragmalinguistic and/or sociopragmatic knowledge (e.g., Eisenstein and Bodman 1986; Kasper and Blum-Kulka 1993; Scarcella 1979). According to Leech (1983), pragmalinguistic knowledge is language-specific and is about "the particular resources which a given language provides for conveying particular illocutions" (Leech 1983: 11), while sociopragmatic knowledge is culture-specific and encompasses the knowledge of

contextual and social variables that affect the appropriateness of the choice of a pragmalinguistic strategy. A lack of knowledge of either or both of these may lead to cross-cultural pragmatic failure (Thomas 1983). Pragmalinguistic failure may arise from interlanguage-specific errors or from an inappropriate pragmatic transfer, while sociopragmatic failure may result from a lack of awareness of the socio-cultural norms in a particular society (Barron 2003). An example of pragmalinguistic failure given by Thomas (1983) is the unfortunate overgeneralization of the English expression *to be to* (*you are to be here by eight*) instead of other possible ways of expression obligation (*must, ought, should, have to*, etc.). Another example of non-target-like use on a pragmalinguistic level is *I'm apologized* instead of *I apologize* (Sabaté i Dalmau and Currel i Gotor 2007). Examples of sociopragmatic failure include choosing the informal term of address *du* in German where the formal term *Sie* would be appropriate (e.g., Norris 2001), or addressing an unknown person in Germany by their first name (*Dieter*) instead of their surname (*Herr Müller*) (Luijkx et al. 2020). More recent studies also point out that even advanced learners' performance of formulaic expressions remain below the norms of the target speech community on a pragmalinguistic and/or sociopragmatic level because of inadequate language skills or sociocultural knowledge, such as in the case of requests (e.g., Taguchi 2006), complaints (e.g., Usó-Juan and Martínez-Flor 2015), refusals (e.g., Bella 2014) and apologies (e.g., Sabaté i Dalmau and Currel i Gotor 2007).

In addition to these findings, there is evidence in broader formulaic language research that non-target-like formulaic expressions produced by advanced learners originate from that learner's incomplete command of L2 grammar. Osborne (2008) reports on examples of grammatical errors in learner productions of formulaic sequences (e.g., pluralized adjectives and mass nouns, third person *-s* and adverb

placement) taken from written samples by L2 English university students. More recently, findings from Bardovi-Harlig and Stringer (2017) suggest that syntactic processing occurs during learners' production of conventional expressions, and that appropriate production depends on students' syntactic development, reflecting their interlanguage grammar. Finally, some studies on L2 learners' collocational knowledge (e.g., Peters 2016; Schmitt 1998) have included findings on misspellings (e.g., orthographic or typographical errors), but these have been disregarded in most analyses since those studies had not aimed to measure L2 learners' spelling ability.

What stands out in the studies on L2 formulaic language, besides the reality of German being an underrepresented language, is that the mainstream practice has been to compare L2 performance to L1 performance as the norm, and to use judgment tasks with L1 (teacher) ratings to assess those learners' performance (e.g., Bardovi-Harlig and Dörnyei 1998; Schauer 2006). Although this approach has undoubtedly advanced our knowledge of learners' L2 development, the perspective of L1 business professionals has been neglected so far. However, it is exactly this perspective that could help us to evaluate whether students' L2 language skills are strong enough to effectively respond to the needs of the international job market.

2.3. Non-target-like L2 language use in professional contexts

Pragmatic infelicities, grammar or spelling issues have also been recognized in studies into L2 language use in professional contexts (e.g., Biesenbach-Lucas 2007; Chen 2006; Decock et al. 2020; Economidou-Kogetsidis 2011, 2021; Luijkx et al. 2020; Schauer 2021; Wolfe et al. 2016). Biesenbach-Lucas' (2007) and Economidou-Kogetsidis' (2011, 2021) studies investigated students' email requests to faculty and found that these emails could be perceived as pragmatically unacceptable due to directness, absence of lexical/phrasal downgraders, and inappropriate forms of address. Similarly, a

longitudinal case study by Chen (2006), in which the development of an advanced L2 learner's email literacy was tracked, showed that the learner struggled with writing appropriate emails to authority figures due to a lack of pragmatic knowledge. Also, in a recent study of Schauer (2021), it was observed that German students of English as a Foreign Language (EFL) had problems with selecting the appropriate term of address in email communication. In sum, these studies demonstrate that interactions in a professional context pose a challenge for L2 learners/users not only because of a potential lack of specific L2 language skills but also because of their inexperience with the norms and values of the target language culture.

