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Investigating the performance of emailed apologies by Australian learners of Italian

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ABSTRACT

EN This paper explores the strategies chosen by Australian learners of Italian when performing emailed apologies in Italian. Through a modified discourse completion task, 42 participants produced a total of 317 emails. This paper presents an adapted typology of these emailed apologies in Italian which, while drawing on previous literature, has been tailored to be more specific to and therefore more effective in the analysis of the data collected in this project. It was found that the apology act as performed by Australian learners of Italian consists of two principal components, the apology and the repair, the latter of which is optional but is usually included. In addition, supportive strategies can be included prior to or following either of these components to strengthen the illocutionary force of the apology act. The analysis also evidenced that while a broad speech act structure can be identified, the apology act is a complex phenomenon which can be performed with great variation.

Key words: APOLOGIES, APOLOGY STRATEGIES, APOLOGY TYPOLOGY, AUSTRALIAN LEARNERS OF ITALIAN, EMAILED APOLOGIES

ES Este estudio examina las estrategias elegidas por discentes australianos de italiano en las disculpas enviadas por e-mail. A través de un Discourse Completion Task modificado (actividad de finalización del discurso), 42 participantes produjeron un total de 317 e-mails. Este artículo presenta una tipología adaptada de disculpas en italiano enviadas por e-mail que, aunque tomada de la literatura precedente, se ha adecuado para que fuera más pertinente al proyecto. Se observa que el acto de disculpa del alumnado australiano de italiano se constituye de dos elementos principales: la disculpa y la reparación; este último es facultativo, pero se suele incluir. Además, se pueden utilizar estrategias de soporte antes o después de uno de los dos componentes para consolidar la fuerza ilocutiva del acto de disculpa. El análisis también ha demostrado que, por un lado, es posible identificar una estructura amplia del acto lingüístico, y por otro, el acto de disculpa es un fenómeno complejo cuya realización es altamente variable.

Palabras claves: DISCULPAS, ESTRATEGIAS PARA DISCULPARSE, TIPOLOGÍA DE DISCULPAS, DISCENTES AUSTRALIANOS DE ITALIANO, DISCULPAS POR E-MAIL

IT Questo studio esamina le strategie usate da apprendenti australiani di italiano per la formulazione di scuse in italiano inviate via e-mail. Attraverso un Discourse Completion Task modificato (attività di completamento del discorso), 42 partecipanti hanno prodotto un totale di 317 email. Questo articolo presenta una tipologia adattata di scuse in italiano inviate via e-mail che, pur attingendo dalla letteratura precedente, è stata adeguata per essere più attinente al presente progetto. Emerge che l'atto di scusarsi prodotto dagli studenti australiani di italiano è costituito da due elementi principali: la scusa e la riparazione; nonostante quest'ultimo sia facoltativo, viene di solito incluso. Inoltre, strategie di supporto possono essere impiegate prima o dopo una delle due componenti per consolidare la forza illocutoria dell'atto di scuse. L'analisi ha anche dimostrato che, se da un lato, è possibile identificare un'ampia struttura dell'atto linguistico, dall'altro, l'atto di scusarsi è un fenomeno complesso la cui realizzazione è altamente variabile.

Parole chiave: SCUSE, STRATEGIE PER SCUSARSI, TIPOLOGIA DI SCUSE, APPRENDENTI AUSTRALIANI DI ITALIANO, SCUSE VIA EMAIL

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1. Introduction

Pragmatics is a dynamic field, particularly within the context of second language acquisition. In this context, it is essential to gain an understanding of how learners perform language and the pragmatic strategies they use to achieve particular speech acts. Through an analysis of emailed apologies elicited from a group of 42 intermediate and advanced Australian learners of Italian, this paper presents a typology of apologies in email communication.

As will be further discussed in the following section, the performance of apology strategies can vary across linguistic and cultural groups. This paper focuses on establishing a typology for the descriptive analysis of the emails produced by these learners of Italian, and on identifying the apology strategies within this data. Accordingly, the paper responds to the research question: *What moves and strategies are used by learners of Italian to accomplish emailed apologies?*

In doing so, this paper presents some preliminary results of a larger project[1] which explored the speech act of apology in the understudied context of Italian language learning in Australia. In this larger project, which was a pilot study for the author's current doctoral project, 317 apology email responses were elicited from learners of Italian through a written Discourse Completion Task (henceforth, DCT). This data was used to develop a typology of apologies, with reference to typologies formulated by other scholars in previous studies of apologies, and a descriptive analysis of these apologies was then conducted. Although apologies were mentioned in Bettoni and Rubino's (2007) work on responses to complaints, they have not been extensively investigated from an Italian–Australian perspective, either in the context of comparing Australian English to Italian or in the context of examining the use of Italian language within Australia. My research seeks to fill this gap by studying apologies within the context of Italian language acquisition in Australia (the results are discussed both in the present article and in Walker, 2017). Exploring this perspective not only sheds light on the act of apology, in that a new group of apologisers are investigated, but also, given the context of Italian language learning, may offer insights and reflections upon language acquisition and pedagogy.

This introductory section 1 of the paper has provided a brief overview of the research; section 2 will present in more detail the background for the study and the findings of relevant previous research. The methodology adopted in my research will then be described (section 3), followed by my findings (section 4). The findings will detail the typology, as well as some further information about how the strategies within this typology were performed by participants. The typology is included in the findings section rather than in the methodology section, because the typology was developed in response to the research question established for this paper. In section 5 of this paper, these findings will be discussed in relation to previous literature, before I discuss the implications (section 6) and conclusions (section 7) of my research. Finally, the limitations of my research will be explored and avenues for further research will be suggested in section 8.

2. Background to the study

2.1. Theorizing apologies

The study of apologies originates from Speech Act Theory (Austin, 1962; Searle, 1979) which is seminal within the pragmatic field. Speech Act Theory describes how utterances function as acts that have an impact in the world and that influence our relationships with others. Essentially, in using words, we *do* things and put actions in motion.

In a number of studies, apologies are defined as speech acts which function to repair or maintain relationships between interlocutors after the speaker has violated a social norm (Businaro, 2002; Cheng, 2017; Jones & Adrefiza, 2017; Martínez-Flor & Beltrán-Palanques, 2014; Trosborg, 1987). As such, apologies aim to restore order and/or harmony in a relationship or interaction (Kasanga & Lwanga-Lumu, 2007). These definitions therefore seem to focus on apologies as post-event acts; however, it is important to recognise that apologies may also be made in anticipation of a possible offence, as demonstrated by Davies, Merrison, & Goddard (2007) and Wyatt (2014).

Apologies are one of the most culturally sensitive acts (Suszczyńska, 1999). While some apology strategies may be universal, there is much variation in how they may be performed by speakers of different languages, and the frequency, intensification of, and conditions for apologies can vary to a great extent across

[1] This paper presents some findings from an honours research project conducted at the University of Sydney under the supervision of Professors Ahmar Mahboob and Antonia Rubino. I thank them very much for their guidance throughout the research. This honours project has served as a pilot study for my current doctoral research, which is being conducted at the University of Sydney under the supervision of Professor Antonia Rubino and Dr. Caroline Lipovsky.

languages and cultures (Cohen & Olshtain, 1985). Speakers of different languages often use different ranges or combinations of strategies to perform speech acts (Bataineh, 2013; Cheng, 2013; Hill, 1997; Ogiermann, 2008). Hence, in the case of my research, it was necessary to reconsider existing typologies of apologies in the particular context of the data collected, that being Italian language as used by students in Australia.

Culturally specific norms are not limited to oral communication; rather, they extend to all forms, verbal and nonverbal, and the diverging expectations of language learners and native speakers can be a source of intercultural miscommunication (Alcón Soler, 2013a, 2013b; Chen, 2006; Economidou-Kogetsidis, 2011). Email communication is a diverse medium that lacks formalised customs and models (Biesenbach-Lucas, 2007, p. 60; Biesenbach-Lucas & Weasenforth, 2001, pp. 135-136; Chen, 2006, p. 35), and this variability can cause exasperation when combined with learners' lack of language proficiency or cultural understanding. Negotiation of the email form is therefore a very rich area of pragmatic study, and differences between the email styles of Italian and British university students has been demonstrated (Sciubba, 2010). Furthermore, email communication in the academic sphere is increasingly being explored, as email has become a key method of communication between students and academic staff that often replaces face-to-face communication (Alcón Soler, 2013b, p. 26; Biesenbach-Lucas, 2006, p. 81; Pagliara, 2019, p. 151).