The perspective of L1 business professionals on L2 language use, so far scarce in SLA or L2 pragmatic research, has been empirically examined in studies on business communication. Specifically, a number of studies have investigated how L2 errors in written business communication genres are perceived by members of the target community. Decock et al. (2020), for example, found that both an idiomatic email response to a complaint without language errors and an email with grammatical and lexical errors and less idiomatic language were evaluated positively by German-speaking customers, on average, and found no significant difference between customer perception of the two emails. As the less idiomatic email with errors was meant to replicate an intercultural setting in which company employees are L2 users, this finding suggests that the participating L1 customers might have been tolerant toward inaccurate language produced by L2 users. However, less clear-cut results were obtained by Luijkx et al. (2020), who investigated the effect of L2 errors in German business letters. Regarding text attractiveness, writer's trustworthiness and intelligence, and the organization's trustworthiness and professionalism, they found that letters without errors were rated significantly higher by L1 German professionals than letters with

errors. Regarding text comprehensibility, writer's friendliness, and aim of the letter, they found no significant difference between the letters with and without errors. In addition, Luijkx et al. (2020) investigated the effect of different L2 error types and found that morphological, syntactic, and lexical errors affected the reader's attitude less negatively than pragmatic errors. Wolfe et al. (2016) asked businesspeople to comment on three different versions of an email in English containing (a) grammatical errors typical of an L2 speaker, (b) grammatical errors typical of an L1 speaker, and (c) pragmatic errors (politeness issues). They found that businesspeople were most tolerant towards the L2 writer's grammatically error-laden email and that the impolite email was perceived as the most bothersome. Although these studies give interesting insights on the perception of L1 business professionals of L2 errors, we still do not know how non-target-like formulaic expressions of L2 users are perceived by L1 business professionals.

2.4. Research questions and hypotheses

This study is informed by 1) research on formulaic language in interlanguage pragmatics (e.g., Bardovi-Harlig 2009; Bardovi-Harlig and Stringer 2017; Kecskes 2000, 2003) and 2) findings on non-target-like L2 language use in professional contexts (e.g., Biesenbach-Lucas 2007; Economidou-Kogetsidis 2011, 2021; Luijkx et al. 2020). Because we know that people belonging to a particular speech community have preferred ways of saying things (e.g., Wray 2002) and that L2 formulaic language is often creatively built and non-target like (e.g., Bardovi-Harlig and Stringer 2017; Kecskes 2007), this study will investigate how non-target-like formulaic expressions in German are perceived. By using an experimental design, we examine L1 business professionals' perception of non-target-like expressions in two conditions: a German versus an intercultural condition. Additionally, we will examine L1 professionals'

perception of different types of unconventionality both quantitatively and qualitatively. We believe that a thorough understanding of L1 professionals' perspective on a non-target-like production of formulaic expressions can help develop classroom approaches to the teaching of formulaic expressions and prepare language students for the job market.

The research questions are:

(1) How do L1 professionals rate the acceptability and appropriateness of non-target-like formulaic expressions, as well as a writer's communicative competence in a German workplace setting and in an intercultural workplace setting?

(2) Which kind of deviation (i.e., a pragmalinguistic infelicity, a sociopragmatic infelicity, a grammatical error or a misspelling) affects these L1 ratings? In other words, which types of unconventionality are met with the most and least tolerance?

First, building on other perception studies (e.g., Taguchi 2006; Economidou-Kogetsidis 2011, 2021), we anticipated that a non-target-like formulaic expression would affect the ratings negatively in both experimental conditions (H1a). However, considering the fact that getting the message across is more important than target-like language use in ELF and BELF discourse (Kankaanranta et al. 2018; Kecskes and Kirner-Ludwig 2019) and the fact that there seems to be some tolerance towards L2 users in business communication (Decock et al. 2020; Wolfe et al. 2016), we expected the participating L1 professionals not to judge the non-target-like expressions too severely, especially not in the intercultural condition (H1b). Second, in accordance with the findings of Luijkx et al. (2020) and Wolfe et al. (2016), we expected that a sociopragmatic infelicity in an

expression would be judged as most bothersome, followed by a pragmalinguistic infelicity, a grammatical error and a misspelling (H2).