While this article concerns itself with presenting a typology rather than with analysing specific realisations or enactments of language, there are several key theories which have influenced my research and therefore must be acknowledged. Firstly, speech act studies often reference Politeness Theory (Brown & Levinson, 1987 [1978]), which describes how speakers navigate the performance of speech acts, especially those which are potentially socially threatening, such as requests, complaints, and apologies. While other scholars, including Grice (1989) and Leech (1983, 2014), have also presented frameworks for the analysis of polite and/or effective communication, it is Politeness Theory which is drawn upon in my research. Additionally, the discussion of previous studies of apologies in sections 2.2 and 2.3 makes reference to Goffman's (1967 [1955], 2003) theory of *face*. This term refers to the positive social value one gains in an interaction, enacted through the verbal and nonverbal actions which interlocutors use to express an evaluation of the communicative situation and of the individuals participating in that situation. Brown and Levinson (1987 [1978]) argue that face is universal to all cultures, and that while the term *positive face* refers to one's desire to be appreciated and approved of by others, *negative face* refers to one's desire to be free and unimpeded by others (pp. 61-62). Speech acts that in some way pose a threat to the face wants of any interlocutor are termed *face-threatening acts* (FTAs) (Brown & Levinson, 1987 [1978], p. 65).

2.2. Studies of apologies in Italian and English

Although the fields of cross-cultural and intercultural pragmatics are vast, to my knowledge, there have been no studies which have specifically investigated apologies as performed by Australian learners of Italian. Studies which have focused on Italian apology performance—which have been conducted outside of the Australian context—have principally investigated oral apologies and have demonstrated that native speakers of Italian tend to favour the explicit apology strategies of asking for forgiveness or pardon and expressions of regret (Nuzzo, 2007; Trubnikova, 2017). Explicit apologies are also common in apologies made by native speakers of Australian English (Jones & Adrefiza, 2017) and other variants of English including Canadian English (Frescura, 1995, p. 87). However, despite this similarity, native speakers of English and Italian demonstrate some variation in how they perform this strategy. Among native English speakers the explicit apology expression most often used is *I'm sorry* (Holmes, 1990; Trosborg, 1995; Wyatt, 2014) and intensifiers such as *very*, *so*, *really*, *terribly,* or *awfully* are often used to strengthen this expression. However, as has been noted by other scholars (Bettoni & Rubino, 2007; Frescura, 1995), the Italian language possesses a much wider range of explicit apology expressions than the English language. More specifically, the most common verbs whereby an explicit apology might be expressed in English are *to apologise*, *to be sorry*, *to pardon*, *to excuse*, *to forgive* and *to regret*. In contrast, the Italian language possesses a much longer list of verbs which express explicit apology—*rincrescere* and *rammaricarsi*, for example, may both be translated as "to regret." Furthermore, in Frescura's (1995, pp. 87-88) comparison of English and Italian apologies, English speakers used only four apology expressions, while the range of expressions used by the Italian speakers was much wider and diverse, eight examples being offered by the author.[2]

[2] The expressions included in Frescura's (1995, pp. 87-88) list of examples were: *mi spiace/dispiace* ("I am sorry"), *sono desolato/mortificato/spiacente* ("I am mortified"), *non ho parole per scusarmi* ("I have no words to express how sorry I am"), *mi scuso* ("I apologize"), *Le/ti chiedo scusa* ("I request your forgiveness"), *non posso che scusarmi* ("I cannot do

Apologies have also been investigated in the context of email communication, as in my research. In comparing emails written by native speakers of British English to other examples of written and spoken communication, Hatipoğlu (2004) found that explicit apologies performed in emails were more likely to follow the form and content conventions of written apologies than spoken apologies. For example, a lower number of modifiers was used than those used in spoken English, and the modifiers which were used in the emails were not those commonly found in speech (Hatipoğlu, 2004). This therefore supports the relevance of a typology that describes the specificities of written apologies.

Moreover, in an intercultural context, Cheng's (2013) study of spoken and emailed apologies performed by native and non-native speakers of English evidenced a vast degree of differentiation in how apologies were formulated by these two groups, demonstrating that native and non-native performance of emailed apologies can be a salient area of cross-cultural speech-act investigation.

Furthermore, previous studies focusing on other speech acts performed in Italian and English have presented some relevant findings. Studies investigating reactions to complaints have demonstrated that native speakers of Italian and native speakers of English often use similar or the same strategies but with different frequencies (Bettoni & Rubino, 2007; Frescura, 1995). Moreover, it has been noted that Anglo-Australian native speakers of English and native speakers of Italian in Italy differ in both the type of speech acts chosen to react to complaints and the directness of these speech acts: Anglo-Australians more frequently admit responsibility for the offence than their Italian counterparts and tend to be more attentive to the negative face of the interlocutor while the Italians are concerned more with their own face (Bettoni & Rubino, 2007). Similarly, Frescura (1995) found that Canadian English speakers are more likely to use strategies which support the face of the hearer, such as offering compensation, while native Italian speakers prefer strategies which support their own face, such as denial of guilt. However, while these findings regarding reactions to complaints are certainly relevant to the study of apologies, they do not specifically investigate the performance of apologies.

Although the existing research presented above explores cross-cultural language variation, it is also important to note that variation may also exist among native speakers of a language and that not all individuals of one linguistic or cultural group will perform a given speech act in the same way (Schneider & Barron, 2008), as there can exist linguistic variations within a language or cultural group, as well as individual variation. Such is true of both verbal and written communication. While this paper does not discuss in depth individual variation in apology performance, in presenting a typology of apologies, this is an important consideration to keep in mind when investigating cross-cultural and intercultural pragmatics.

Aside from the studies discussed above, there is still relatively little literature which has focalised or touched on studying apologies in the Italian language, much less apologies in Italian as performed in emails. The findings presented in this article are the preliminary results of a pilot study which seems to be the first study to investigate apologies as performed by Australian learners of Italian. This article further investigates a data set which has been presented in previous work (Walker, 2017); while the first publication arising from this pilot study explored the politeness norms with which learners of Italian engaged in composing emailed apologies (Walker, 2017), the present article presents a different aspect of the analysis of the same data set. Specifically, this paper is concerned with the pragmatic moves and strategies used by Australian learners of Italian[3] to achieve emailed apologies, and with presenting a typology of these apologies. This typology, detailed in Section 4.1 of this paper, will shed light on how Australian learners of Italian accomplish emailed apologies, which can in turn provide valuable insights into second language acquisition for language teachers.

2.3. Previous typologies of apologies

Apologies are complex acts; as established above, they may be performed pre- or post-offence, may be performed using a variety of strategies, and can vary significantly across languages and cultures. The relationship between the form and function of apologies is dynamic and a vast range of utterances may be used to achieve apology performance (Coulmas, 1981; Lakoff, 2015).

Over time, scholars have presented a number of typologies of apologies, most of which incorporate both explicit and implicit apology strategies. It should be noted that while most scholars have not defined the

anything else except apologize"), *mi scusi/scusami/mi perdoni/perdonami* ("forgive me"), and *La/ti prego di scusarmi* ("I beg you to forgive me").

[3] In this paper, the term *Australian learners of Italian* refers to domestic students enrolled in Italian language courses at an Australian university. The term *domestic student* is used by Australian universities to refer to students who are citizens or permanent residents of Australia.

term *strategy* and different terms arise across the literature (including *sub-formula*, *sub-category*, *semantic strategy*, and *semantic formula*), in this paper, two terms will be used: *move* and *strategy*. A move is a broad semantic function which can be achieved by strategies, which are phrases or sentences whereby a speech act is achieved. This distinction will be further discussed in Section 4.1. of this paper.

Owen's (1983) typology of apologies identifies three distinct utterances whereby the speech act can be achieved:

- *apology*, *apologies* or *apologise*
- *sorry*, and
- *I'm afraid* + sentence pro-form.[4]

However, apologies are much more diverse than what Owen's typology suggests. The above phrases are not in fact necessary for apology performance, as other scholars have identified other more implicit types of apologies, discussed below, which do not incorporate any of these three utterances.

In their own typology, Blum-Kulka and Olshtain (1984) identify two main types of apologies: those which are achieved by explicit expressions of apology using illocutionary force indicating devices (IFIDs[5]), and those which are achieved by utterances which relate to the necessary conditions for an apology. Specifically, these conditions are: i) that the speaker did or did not do something; ii) that the speaker is perceived as being in breach of a social norm; and iii) that which was/was not done by the speaker causes some form of harm or offence to the hearer (Blum-Kulka & Olshtain, 1984, p. 206). In this second type of apology, there are multiple strategies whereby the apology may be performed, for example, accepting responsibility or offering repair for the offence.

In a similar vein, Cohen and Olshtain developed a typology of five apology strategies which were adopted in the influential Cross-Cultural Speech Act Realisation Project (CCSARP) and in numerous other studies (including Blum-Kulka, House, & Kasper, 1989; Cohen, Olshtain, & Rosenstein, 1986; Cohen & Olshtain, 1981, 1985, 1994; Olshtain, 1983; Olshtain & Cohen, 1983, 1990). These strategies, often used in combination with each other in what is termed a *speech act set* (Olshtain & Cohen, 1983), are:

- explicit expression of apology (e.g., *I'm sorry*)
- explanation or account of the situation (e.g., *there was a traffic jam*)
- acknowledgement of responsibility (e.g., *it's my fault*)
- offer of repair (e.g., *let me make it up to you by replacing it*), and
- promise of forbearance, or non-reoccurrence (e.g., *it will never happen again*).

Some scholars have adopted the above typology (e.g., Economidou-Kogetsidis, 2010; Márquez Reiter, 2000; Suszczyńska, 1999; Yu, 2010), while others have adapted or expanded it to better describe their own data sets, as I have. For example, while Lipson (1994) drew upon both Owen's (1983) typology and that of the CCSARP in her analysis of apologies, Trosborg (1995) extended the CCSARP's typology to include three additional strategies: *does not take on responsibility*, *minimizes the degree of the offence*, and *expresses concern for the hearer*.

On the other hand, scholars such as Nuzzo (2007) have formulated more unique typologies arising from the data collected in their own projects, with some reference to previous works (e.g., Blum-Kulka et al., 1989; Márquez Reiter, 2000; Trosborg, 1995). When analysing role-play data collected from learners of Italian, the apology strategies identified by Nuzzo (2007) were:

[4] The sentence pro-form refers to an utterance which is contextually dependent, and which complements the phrase *I'm afraid*, adding semantic information about the situation which adds to the remedial nature of the utterance (Owen, 1983).
[5] IFIDs are routinised and formulaic expressions which usually include a performative verb, such as *I'm sorry* or *I apologise* (Blum-Kulka & Olshtain, 1984, p. 206).

Table 1
Apology strategies identified by Nuzzo (2007)

Term used by Nuzzo	English gloss	Example (Nuzzo, 2007)	English translation
ammissione di colpa	admission of guilt	*mi son dimenticato il libro*	I forgot the book
evento negativo	negative event	*si è rovesciato addosso un po' di caffè*	some coffee was spilled on them (singular)
espressione di rincrescimento	expression of regret	*mi dispiace*	I'm sorry
giustificazione	justification	*c'è stato un ritardo della metrò*	The metro was late
mancanza di intenzionalità	lack of intent	*non l'ho fatto apposta*	I didn't do it on purpose
offerta di risarcimento	offer of repair	*glielo raccolgo*	I will pick it up
richiesta di perdono	asking for pardon	*mi scusi*	excuse me
verifica di gravità	verification of the gravity of the offence	*è un grosso problema?*	Is it a big problem?

Although the existing typologies discussed in this section are relevant to the data collected in the present project, they did not exactly correspond to the written apologies elicited from the Australian learners of Italian. For example, while some of the strategies outlined in existing typologies were present in my data, they were used by participants differently from how they were by participants in other studies; hence, these strategies have a different structural positioning in the typology that I present in this paper.

One of the reasons for these differences in strategy usage may be that the type of data used to develop these existing typologies differs from the data which I have collected in my research. The typologies discussed above were used to codify either spoken apologies or a written elicitation of what one would hypothetically say to apologise; in contrast, this paper analyses written apologies in the context of a medium of real written communication by email. In addition, my data was elicited specifically from non-native speakers and included eight particular scenarios (outlined in Section 3.1 and detailed in Appendices 3 and 4) which were not specified in the above-mentioned research. Therefore, while previous typologies were considered and drawn upon in the interpretation of data, modifications had to be made to identify a typology which more closely reflected i) the apologies elicited in this particular project, and ii) the ways in which the participants of this project constructed and combined apology strategies.

3. Methodology

This paper aims to answer the following research question: *What moves and strategies are used by learners of Italian to accomplish emailed apologies?* In doing so, written data was collected through a modified written DCT, which was designed to elicit emailed apologies. The process of data collection and the methods of analysis will be discussed in this section of the paper, and the typology of apologies resulting from this research will be presented in the findings (Section 4).

3.1. The discourse completion task (DCT)

The DCT involved four scenarios that were designed to be plausible for participants, all of whom were studying Italian as a second language in Australia. Briefly, the scenarios involved: having to cancel a work meeting; being unable to participate in a group presentation at university; being unable to pay rent on time; and accidental theft (as in Figure 1). The full DCT is included in Appendices 3 and 4.

All scenarios were set in Italy, thereby requiring participants to draw upon cross-cultural and intercultural pragmatic knowledge. DCT prompts were presented in Italian, with translation of some potentially challenging words provided in English, and participants were required to complete the DCT in Italian. The scenario prompts are included in Italian (as provided to participants in the DCT) and in English (as translated for this article) in Appendix 3 and Appendix 4, respectively.

Each of these scenarios involved two variations in which the situation was the same, but in which participants were asked to address their emails to interlocutors who differed with respect to their social distance and status in relation to participants. The goal was to explore the impact of these social variables upon the students' speech act performance, as it has been argued that certain sociological variables are vital in the process of understanding FTAs (Brown & Levinson, 1987 [1978], p. 74). However, these variables will not be

analysed in this paper due to space constraints. Nor did these social variables seem to influence the typology presented in this paper, which aims to represent the whole corpus of emails elicited in this research.

As the DCT required each participant to respond to two variations of four scenarios, each DCT elicited a total of eight individual email responses. Appendix 1 provides a table including each of these four scenarios and the interlocutors specified in each variation, along with the DCT instructions and all DCT prompts provided to participants.

Each of these was elicited by a prompt describing the situation and providing space for the participant to write their email, as demonstrated in Figure 1.

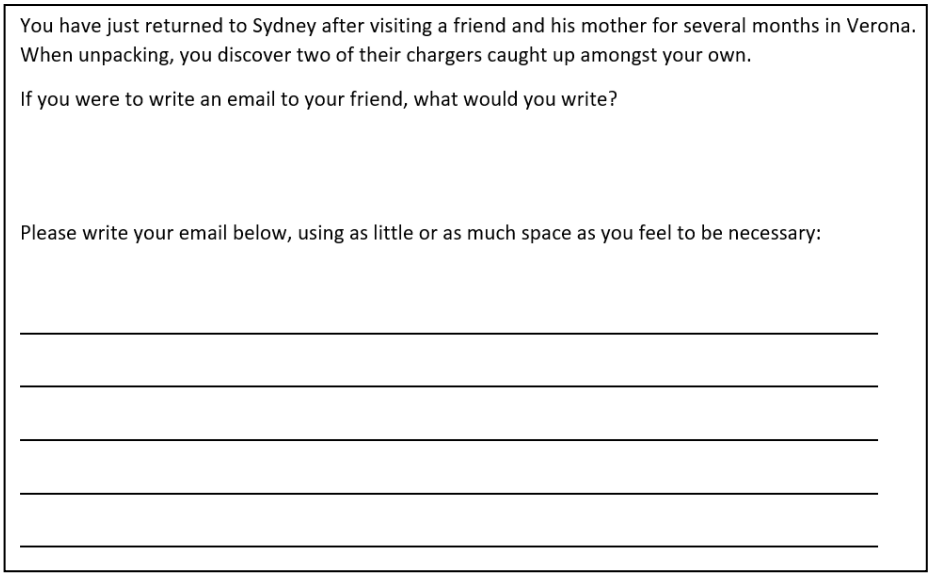

Figure 1. English translation of a DCT prompt (Walker, 2017)

The task was completed in class and linguistic aids such as dictionaries were not used, to ensure that the language use of the participants reflected their own linguistic ability. The time allocated for the task was approximately an hour.