3. Method

In order to test our hypotheses, we designed a questionnaire in which we asked a group of L1 German professionals ($N = 84$) to rate a number of non-target-like formulaic expressions and to complete an obligatory open-ended response to justify their ratings. In preparation for our main study, we undertook field observations and conducted a written discourse completion task (DCT).

3.1. Preparation for the main study: field observations and DCT

First, we were granted access to and read about 200 email interactions from the sales team of a Belgian multinational company. Based on this email corpus, we selected 20 situations that (1) were frequently observed in the corpus and (2) would saliently feature the use of formulaic expressions and could thus be assumed to elicit such production. These 20 situations, all taking place within a workplace context, were used to create a written DCT (see Appendix A). The goals of the DCT were to (1) identify formulaic expressions that are shared by the members of the German speech community, (2) collect production data from L2 students, and (3) identify types of unconventionality in this L2 production data. In the DCT, participants were instructed to read a scenario description, imagine how they would respond to that particular scenario, and then write their response in German. The scenario descriptions were written in Dutch in order to prevent participants from picking up and reusing any words that appeared in the description.

First, to identify the formulaic expressions that members of the German-speaking community commonly use in each particular situation, we recruited 16 L1 speakers of German (11 female, 5 male) through personal networks to complete the

DCT. They were drawn from a variety of fields including science, engineering, and business, had good receptive language skills in Dutch, and ranged from 21 to 67 years old, with a mean age of 39.8 (SD = 14.81; median = 41). The responses of the L1 speakers on the DCT were analysed manually, and frequently recurring units were identified. If an expression was given by at least 50 percent of the L1 speakers, it was considered to be a formulaic expression for the purposes of this study (see, e.g., Bardovi-Harlig 2009; Culpeper 2010). This 50 percent cut-off was met or exceeded in 12 of the 20 situations, so these situations were included. In eight cases, the target cut-off was not met. However, based on our field observations, we agreed to include three of these situations in the questionnaire still because those situations were found to frequently recur in workplace interactions (i.e., apology for a late response, potential to ask further questions, and subscription to a newsletter) and would saliently feature the use of formulaic expressions.

Then, the DCT was administered to 54 L1 Dutch-speaking Belgian students (43 female, 11 male), ranging in age from 19 to 32 (mean = 21.4, SD = 1.75, median = 21), who had obtained a bachelor degree in German and another foreign language (e.g., French, Spanish, English) and were studying in a one-year languages master's program majoring in German. This program aims to prepare students to communicate effectively in multilingual and intercultural workplace settings, and all students had reached, at minimum, the Common European Framework of Reference (CEFR) level of C1 in German (Council of Europe, 2001). These participants' answers to the DCT were also analysed manually to find any patterns of deviation from the formulaic expressions given by the L1 speakers. Four different types of deviations, also found in the literature on L2 language use, were identified, i.e., misspellings (both typographical and

orthographic errors), grammatical errors, sociopragmatic and pragmalinguistic infelicities. They served to generate the stimuli for the experimental study.

3.2. Experimental study (main study)

3.2.1. Stimuli

In the experimental study, each of the 15 formulaic expressions identified in our preparatory study was used as a baseline stimulus and then manipulated by introducing a type of deviation from the target-like norms, as shown in Table 1. Note that C is the target-like formulaic expression, as identified by L1 German speakers in the DCT.

[Insert Table 1]

In order to examine the influence of a specific type of unconventionality, we ensured that the formulaic expression did not contain any types of unconventionality other than targets A, B, D or E. Additionally, all deviations from the target-like expression used were based on the original L2 learners' responses found in the DCT dataset. We allocated the 15 formulaic expressions and five different representations of each expression (i.e., the four deviations and the target-like expression coded as A, B, C, D, E) according to a Latin square design (Table 2).

[Insert Table 2]

To examine whether L1 speakers were more tolerant of non-target-like expressions produced by L2 users in an intercultural workplace setting, we created two conditions in the experiment. In one condition (i.e., German condition), participants were asked to imagine themselves in a German workplace setting and were told that the writer of the expression (as part of an email) was living in Germany. Note that the author of the message could be either an L1 or an L2 German speaker in this condition;

we did not specify that this person was an L1 speaker because this could have rendered some of our stimuli unrealistic, particularly the expressions featuring grammatical errors or pragmalinguistic infelicities. In the other condition (i.e., intercultural condition), it was explicitly stated that the situations took place in an intercultural workplace setting and that the writer was a Flemish Belgian with Dutch as their L1.