The possibility of opting out of responding to individual scenarios was offered to participants through the inclusion of a "I would not write an email" option following each DCT prompt. This was to account for the reality that in authentic interactions, individuals may choose to avoid performing speech acts (Kuchuk, 2012), particularly in the case of those which, like apologies, are face-threatening (Brown & Levinson, 1987 [1978]). In addition, not all participants might consider an email to be necessary in all the DCT scenarios presented. However, in only 19 emails (out of a total of 336 DCT responses) did participants choose this opt-out option; this suggests that most participants did deem email communication to be necessary in most scenarios, and that these scenarios were therefore plausible.

One of the common criticisms of DCTs as a method of data collection is that the elicited data is ultimately unnatural and unrealistic (Beebe & Cummings, 1996; Brown, 2001; Golato, 2003; Sasaki, 1998). This claim is not unfounded, as traditional DCTs require participants to respond to a prompt by *writing* what they would ideally *say* in a given situation (for example, in the following studies: Bataineh & Bataineh, 2006; Hong, 2011; Tanaka, Spencer-Oatey & Cray, 2008; Trubnikova, 2017). Hence, the purposeful methodological decision to elicit responses in email form was made to increase the reliability of the data collected through the DCT. As email communication is already a written form of communication, this particular concern regarding DCTs was minimized. Such modified DCTs have also been used in other studies to investigate discourse in technologically mediated communication; for example, Nuzzo and Cortés Velásquez (2020) administered a modified DCT which elicited text messages rather than spoken dialogue.

3.2. The participants

A total of 42 individuals participated in the DCT. All participants were Australian students currently enrolled in intermediate or advanced (B1 to C1[6]) Italian language courses at a large public university in Australia. Learners at the beginner level were not invited to participate, as they would likely experience difficulty in completing the DCT.

Although there was some differentiation in proficiency across the participant groups, the syllabus documents for each participant group indicated that the students should have sufficient knowledge of Italian to complete the DCT task. Specifically, the language outcomes listed in the syllabus of each of the language classes invited to participate listed grammatical and lexical categories that would allow participants to construct emails fulfilling the DCT requirements. Furthermore, no clear correlations were observed between the level of language class in which participants were enrolled and the structure of the apologies they performed, the length of their emails, or the grammatical correctness of their writing. Hence, the language class to which participants belonged did not emerge as an influential variable in this study.

At the end of the DCT, participants also completed a brief demographic questionnaire for the purpose of data analysis. Most participants were between the ages of 18 and 25, with two participants reporting ages over 25. A total of 35 participants were female, and only 7 were male; however, literature demonstrates that gender imbalance within language courses is quite common, as the numbers of female enrolments and language teachers both tend to be higher than the male counterparts in secondary and tertiary language courses, both across Australia and internationally (Australian Government Department of Education and Training, 2016; Carr & Frankcom, 1997; Carr & Pauwels, 2006; Kissau & Salas, 2013; Nikitina & Furuoka, 2007), and therefore this gender imblance could not be avoided.

While not all participants were Anglo-Australian (a range of backgrounds were self-identified in the demographic survey), and 13 participants reported Italian heritage through either parent(s) or grandparent(s), cultural and linguistic background of family members did not seem to be a meaningful factor in explaining Australian learners' linguistic choices, as there was no correlation between demographic background and apology construction. Nor did participants' age or gender seem to influence the written data elicited. Hence, these demographic factors are not considered in the analysis presented in this paper.

3.3. Analysis of the data

As the DCT required each of the 42 participants to produce eight emails, and there were 19 instances in which participants opted not to write an email in response to a DCT prompt, a total of 317 emails are included in the data analysis in this paper.

Once collected, the DCT data was reviewed, and preliminary notes were taken regarding which moves and strategies appeared to be present in the data set. This initial coding process was exploratory, in that I attempted to apply the previous typologies already discussed in this paper (Blum-Kulka et al., 1989; Lipson, 1994; Márquez Reiter, 2000; Nuzzo, 2007; Olshtain & Cohen, 1983; Owen, 1983; Trosborg, 1995) to my own data to ascertain which of these strategies were in fact present in my data set. At this stage, notes were also taken as to how strategies were structured and combined in the elicited data.

Following this exploratory process, the typology presented in Section 4.1 of this paper was drafted and then finalised, and participants' elicited emails were then coded for analysis.

All participants' emails and excerpts included in this paper have been transcribed as they were written by participants, except for several minor changes including grammatical and orthographical corrections. Any errors in phrasing or expression have been retained in order to accurately represent participants' language use. This is to facilitate ease of reading while maintaining the voice of the participants. Likewise, in order to accurately represent the expressions formulated by participants in Italian, the exact grammatical accuracy of the English translations has at times been compromised to more accurately reflect the meaning of the original Italian texts.

4. Findings: How were the emails structured?

As with any written medium of communication, there are certain conventional elements which are typically included in email communication—specifically, the opening salutation, the body of the email, and the signing off. While each of these elements carries important linguistic information, only the body of emails

[6] According to the Common European Framework of Reference for Languages (2001).

elicited from participants will be considered in this paper, as it is within this section that apology acts are performed. The elements which were omitted from analysis were the opening and the closing. The former includes greetings, titles and names, for example, *Cara Signora [cognome]* ("Dear Mrs [surname]") and *Buongiorno Matteo* ("Good morning, Matteo"). The closing includes routinised phrases such as *Kind regards* and signoffs consisting of the name of the writer of the email.

As the goal of this paper is to identify the moves and strategies used by learners of Italian in performing emailed apologies, this section will present the typology of apologies developed in my research. First, an overview of this typology will be provided and then each component will be explored in more detail with reference to how strategies were used by participants.

Although existing typologies can be incredibly useful in the consideration of one's own data, the direct imposition of one of these frameworks onto a new data set is not necessarily effective or useful. In the case of this project, several relevant typologies were initially consulted for the analysis of data (e.g., Blum-Kulka et al., 1989; Cheng, 2013; Nuzzo, 2007; Trosborg, 1987, 1995). However, these had been developed to codify and describe data which differed to that which was collected in this project, both in regard to the type of data itself and the context of data collection. Hence, it was necessary in my research to decide upon an adapted typology which could accurately and thoroughly describe emailed apology performance by Australian learners of Italian. It is this typology which is presented and discussed in this paper.

The existing typologies of apologies introduced in this paper each outlined a series of strategies which could be used individually or in combination with each other to perform an apology. While many of these strategies were also found in the data used in this paper, it emerged that they could be grouped into two distinct actions which participants could perform in their emails. Each of these moves had a specific goal: either to establish the apology (the apology move), or to seek repair (the repair move). These two distinct actions in apology emails have been termed *moves*.

While the apology move established apology by acknowledging or accounting for the fact that an offence had occurred, the function of the repair move was to follow through by proposing or initiating remedial action in response to the offence. Each of these moves could contain several strategies for accomplishing the overall goal.

In other typologies, specifically in the CCSARP (Blum-Kulka et al., 1989), and in both Trosborg (1995) and Nuzzo (2007), repair has been included as an apology strategy which could be used as an alternative to or in combination with other apology strategies. This suggests that the repair functions in a similar way to these other strategies.

The email data collected in my research, however, revealed that the repair move could in fact be quite elaborate and include multiple clauses. In addition, the repair was often structurally separate from other apology strategies; for example, it could occur in a separate sentence or paragraph comprising the apology move. However, the repair move never occurred alone, and therefore is part of the speech act of apology, rather than a separate speech act. Indeed, even in existing typologies of apologies, repair has been included as an apology strategy (Blum-Kulka et al., 1989; Nuzzo, 2007; Trosborg, 1995), and identified as an element which can be common to other face-threatening acts, for example cancellations (Nuzzo & Cortés Velásquez, 2020).

Supportive strategies, such as expressing thanks or concern, were identified external to the two moves and were used in the construction of the email to strengthen the apology act. These were coded separately from the apology and repair moves, as they did not occur in isolation and could be used in any order and number prior to or following an apology or repair move. In addition, a supportive strategy itself could not address the offence; rather, supportive strategies mitigated the offence through attempting to appease the offendee or reducing the severity of the offence.

The diagram below represents the structure of the apology act and the different levels which exist within this act, according to the data collected.

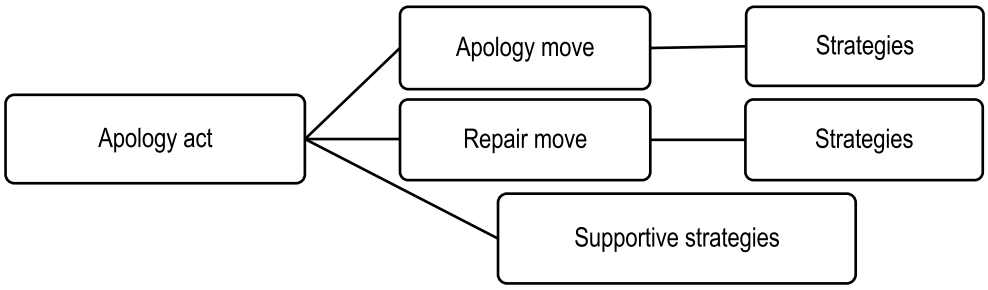

Figure 2. Overview of the apology act

Of these two moves, only the apology was necessary for the performance of an apology act. When included, the repair move always followed the apology. Although uncommon, a second apology move, or a reprisal of the apology move, could also follow the repair move. Supportive strategies could be used in any position outside of the two moves. This may be represented as:

> *apology act = (supportive strategy +) apology move (+ supportive strategy) (+ repair move) (+ supportive strategy) (+ apology move)) (+ supportive strategy)*

In this formula, the brackets denote optional elements. This formula represents all apologies collected in this research. To provide an example of how this structure was enacted in emails, a participant example has been provided below (Example 1, English translation provided in Appendix 5). To the right of the email, I have annotated the strategies performed in the email, and on the far right, the moves have been noted.

Example 1. *Sample participant email*

Elicited email	**Sub-strategy**	**Move/strategy**
Cara [nome],	Opening	
Al primo posto, devo ringraziarle di nuovo della sua ospitalità incredibile. Il mio soggiorno a Verona è stato meraviglioso e l'amicizia della sua famiglia è stata una gran parte di quell'esperienza indimenticabile.	Expressions of thanks and politeness	Supportive strategies
Sono appena arrivata a casa e ho scoperto che purtroppo ho preso due dei suoi caricabattiere con me.	Statement of fact	Apology move
Chiedo i suoi scusi per questo sbaglio!	Explicit expression of apology; Lack of intent	Apology move
Penso che sia ottimo se glieli mando subito. Vado all'ufficio postale oggi pomeriggio.	Expression of repair	Repair move
Ma in ogni caso credo che probabilmente staste cercando ovunque quelle cose e dunque vorrei dirle che hanno fatto un gran viaggio con me!	Expression of concern	Supportive strategy
Mille grazie per tutto e mi dispiace quel errore	Expression of thanks; Explicit expression of apology	Supportive strategy; Apology move
Con affetto, [nome]	Closing	

In this example, the *expressions of thanks/politeness* which are used to orient the response are very elaborate. The apology which follows then includes several strategies: a *statement of fact*, an *explicit expression of apology*, and an expression of *lack of intent*. The repair move is then followed by two more supportive strategies, an *expression of concern* and an *expression of thanks*. Finally, before the closing, another *explicit expression of apology* is used to strengthen the force of the apology sequence.

This paper will now discuss in more depth each of the moves identified above and the strategies which could comprise these moves, as well as identifying similarities and differences with my typology and existing typologies.

4.1. The apology move

The apology move consists of five strategies which can be used in combination with each other, like the strategies identified in the apology speech act set (Olshtain & Cohen, 1983). The five strategies identified in my data are as follows:

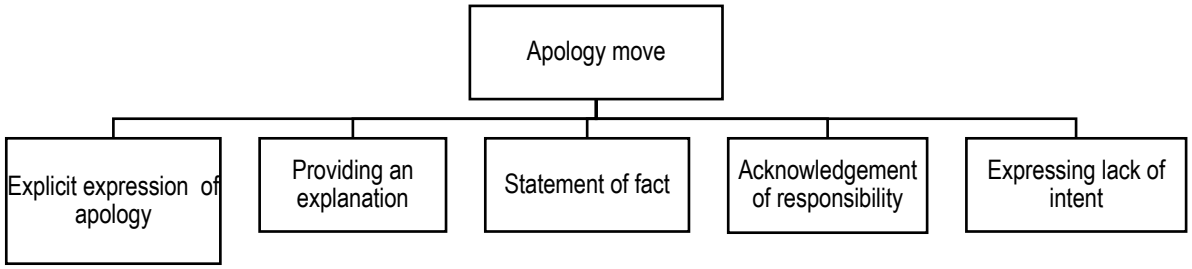

Figure 3. Structure of the apology move

Like previous typologies presented in this paper, the structure above accounts for both *explicit expressions of apology*, as well as other implicit means of apologising, namely: *providing an explanation*, *statement of fact*, *acknowledgement of responsibility*, and *expressing lack of intent*. While the above structure is very similar to that presented by Olshtain and Cohen (1983), two strategies have been added: *statement of fact* and *expressing lack of intent*. These were adapted from Nuzzo (2007), as they were also used by the Australian learners of Italian in the present study.

While *expressing lack of intent* is a close translation of Nuzzo's term *mancanza di intenzionalità*, the terminology of the *statement of fact* differs from the terminology of the *negative event* identified by Nuzzo. The terminology was modified to more clearly capture the type of utterance that this strategy comprises. As described by Nuzzo, the term *evento negativo* refers to the speakers' statement that an offence (a 'negative event') has occurred without taking responsibility for this event. In the case of Trubnikova's (2017) analysis of apologies performed in Italian, the term *nominazione dell'atto* is adopted for this strategy, and like the English term *statement of fact*, this term makes clear that when performing this strategy, participants factually and objectively stated what had occurred.

Of the five apology strategies identified, the *explicit expression of apologies* was the most frequently used, appearing in 272 emails. *Providing an explanation* was also relatively frequent, being performed in 190 emails, while all other apology strategies were used in fewer than 100 emails, as in Table 2.

Table 2
Strategies of apology used in the corpus

Supportive strategy	Number of emails including this strategy
Explicit expression of apology	272
Providing an explanation	190
Statement of fact	95
Acknowledgement of responsibility	42
Expressing lack of intent	26

This article will now provide more detailed descriptions of each of these five strategies, including examples from the corpus.

4.1.1. Explicit expression of apology

These expressions are routine formula and include an illocutionary force indicating device, or IFID. This is a conventionalised and formulaic expression usually involving the use of a performative verb. In English, these include: *to be sorry*, *to excuse*, *to apologise*, *to forgive*, *to regret* and *to pardon* (Blum-Kulka et al., 1989, p. 290). Equivalent IFIDs in Italian include, for example, *scusarsi*, *perdonare*, *dispiacersi* and *chiedere scusa*. This

apology strategy was present in all the typologies mentioned above. Examples from the data are found in Table 3.

Table 3
Examples of explicit expressions of apology

Example from the data	English translation
Mi dispiace	I'm sorry
Scusa	Excuse me (informal)[7]
Mi scusi	Excuse me (formal)
Scusami!	Excuse me! (informal)

Explicit expressions of apology can be modified. Modifiers are added to the explicit apology utterance and are used to alter its illocutionary force. Two types of modification were identified in the data, *intensification* and *reiteration*, and these are presented with examples in Table 4.

Table 4
Modifiers of explicit expressions of apology

Type of modification	Description	Examples from the data	English translation
Intensification	Adjectives and adverbs which strengthen the force of the explicit expression of apology.	*Mi dispiace tanto*	I'm really sorry
		Mi dispiace sinceramente	I'm sincerely sorry
		Scusa un sacco!	Very sorry!
Reiteration	A phrase whereby the repetition of the explicit expression of apology is overtly stated.	*Mi dispiace di nuovo*	I'm sorry once more
		Mi dispiace ancora	I'm sorry again

Modification has been discussed in previous typologies of apologies. In particular, *intensification* is a modifier which has been commonly acknowledged in the literature (Márquez Reiter, 2000: 54; Nuzzo, 2007: 166; Trosborg, 1995). In this typology, I also include *reiteration* as another form of modification, as this strategy served a function which differed from that of intensification.

A comparison of all emails produced by participants made clear that, across the data set, the *explicit expression of apology* was by far the most common strategy used by participants in the apology move. As illustrated in Table 2, 272 of all email responses (out of 317 responses in total) included the strategy at least once. The total number of *explicit expressions of apology* across the data set was 345, hence it was not uncommon for participants to use this strategy more than once within a single email. Across all types of apology strategies in both the apology move and the repair move, as well as the supportive strategies, the explicit expression of apology was used by participants with the most frequency and repetition.