3.2.2. Pilot study

To pilot the instrument, a group of 30 participants (11 female, 19 male) was recruited via Prolific, a platform for finding survey participants on demand. The aim of the pilot was to check the following issues: 1) the clarity of the situation descriptions and instructions of the judgement task, 2) the extent to which L1 speakers find the situations realistic in a workplace setting, and 3) the perception of the severity of errors.

The (pilot) questionnaire was designed using Qualtrics and was presented on the Prolific platform. In the introduction, participants were told that the experimental study consisted of an approximately 20-minute online questionnaire. They were then informed that they would be presented with 15 short descriptions of specific situations in a business context (either German or intercultural) and an excerpt from an email corresponding to that situation. For example:

> *Christina Schmidt works for a German company and has an important evaluation meeting with her boss tomorrow. A colleague (with the same corporate rank and same age as Christina, who has known Christina for years and with whom she also meets outside of work) sends her an email, in which she writes (among other things): "**Good luck with the interview!**"*

Participants were asked to read each situation description and the given expression carefully. Then, for each expression presented, participants were requested to rate the expression, taking into account the context in which it was phrased, and spontaneously

mark one of the 7 dots between the two extreme options of "not at all acceptable/appropriate/competent" on the left side of the scale and "very acceptable/appropriate/competent" on the right, building on previous rating scales used for pragmatic acceptability and appropriateness judgments (e.g., Bardovi-Harlig and Dörnyei 1998; Taguchi 2006). The same 7-point scale was used to rate writer's communicative competence. Since we wanted that our ratings were based on what L1 professionals understand to be acceptable/appropriate/competent, we did not give an explicit definition of acceptability/appropriateness/competence in the instructions. However, we explicitly stated that the participants had to take into account the specific email situation in which the utterance was formulated when giving their ratings. In other words, they were asked to rate the extent to which the utterances were acceptable and appropriate to them in that specific situation. Participants were also asked to complete an obligatory open-ended response to justify their ratings. After each response, the next situation was automatically displayed. The instructions for both conditions and an example of the judgment task are provided in Appendix B. Since all situations were considered highly realistic and participants mentioned that the instructions were clear, we only made some minor changes in wording. Additionally, to calculate the number of participants needed for the study, we carried out an a priori power analysis using G*power version 3.1.9.7 (Faul et al. 2009) showing that at $\alpha = 0.05$ (power = 0.90), a sample size of $n = 94$ is adequate to detect small effects (Cohen's d = 0.40) in our within-subject design.

3.2.3. Participants, procedure and measures

For the experiment, 102 participants (35 female, 66 male, 1 who identified as X) were recruited via Prolific. Their profile had to meet the following criteria: being an L1 speaker of German, having German nationality, and being employed part-time or

fulltime. Participants ranged from 18 to 60 in age, with a mean of 30.1 years old (SD = 8.11; median = 28.75). A substantial proportion of the participants (64%) reported having a college-degree from a university or a university college, and 36% a high-school degree. Because the expressions were presented as being part of an email, we also asked participants how frequently they read emails at work. The great majority (83%) indicated that they read emails very frequently: 58% daily and 25% at least once a week. These numbers show that most of our respondents, at the time of completing our survey, worked in fields where emails are regularly exchanged. We decided to exclude the few participants who indicated that they did not read emails regularly in their jobs (i.e., once a month or less), which left us with the data of the 84 participants (30 female, 54 male) who reported reading emails very frequently in their jobs: 70% daily and 30% at least once a week. Each respondent was compensated with £4 for their participation and provided written informed consent prior to enrolment.

We used Qualtrics to create five lists both for the German and the intercultural condition with 15 stimuli per list (Table 2). Participants were randomly allocated to each list. The order in which the situations were presented to each group (n = 40 in the German condition, n = 44 in the intercultural condition) on the Prolific platform was the same; the 1st situation was presented first, the 2nd situation second, and so on. The order in which the stimuli in a specific list were presented, however, was randomized so that participants would not be presented with the same order of types of unconventionality.