Participants particularly favoured the use of the explicit apologies *dispiacersi* and *scusarsi*, and both intensifiers and markers of reiteration were often used as modifiers. While a comparison of learner data to native speaker control groups was not within the scope of the preliminary research presented in this paper, these results align with the aforementioned findings of other scholars that *I'm sorry* is the most common explicit apology expression performed by native speakers of English and that modifiers are often used by English speakers to strengthen explicit apology performance (Holmes, 1990; Trosborg, 1995; Wyatt, 2014). Therefore, based on this small comparison, it seems that even when writing in Italian, the Australian learners lean towards some norms of English communication, and it would be valuable to investigate this more deeply in further research. For example, data collected from native speakers of Italian could offer further insights into whether this is a case of positive or negative pragmatic transfer.

4.1.2. Providing an explanation

Like in Olshtain and Cohen's (1983) typology of apology strategies, this strategy involves providing an account of why the offence occurred. In Nuzzo's (2007) typology, these explanations are termed *justifications*

[7] In the English translations provided in this paper, "(formal)" has been used to indicate instances of formal pronouns and conjugation of verbs in Italian, while "(informal)" indicates the use of informal pronouns and verbal conjugation.

(in Italian, *giustificazioni*). In providing an explanation, reference may be made either to personal or external factors. In using this strategy, participants offered reasoning or causes for the offence which went beyond the information provided in the DCT prompt to which they were responding. The first two examples below evidence a personal explanation (in this case, illness), while the third and fourth refer to external factors.

Table 5
Examples of providing an explanation

Example from the data	English translation	Scenario[8]
Oggi, mi sento veramente male, e devo andare dal dottore	Today, I feel really ill, and I need to go to the doctor	Group presentation
Sfortunatamente sono malato quindi non sarò in classe per fare la presentazione	Unfortunately, I am ill therefore I won't be in class to do the presentation	Group presentation
Sto viaggiando e non riuscirei a pagarti in tempo	I am travelling and won't be able to pay you (informal) in time	Unpaid rent
Non ho lavorato molto questa settimana[9]	I did not work much this week	Unpaid rent

Providing an explanation was the second most frequent strategy in the apology move, appearing in 190 of the emails elicited from participants. The length of explanations can be variable, and some of the explanations in the corpus were therefore more elaborate than others.

4.1.3. Statement of fact

In stating the facts of what has occurred, the offender acknowledges the incident or event which has caused offence. However, this statement does not acknowledge the offender's responsibility in causing the offence. Nor does it include any information outside of that which is provided in the DCT prompt. While acknowledging that the offence has occurred, the *statement of fact* does not attempt to account for or explain this offence in any way. Examples from the corpus include:

Table 6
Examples of statements of fact

Example from the data	English translation	Scenario
Non posso pagare il pagamento per questo mese in tempo	I can't pay the payment for this month in time	Unpaid rent
Non posso incontrare questo pomeriggio	I can't meet this afternoon	Cancelled meeting

Statements of fact appeared in only 95 emails and thus were used with much less frequency than the two previously discussed strategies in the apology move, possibly because this strategy reflected information already included in the DCT prompt.

4.1.4. Acknowledgement of responsibility

In this strategy, the composer explicitly assumes responsibility for having committed the offence and acknowledges that they are at fault. They therefore go beyond simply acknowledging events and instead place themselves as the actor who has committed the offence, as underlined in the examples below. This strategy was also present in previously discussed typologies (including Nuzzo, 2007; Olshtain & Cohen, 1983).

[8] Included here to provide context for the explanations.
[9] The scenario to which this refers is not being able to pay rent on time. In Appendix C, this scenario is titled *Affitto non pagato* (in English, "Unpaid rent").

Table 7
Examples of explicit acknowledgements of responsibility

Example from the data	English translation	Scenario
Ho realizzato che ho portato due dei vostri caricabatterie con me a Sydney	I realised that I brought two of your (plural) chargers with me to Sydney	Accidental theft
Non ho soldi, ho dimenticato	I don't have money, I forgot	Unpaid rent

The explicit acknowledgement of responsibility was not a common strategy across the corpus, appearing in only 42 emails. Interestingly, it was the only apology strategy which was never used more than once in any single email.

4.1.5. Expressing lack of intent

Finally, one can also make clear that the offence was not committed intentionally by expressing their lack of intent in committing the offence, a strategy also present in Nuzzo's (2007) data. Examples from participants' emails include:

Table 8
Examples of expressing lack of intent

Example from the data	English translation	Scenario
Non so come sono finiti insieme ai miei …	I don't know how they ended up with mine …	Accidental theft
Per sbaglio	By mistake	Accidental theft

This was the strategy used with the lowest frequency, as only 26 responses included expressions which demonstrated the composer's lack of intent in committing the offence.

4.2. The repair move

The repair move is less variable and less complex than the apology move, as it consists of only one possible strategy, the *expression of repair*. In this strategy, one makes implicit or explicit offers of or requests for reparation after an offence has been committed. Hence, the term *expression of repair* was adopted in my typology, rather than *offer of repair* which was included in other aforementioned typologies (e.g., Nuzzo, 2007; Olshtain & Cohen, 1983), as "expression" is a much broader term and therefore encompasses a wider range of utterances, as were present in the data.

What this reparation consists of may be specified or unspecified, and like explanations for the offence, some participants' attempts at repair were more elaborate than others. Regardless of whether participants phrased repair through requesting action from the interlocutor or by offering action themselves, these attempts at reparation were coded as one strategy, as the overall outcome was an attempt at reparation. Examples from the corpus include:

Table 9
Examples of expressions of repair

Example from the data	English translation	Scenario
Pago subito con l'affitto per il prossimo mese anche	I will pay immediately, with the rent for the next month as well	Unpaid rent
Ve lo mando per posta subito	I will send it to you (plural)[10] via post immediately	Accidental theft
Possiamo incontrarci un'altro giorno?	Can we meet another day?	Cancelled meeting
È possibile di incontrarci un altro giorno? Avrò tempo dal lunedi al giovedi la prossima settimana.	Is it possible to meet another day? I will have time from Monday to Thursday next week.	Cancelled meeting

[10] In English translations, "(plural)" indicates plural pronouns. In unmarked instances, pronouns are singular.

The inclusion of *expressions of repair* was very common. Of all strategies in the data set, this strategy appeared most frequently across the corpus, as 285 emails included an *expression of repair*. However, this strategy was repeated less often than the *explicit apology expressions*, as the total number of instances in the corpus was only 292.

Despite the fact that the repair move was not essential to the structure of the apology act, most participants preferred to include an *expression of repair* in their emails. This therefore indicates that repair was perceived by many participants as an important element of the apology act structure. Indeed, overall, across the two moves, the three apology strategies most frequently used by participants across the corpus were the *explicit expression of apology*, *expression of repair*, and *providing an explanation*. These also happened to be the strategies which were most often used in combination with each other within a single email.

4.3. Supportive strategies

Several supportive strategies external to both the apology and repair moves were also identified. As the name suggests, these strategies serve to strengthen the apology act. The data indicated that any number of supportive strategies may be used in any order prior to or following either an apology move or a repair move.

Four supportive strategies were identified in the data, and they are all included in Table 10, with a description and examples.

Table 10
Supportive strategies external to the apology and repair

Supportive strategy	Description	Example(s) from the data	English translation
Expressions of thanks or other politeness remarks	Expression of thanks, compliments, or other expressions which indicate a move towards the restoration of balance/harmony.	*1. Grazie mille per invito alla sua casa*	1. Thank you very much for the invitation to your (formal) house
		2. Sono cosi fortunata per avere te nella mia vita	2. I am so fortunate to have you in my life
Expressing concern for or justification of the offended party	Explicit concern for the feelings or wellbeing of the offended party, or an expression of understanding of the fact that the offended party has taken offence. This includes expressions which verify the gravity or impact of the offence.	*1. Mi rendo conto che questo non fa bene e che sarà impatto piani che lei ha per il suo giorno*	1. I realise that this is no good and it will impact the plans that you (formal) have for your (formal) day
		2. Spero che non sia un grande problema	2. I hope that it isn't a big problem
Minimizing the degree of offence	The offence is minimized, either by being presented as being insignificant or unimportant, or by questioning the preconditions of the offence.	*1. Ho un piccolo problema*	1. I have a little problem
		2. Per favore ricordisi che non ho mai dimenticato a pagare prima di oggi!	2. Please remember that I have never forgotten to pay before today!
Promise of forbearance	A promise that the offence will not occur again in the future or that the behaviour of the offender will improve in future.	*Promesso che non suceddere da nuovo …*	I promise that it won't happen again …

While there are some similarities between the strategies presented above and the previously presented typologies presented by other scholars, there are also differences. The *promise of forbearance* was included as one of Olshtain and Cohen's (1983) five apology strategies; however, in the data for the present project, *promises of forbearance* were not used alone by participants as a sole apology strategy. Instead, *promises of forbearance* were used only when another apology strategy had been used in the same email and therefore these were coded as supportive strategies rather than as apology strategies in and of themselves. This may be due to the fact that emailed apologies are usually explicit, possibly because there may be less

shared context between writer and recipient of the email than there might be with interlocutors of an oral interaction.