4. Results

4.1. Quantitative results

The descriptive results of all ratings are presented in Table 3, which indicates that our L1 participants judged the non-target-like expressions quite positively on average for all three measures in both conditions. The lowest mean score for a non-target-like

expression was 3.97 on a 7-point scale and the highest mean score 6.09. The overall ratings in the intercultural condition were higher than those in the German condition. [Insert Table 3]

The data were analysed with cumulative link mixed-effects models using the function clmm() from the ordinal package (Christensen 2018) in order to answer our first research question concerning perceived appropriateness, acceptability and writer's communicative competence in a German workplace setting and in an intercultural workplace setting, and our second question (effect of type of unconventionality). We included the fixed factors of Group and Type, their interaction, and random intercepts for situations and participants. Gender and age were controlled but did not affect the results. Post-hoc comparisons were carried out using lsmeans. All analyses were carried out with R software version 3.6.2. (R development core team 2019). All data are available on the Open Science Framework (https://osf.io/62hkr/?view_only=ffb1f91e7e674661ab9ef3d40c6cb938).

For the appropriateness judgments, we found no main effect of Group ($B = .22$, $SE = .35$, $z = 0.63$, $p = .530$), but a main effect of Type, with the target-like formulaic expressions being perceived as more appropriate than those featuring misspellings ($B = -1.32$, $SE = .27$, $z = -4.87$, $p < .001$), sociopragmatic infelicities ($B = -2.85$, $SE = .27$, $z = -10.50$, $p < .001$), pragmalinguistic infelicities ($B = -2.40$, $SE = .27$, $z = -8.78$, $p < .001$) and grammatical errors ($B = -2.78$, $SE = .28$, $z = -9.99$, $p < .001$). We found no significant interactions between Group and Type. After running post-hoc comparisons, we found that grammatical errors were judged as less appropriate than misspellings ($B = -1.38$, $SE = .17$, $z = -8.07$, $p < .001$), while no significant difference was found with pragmalinguistic infelicities ($B = -0.16$, $SE = .16$, $z = -0.96$, $p = .872$) and

sociopragmatic infelicities (B = 0.15, SE = .16, z = .91, p = .894). Appropriateness judgments were higher for misspellings than for pragmalinguistic infelicities (B = 1.23, SE = .17, z = 7.27, p < .001) and sociopragmatic infelicities (B = 1.53, SE = .17, z = 8.98, p < .001), while no difference was found between these two latter types of unconventionality (B = 0.30, SE = .16, z = 1.90, p = .317).

For the acceptability judgments, we similarly found no main effect of Group, but a main effect of Type, with grammatical errors (B = -3.46, SE = .28, z = -12.21, p < .001), pragmalinguistic infelicities (B = -2.63, SE = .28, z = -9.50, p < .001), sociopragmatic infelicities (B = -2.53, SE = .27, z = -9.23, p < .001) and misspellings (B = -1.66, SE = .27, z = -6.01, p < .001) all being perceived as less acceptable than the target-like formulaic expressions. We found a significant interaction between Group and Type (grammatical errors) (post-hoc comparison: B = -1.11, SE = .30, z = -3.75, p = .007) for this type of judgment. When post-hoc comparisons were done to determine which type of unconventionality was perceived as the least acceptable, grammatical errors were judged to be less acceptable than misspellings (B = -1.59, SE = .17, z = -9.24, p < .001) and sociopragmatic infelicities (B = -0.55, SE = .16, z = -3.39, p = .0063). Misspellings were judged to be more acceptable than pragmalinguistic (B = 1.15, SE = .17, z = 6.80, p < .001) and sociopragmatic infelicities (B = 1.04, SE = .17, z = 6.14, p < .001), while no difference was found between these two latter types of unconventionality (B = -0.11, SE = .16, z = -0.70, p = .95).

For the competence judgments, on the other hand, we did find a main effect of Group (B = .67, SE = .33, z = 2.03, p = .043). The competence of the writers who were explicitly said to be L2 users living outside of Germany (M = 5.40; SD = 1.57) was thus assessed as higher in comparison to the other group (i.e., in which the writer was said to be living in Germany) (M = 4.84; SD = 1.92). As in the other two categories, we also

found a main effect of Type, with writers being perceived as more competent for target-like formulaic expressions than for misspellings (B = -1.41, SE = .26, z = -5.48, p < .001), sociopragmatic infelicities (B = -2.50, SE = .26, z = -9.66, p < .001), pragmalinguistic infelicities (B = -2.67, SE = .26, z = -5.48, p < .001) and grammatical errors (B = -3.10, SE = .26, z = -11.79, p < .001). We found no significant interactions between Group and Type. Post-hoc comparisons showed that writers were judged as less competent for expressions featuring grammatical errors in comparison to misspellings (B = -1.56, SE = .17, z = -9.26, p < .001), but no significant difference was found with pragmalinguistic infelicities (B = -0.25, SE = .16, z = -1.59, p= .43) and sociopragmatic infelicities (B = -0.39, SE = .16, z = -2.43, p = .107). Writers were judged to be more competent for expressions featuring misspellings than for those featuring pragmalinguistic infelicities (B = 1.30, SE = .17, z = 7.75, p < .001) and sociopragmatic infelicities (B = 1.17, SE = .17, z = 7.02, p < .001), but no difference was found between these two latter types of unconventionality (B = -0.13, SE = .16, z = -0.83, p = .92).

4.2. Qualitative results

To complement our quantitative results and gain a deeper understanding of respondents' underlying reasons or motivations for their ratings, we also collected and manually analysed the compulsory open responses in which participants justified their ratings. Since we did not inform participants that the expression contained an unconventionality, these responses allowed us to determine whether participants had noticed the unconventionality. On average, misspellings were recognized in 43.8% of the cases, grammatical errors in 78.8%, sociopragmatic infelicities in 73.2% and pragmalinguistic infelicities in 66.7% of the cases. The fact that misspellings were often overlooked could explain their high quantitative ratings.

A frequent observation in participants' open responses was the comment that non-target-like use of formulaic expressions is forgivable when the intention or content of the expression is clear. Such comments, which were written in response to all types of unconventionality, shed further light on our first research question in that they explain the relatively high ratings in general:

> [1] Rechtschreibfehler sind nicht so schlimm, solange klar ist, was gemeint ist, und die Nachricht ist sehr eindeutig. [Misspellings are not so bad as long as it is clear what is meant and the message is very clear.]
>
> [2] Natürlich ist das Springen von "Ihnen" auf "Deine" sehr ungünstig, aber wahrscheinlich nur ein kleiner Fehler des Kollegen. Es ist gut, dass er sich höflich bedankt und diese Intention ist was zählen sollte. [Of course, jumping from *Ihnen* to *Deine* is very inconvenient, but probably just a small error of the colleague. It's good that he politely says 'thank you' and this intention is what should count.]
>
> [3] Die holprige Formulierung fällt auf, aber die Nachricht ist klar. [The awkward wording is striking, but the message is clear.]
>
> [4] Hmm, schwierig. Irgendwie ist es schon peinlich, wenn man nicht richtig konjugieren kann, aber andererseits kann sich die Person natürlich einfach nur verschrieben haben. Als Händler würde ich auf jeden Fall nicht meine Geschäftsbeziehung mit der neuen Firma in Frage stellen, nur weil ein Wort mal nicht richtig konjugiert war. [Hmm, difficult. Somehow, it's embarrassing if you can't conjugate properly, but on the other hand, it could have been a slip of the pen. As a trader, I would definitely not question my business relationship with the new company just because a word was not conjugated properly.]

However, the general ratings also depended on the situation. Some comments suggest that there is a difference between internal and external communication and point to less tolerance when it comes to communication directed towards customers rather than between colleagues:

> [8] Emails an Kunden sollten korrektur gelesen werden. [Emails to customers should be proofread.]
>
> [9] Die Kommunikation zum Kunden sollte sprachlich einwandfrei laufen. [Communication with the customer should be linguistically perfect.]
>
> [10] Unnatürliche Formulierung aber unter guten Kollegen stellt das kein Problem dar. [Unnatural wording, but among good colleagues this is no problem.]
>
> [11] Die Intention der Mail ist sehr höflich und zeigt, dass der Mitarbeiter die Hilfe zu schätzen weis [sic]. Rechtschreibfehler sollten vermieden werden, sind aber unter Kollegen weniger schlimm als gegenüber Kunden. [The intention of the email is very polite and shows that the employee appreciates the help. Misspellings should be avoided, but are less bad among colleagues than towards customers.]