Minimizing the degree of offence and *expressing concern for or justification of the offended party* were also present in Trosborg's (1995) and Nuzzo's (2007) analytical frameworks; however, in Nuzzo's framework, the latter is termed *verification of the gravity of the offence*. However, while Trosborg's typology treated both of these as apology strategies and Nuzzo treated the latter as an apology strategy, in my typology, they are supportive strategies which are external to the apology and repair moves. This is because their function did not align with the function of either of the moves, and these strategies were always used in combination with one or more strategies in the apology and/or repair move(s). Hence, these strategies were used to modify the force of the apology act, rather than to enact the apology itself.

In addition to these three strategies adapted from previous literature, the data also evidenced a prevalence of *expressions of thanks or other politeness remarks*, which was by far the most frequently occurring supportive strategy. These expressions of thanks were not accounted for by other typologies; however, their frequency in the data indicated that this mitigative supportive strategy was valuable in building rapport and supporting the apology and repair moves.

Table 11
Participants' use of supportive strategies

Supportive Strategy	Number of Emails Including this Strategy
Expressions of thanks or other politeness remarks	53
Expressing concern for or justification of the offended party	25
Minimizing the degree of offence	11
Promise of forbearance	2

As Table 11 demonstrates, *expressions of thanks or other politeness remarks* were favoured above the other supportive strategies, appearing in 53 of the emails. Several emails also included multiple instances of this supportive strategy. *Expressions of thanks or other politeness remarks* could comprise multiple clauses and was therefore quite elaborate at times; therefore, there was variation in how this strategy was realised.

Expressions of concern for or justification of the offended party was less common, appearing in only 25 emails within the corpus. These were similar to Nuzzo's (2007) verification of the gravity of the situation (*verifica di gravità*); however, the term *expressions of concern for or justification of the offended party* was used to more accurately represent the types of expressions performed by the participants.

The other two strategies were used with even lower frequency. There were 11 instances of *minimizing the degree of offence* and two of the *promise of forbearance*. Unlike the other two more frequent supportive strategies, neither of these was ever used more than once by a participant in a single email.

4.4. Quantitative summary

In summary, the strategy most frequently performed by participants was the *explicit expression of apology*, which was closely followed by the *expression of repair*. Hence, it seems that explicit apology and repair are key elements of emailed apologies. To a lesser degree, participants often *provided an explanation*, indicating that this too is a popular apology strategy.

Table 12 demonstrates all occurrences of all apology strategies in the data. It illustrates both the number of email responses which included each strategy at least once ("Number of responses") and the total number of times that each of the strategies was present in the whole data set, including multiple instances of the one strategy within a single response ("Total number of instances").

Table 12
Summary of strategies across the corpus

Move/ Strategy	Sub-strategy	Number of Responses	Total Number of Instances
Apology	Explicit expression of apology	272	345
	Providing an explanation	191	190
	Statement of fact	96	95
	Explicit acknowledgement of responsibility	42	42
	Expressing lack of intent	26	28
Repair	Expression of repair	285	292
Supportive strategies	Expressions of thanks or other politeness remarks	53	58
	Expressing concern for or justification of the offended party	25	28
	Minimizing the degree of offence	11	11
	Promise of forbearance	2	2

5. Discussion

The email data elicited in this project was used to present a typology of emailed apologies as performed by Australian learners of Italian. As established in Section 2 of this paper, the use of speech act strategies can change across language and cultural groups, and even within these groups, variation may exist. What this paper therefore offers is a particular snapshot of language use: Italian L2, as used by Australian university students. The typology thereby outlined in this paper, drawing upon other studies in the field and existing typologies of apology performance, was adapted with the aim of presenting a typology which is consistent with and adequately represents the performance of apologies by all participants in the project, and by extension, of the Italian L2 speakers within this particular context. In doing so, the paper answered the research question: *What moves and strategies are used by learners of Italian in accomplishing emailed apologies?*

All apology speech act sets performed by participants involved an apology move. This apology move was comprised of any one or a combination of five explicit and implicit apology strategies – namely, *explicit expression of apology*, *providing an explanation*, *statement of fact*, *explicit acknowledgement of responsibility* and *expressing lack of intent*. Any of these strategies could be used either in isolation or together with any of the other strategies of the apology move. The most common strategy was the *explicit expression of apology*, which was often modified to increase its strength. What is important to note here is that the apology move could be achieved even without an explicit IFID being used, demonstrating that the apology is indeed a varied speech act.

While not essential, most apology acts also involved a repair move. This was achieved through an *expression of repair*, indicating that remedy is a key element of apology structure, a finding which aligns with the previously established characterisation of apologies as acts which restore harmony in interactions and thereby maintain relationships (Businaro, 2002; Cheng, 2017; Jones & Adrefiza, 2017; Kasanga & Lwanga-Lumu, 2007; Martínez-Flor & Beltrán-Palanques, 2014; Trosborg, 1987).

In addition to the apology and repair moves, the apology act may include a number of supportive strategies. These are not vital to the structure of the apology act but can be included in the apology act at any point to strengthen the illocutionary effect of the apology and therefore mitigate the offence.

Drawing upon previous literature and demonstrating some similarities to existing typologies considered in Section 1.2, the adapted typology of apologies offered in this paper includes some key differences. The apology move structure presented in this paper, although largely modelled on Olshtain and Cohen's (1983) typology of apologies, also incorporates two strategies identified by Nuzzo (2007) and Trubnikova (2017), the *statement of fact* and *expressing lack of intent*. My typology also offers a distinction between two types of IFID modification, *intensification* and *reiteration*, as a means of more specifically analysing the ways in which participants achieved *explicit expressions of apology*.

Furthermore, the *promise of forbearance*, rather than being included as an apology strategy (as in Olshtain & Cohen, 1983), was instead identified in my typology as a supportive strategy. This was also the case for the strategies of *minimizing the offence* and *expressing concern for or justification of the offended party*, which Trosborg (1987) categorized as stand-alone apology strategies, but which I treat as supportive strategies

instead. The reason for this is that each of these strategies, although present in my data, were never used on their own to achieve an apology. Rather, they were always used in support of other identified apology strategies, and were therefore characterised as supportive strategies. The difference in how these strategies were used by participants of other studies and in my study may be due to the nature of the communication – in a single email, the speech act stands alone and may be more explicit, while in face-to-face communication or even a longer email exchange, this may not be the case.

While non-existent in previous typologies of apology, the *expression of thanks/politeness* was identified in my typology as a supportive strategy. As email communication can be more structured and formal than oral speech and *expressing thanks/politeness* can be a formulaic strategy used in emails to establish rapport. This supportive strategy is particularly relevant to the context of email communication, a medium which had not been explored by previous studies considered in this research.

In adapting typologies of apologies as presented in the literature and in presenting a typology which reflects the data collected in my research rather than imposing an existing typology on the data, this paper presents a typology of apologies that reflects the particular context of the Italian language as performed by Australian learners of Italian.

The wide variety of apology strategies identified in the data signifies that it is possible for written apology performance to be quite elaborate and complex. Indeed, within the structure of the typology discussed in this paper, there was a deal of variation in how apologies were achieved by participants. The emailed apology act can contain multiple elements which may be arranged in numerous ways, and the data demonstrates that the structure of the apology act in email communication is quite flexible. In addition, the length and elaboration of the elicited emails varied greatly, suggesting that there is no single or concrete structure for apology performance – indeed, these are factors which could be determined by the individual communication preferences and styles of participants, which of course varies significantly. The question which therefore arises is whether certain apology strategies might be more or less effective in achieving apology, which is one of the concerns of my current doctoral research. At this point, what is clear is that written apology performance by Australian learners of Italian is very varied, as noted by other aforementioned studies of apology performance (see Section 2 and Cohen & Olshtain, 1985; Coulmas, 1981; Lakoff, 2015; Suszczyńska, 1999).