For the second research question (effect of type of unconventionality), we focused on the comments of participants who noticed the deviations from the target-like norms, categorizing these comments into ‘rejection’ (negative attitude), ‘tolerance’ (tolerant attitude) and ‘neutral’ (mere observation or neutral attitude). This categorization allowed us to see whether the specific type of unconventionality triggered variation in the raters’ evaluations. For each condition and each type of unconventionality, the comments were coded into one of the categories. The following examples for a grammatical error illustrate the three attitudinal categories:

[12] Grammatikalische Katastrophe – niemals ok. [Grammatical disaster – never okay.] (rejection)

[13] Der Satz is zwar angemessen aber grammatikalisch falsch, was in diesem Fall nicht schlimm ist, da sich die beiden gut kennen. Es kann als einfacher Fehler angesehn werden. [The sentence is appropriate but grammatically incorrect, which is no problem in this case, as the two know each other well. The error can be considered a simple error.] (tolerance)

[14] Grammatikfehler. [Grammatical error.] (neutral)

The average percentages are shown in Table 4.

[Insert Table 4]

These findings lend support to our quantitative results, as they show that misspellings are considered a mild impairment with a high level of explicit tolerance. For example, one participant said:

[15] "bednaken." Typo... Kann passieren. Passiert mir ständig, haha :D.

[*bednaken*. Typo…Can happen. Happens to me all the time, haha :D.]

Furthermore, the percentages for sociopragmatic and pragmalinguistic infelicities were quite close; in about 30% of the cases for both types there was explicit rejection, in 10% explicit tolerance, and in about 60% we found a neutral comment. The qualitative analysis also enabled us to observe that for sociopragmatic infelicities, when it comes to the form of address, the rules are not straightforward. The guidelines concerning what is (in)appropriate seem to depend on the company, or even on the personal preference of the rater:

[16] Viele moderne Unternehmen duzen ihre Kunden mittlerweile und duzen sich auch firmenintern. Für mich ist das absolut in Ordnung, allerdings könnten

einige Kunden das nicht mögen. [Many modern companies now call their customers by their first names and also use the first name within the company. For me this is absolutely fine, but some customers might not like it.]

Although grammatical errors received the lowest quantitative ratings of all types, participants' comments showed less explicit rejection and more explicit tolerance towards grammatical errors than towards sociopragmatic or pragmalinguistic infelicities, particularly in an intercultural context:

[17] Aufgrund der Sprachdifferenz ist der kleine (grammatikalische) Fehler zu entschuldigen. [Because of the language difference, the small (grammatical) error is negligible.]

To qualitatively examine the finding that writers in the intercultural condition were rated as more competent than in the German condition for identical linguistic performance, we coded the open responses again, now indicating whether there was an explicit statement of (in)tolerance towards L2 users (0 = intolerance; 1 = tolerance). Comments of intolerance were found in 2% of all comments in the intercultural condition and in 0.74% in the German condition. However, explicit statements of tolerance were found in 11.81% of the comments in the intercultural condition, and only in 2.2% in the German condition. Even though we did not ask participants to comment on this, raters point to the fact that the use of a non-target-like expression is forgivable in L1-L2 communication:

[18] Inhalt ist klar, bei einem Nicht-Muttersprachler sind leichte Fehler entschuldbar. [Content is clear. For a non-native speaker, slight errors are excusable.]

[19] Klingt etwas holprig, persönlich würde mich jedoch nichts daran stören. Kommunikation über Landesgrenzen ist einfach so. Wer das bemängelt, sollte

seine Prioritäten überdenken. [Sounds a bit awkward, but personally I wouldn't mind. Communication across borders is just like that. Anyone who complains about this should rethink priorities.]

On top of expressing tolerance, an appreciative attitude towards L2 employees using German was also demonstrated in some cases:

[20] Ich finde es sehr gut, dass der Kunde auf Deutsch schreibt und nicht auf Englisch. Kleine Fehler sind in so einem Fall in Ordnung. [I think it is very good that the customer writes in German and not in English. Small errors are fine in that case.]

[21] Der kleine grammatikalische fehler macht den Satz nur sympathischer da er zeigt dass sich die flämische Köllegin bemüht eine aufmunternde Botschaft in der Muttersprache ihrer Kollegin zu schreiben. [The small grammatical error only makes the sentence more appealing as it shows that the Flemish colleague is trying to write an encouraging message in the mother tongue of her colleague.]

5. Discussion and conclusion

This study aimed to investigate what L1 business professionals of German think when formulaic expressions of L2 users in a particular workplace setting do not correspond with the standard language or cultural norms. As even very advanced L2 users struggle with target-like use of formulaic expressions, it is crucial to understand L1 professionals' perception of non-target-like L2 formulaic expressions in order to offer language students the right tools for the intercultural workplace. The study design allowed us to have a high degree of experimental control over both conditions with stimuli that were inspired from a corpus of L2 production data.

The first key finding is that, while a non-target-like expression did affect ratings negatively, general ratings were quite positive on average, thus confirming both Hypotheses 1a and 1b. Comments made by participants indicate that in a workplace setting, non-target-like (interlanguage) forms are forgivable as long as the message is clear, albeit more tolerance seems to be given in communication with colleagues than with customers. This study thus echoes the empirical observation made by Luijkx et al. (2020) that errors do not matter that much as long as the aim of the communication is achieved, and the finding of Decock et al. (2020) that both error-free and error-laden emails receive positive ratings in a workplace context. Our study adds to these findings by illustrating that L1 professionals additionally accept deviations from the target-like norms when it is clear that the expression was written in an intercultural workplace context. Decock et al. (2020) and Wolfe et al. (2016), for example, suggested intercultural tolerance with regard to L2 non-target-like language production, which is supported by our findings. We found that writers in the intercultural condition received significantly better ratings for communicative competence than their colleagues in the German condition for the same performance. Although formulaic expressions are preferred ways of saying things in a particular speech community and crucial in managing daily situations, deviations from the target-like norms do not seem to bother L1 business professionals too much. What is more, our qualitative findings suggest that it is very much appreciated when L2 users try to communicate in the language of their customers or colleagues, even if the expressions used are not entirely in accordance with the target-like norms.

A second finding is that the ratings depended on the type of unconventionality. We found that grammatical errors were considered less acceptable than sociopragmatic and pragmalinguistic infelicities and misspellings. This finding does not confirm our

second hypothesis and is inconsistent with the results of Luijkx et al. (2020) and Wolfe et al. (2016), who found that pragmatic infelicities are considered more bothersome than grammatical errors in business communication. A possible explanation for this discrepancy is that grammatical errors might be more striking in a short expression than in a longer letter/email, and therefore have a more negative impact compared to pragmatic infelicities. Alternatively, the difference between the findings could be explained by the fact that 78.8% of the grammatical errors in our study were recognized while a slightly smaller amount of pragmatic infelicities were noticed (73.2% sociopragmatic and 66.7% pragmalinguistic). The qualitative comments further revealed that when participants did notice pragmatic infelicities, it resulted in more explicit rejection compared to grammatical errors, which lends some support to the findings by Luijkx et al. (2020) and Wolfe et al. (2016) after all. As far as misspellings are concerned, both our quantitative and qualitative findings revealed that they are not considered problematic at all from a L1 business perspective.

We believe that the findings of this study might provide useful insights to prepare language majors for the intercultural workplace. First, we suggest that teachers provide students with a large number of formulaic expressions that are useful in workplace communication. These expressions should be offered to the students as whole expressions, so students can learn a particular speech community's preferred ways of saying things. Since grammatical errors and pragmatic infelicities were clearly noticed by the L1 professionals, we think that it is important that teachers should definitely make students aware of grammatical and pragmatic difficulties in a given expression and in general, pay attention to L2 grammar and students' pragmatic awareness. Teachers should also provide students with many opportunities to produce formulaic expressions, since production is known to be far more challenging than

recognition. At the same time, teachers should point out that a perfect command of the L2 is not always expected in an intercultural business context, and that unconventionalities are forgivable, as long as the message is clear. By doing so, teachers could reduce students' fear of producing (non-target-like) formulaic expressions and help them aim for communication that is appreciated in the intercultural workplace.

There are, of course, limitations to this study, some of which may inspire future research. The rating data were collected online, which makes it more difficult to assess the seriousness and honesty of the respondents who completed the questionnaire, although their provided comments strongly suggest that they acted in good faith, and several studies attest to the high data quality of online platforms such as Prolific (e.g., Peer et al. 2021). Furthermore, the situations and expressions used contained mainly positive and neutral messages, so future experiments could include negative messages to see whether message valence has an impact on L1 professionals' perception. In this study, we only included L2 learners of German with Dutch as their L1, so the study could also be expanded to other languages to examine whether there is a difference in intercultural tolerance towards L2 users of German from countries with L1 languages other than Dutch. In any case, our findings suggest that also in non-ELF-contexts, deviations from the target-like norms are accepted in the intercultural workplace, especially when the message remains intact.

Appendices

Appendix A and appendix B can be found on the Open Science Framework (https://osf.io/62hkr/?view_only=ffb1f91e7e674661ab9ef3d40c6cb938).

Bio notes

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