6. Implications

6.1. Implications for research

As established throughout this paper, while some apology strategies may be universal, a great deal of variation can affect how they are performed. Therefore, it is essential to reconsider and revaluate speech act performance and structure as new data is collected, as the reconsideration of speech act typologies may reveal more than the unquestioned imposition of existing typologies onto this new data. Such revaluation can reveal greater diversity in language use across languages, cultures, and contexts, and is therefore very valuable.

As a pilot study of apologies in the context of Italian language learning in Australia, the research presented in this paper and in Walker (2017) is a steppingstone in understanding L2 apology performance in a new context. As such, there is scope for further research within this space, as further discussed in Section 8, and I am also continuing this research in my doctoral studies.

6.2. Implications for practice

The process of reassessment and learning mentioned above can also be valuable in the pedagogical context. The typology outlined in this paper offers a means of understanding how Australian learners of Italian construct apology emails. This provides a benefit to Italian language teachers in that the typology can be a means of analysing learners' construction of apology emails—and indeed, typologies of other speech acts can be used to analyse other text types.

Such typologies can then be used to identify strengths and possible areas of improvement in learners' written work, and can also be used in student feedback to help learners to understand elements of texts and which strategies should be included in certain text types. In addition, such typologies may be used to explicitly teach language learners how to perform speech acts.

Hence, through developing stronger understandings of how learners of a language use that language, those involved in language education can gain insight into how to support the learners' development of pragmatic knowledge. This is particularly true if one can compare the language use of these learners to that of native speakers, the anticipated benefit of which is further discussed in Section 8 of this paper.

7. Conclusion

This paper presents insightful findings regarding the performance of emailed apologies by Australian learners of Italian. The typology of apologies presented in this project, formulated from the data collected with reference to previous typologies, represents written apology performance in the intercultural and second language context. While it draws upon typologies presented by other scholars, the typology offered in this paper is adapted to the analysis of apologies as performed in email communication by Australian learners of Italian.

As my data demonstrates, the speech act of apology can be achieved in various forms. Apology structure is particularly flexible in the context of a longer text such as an email, and this allows for the formulation of an apology sequence which is unique. Specifically, while the emails composed by the participants adhered to the general structure of an apology move followed by an optional repair move, the specific strategies chosen to accomplish each of these moves and the supportive strategies which were performed varied in expression, order, and number. Thus, the emailed apology is of great investigative interest, especially in the area of pragmatics.

This flexibility of apology performance suggests that, particularly in the context of language acquisition and second language use, interlocutors should be aware of the diverse strategies whereby apologies may be performed. This diversity is also important to address in the pedagogical context. Research currently being undertaken by the author extends upon the findings of this pilot study and extrapolates upon these themes by i) comparing the apology performance of learners of Italian to native speakers of Italian and Australian English, and ii) investigating how different apology strategies performed in student emails are received by recipients. It is hoped that this further research will provide a deeper understanding not only of apology structure, but also of the impact of apology communication, and that research into the impact of apology communication may provide insights regarding, and have implications for, the way in which apologies are taught to learners of Italian.

8. Limitations of the study and opportunities for further research

As a pilot study, this paper offers valuable methodological and analytical considerations for further research, though it does have some limitations. As with any data elicitation process, there are task effects which may have influenced the decisions made by participants. The main effect to acknowledge is the fact that not all apology strategies can be used in all situations. This is true, for example, of *expressions of repair*, the necessity of which can vary significantly depending on situational variables (Trosborg, 1995). The type of repair which may be suggested for an offence is very much contingent on situational factors. The use of some supportive strategies is also contextually bound; one cannot, for example, promise to never again fall ill and therefore to never again miss a day of class (an example of a *promise of forbearance*). This variability indicates that, at least in regard to some elements of their emails, participants' constructions of the apology act were influenced by the DCT prompt to which they were responding; therefore, this research can present apology act performance only in relation to particular scenarios, rather than a broad overview of all possible apologies in all possible contexts.

In the same line, a possible avenue for future research could involve comparing participants' emailed apologies to oral apologies performed in similar contexts. This would allow for an investigation of how similarly – or differently – Australian learners of Italian perform verbal and written apologies. Hatipoğlu's (2004) findings suggest that explicit apologies would be performed differently in verbal and written forms; however, investigating the comparison may also reveal whether the typology presented in this paper is specific only to written communication, or whether it might account for both written and oral communication.

Another limitation to acknowledge is that each individual, regardless of cultural and linguistic factors, may favour certain apology strategies above others. This individual variation was not accounted for in this paper. Other scholars have investigated such variables in retrospective interviews conducted after written data collection (e.g., Chen, 2015; Cheng, 2013; Frescura, 1995; Lipson, 1994), but this was outside the scope of the research presented in this paper. Such interviews are a key element in my current doctoral research, as they provide insight into participants' linguistic choices and thereby allow for a more holistic exploration of the structure of written apologies.

A further extension on this research will be the comparison of apologies performed by Australian learners of Italian to native speakers of both Italian and Australian English. Such analysis will provide benchmarks of comparison which may reveal just how closely the apology performance in Italian of Australian

learners of Italian aligns with both Italian and Australian English. This comparison of learner performance with native speaker control groups forms another aim of my current doctoral research project, and it is expected that the analysis of emailed apologies across these three participant groups will provide much more revealing insights into learner apology construction.

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Appendix A

DCT SCENARIOS AND INTERLOCUTOR VARIATIONS

Scenario name	Description	Interlocutors
Cancelled meeting	While interning in an Italian firm, participants had scheduled a meeting, but were no longer able to attend	Fellow intern / boss
Group presentation	Participants were to present an assessment task in class the following day, but had fallen ill	Classmate / professor
Unpaid rent	Participants were living and travelling in Italy and were unable to pay their rent on time	Flatmate / landlord
Accidental theft	After having stayed with a friend and his mother in Italy, participants discovered that they had accidentally taken two chargers which were not theirs	The friend / friend's mother

Appendix B

DCT INSTRUCTIONS TO PARTICIPANTS

In this task, you will be asked to respond to four different situations via email. In each situation, there will be two versions of the situation. You are asked to complete both versions, totalling eight responses.

All scenarios are set in Italy.

The following task is written in Italian and challenging terms will also be provided in English.

At the end of each, you will be asked to rate the scenario in regards to the social distance between yourself and your interlocutor, your interlocutor's status in relation to your own and the severity of your offence.
In this task, the italicised terms are defined in the following ways:

Social distance: how well known the participants are to each other, ranging from strangers to intimates
Status of interlocutor: the degree of power held by the interlocutor, i.e. if their social position within the interaction is higher, equal to, or lower than the speaker
Severity of offence: the 'seriousness' of and extent of damage caused by the offence for which the apology is being offered

You should respond to the eight scenarios as per the example below:

Example Scenario:
You are not feeling well and so you will be absent from today's lecture. You know that the student who sits beside you will be attending and that she always takes detailed notes.
If you were to write an email to her, what would you write?

Example Response:
Hi Elena,
Sorry to be a bother, but I wanted to ask you a favour. I won't be in class today because I'm sick, so I was wondering if you could send me your notes from today's lecture?
Thank you so much!
Jessica

Appendix C

DCT PROMPTS (IN ITALIAN)

Appuntamento cancellato

A.
Mentre stai facendo uno stage (internship) in un'azienda italiana, organizzi di incontrare un altro stagista (intern) italiano alle due di pomeriggio. Però, non puoi più incontrarlo.
Se gli scrivessi un'email, cosa scriveresti?

B.
Mentre stai facendo uno stage (internship) in un'azienda italiana, organizzi di incontrare il tuo capo alle due di pomeriggio. Però, non puoi più incontrarlo.
Se gli scrivessi un'email, cosa scriveresti?

Presentazione

A.
Tu e una compagna di classe (classmate) state facendo un compito che deve essere presentato in classe domani, ma stai male e non riuscirai a essere in classe per fare la presentazione.
Se scrivessi un'email alla tua compagna di classe, cosa scriveresti?

B.
Tu e una compagna di classe (classmate) state facendo un compito che deve essere presentato in classe domani, ma stai male e non riuscirai a essere in classe per fare la presentazione.
Se scrivessi un'email alla tua professoressa, cosa scriveresti?

Affitto non pagato

A.
Mentre sei in Italia, condividi un appartamento con un'altra escursionista (backpacker) e devi pagare l'affitto (rent) ogni mese. La data per il pagamento è entro quattro giorni, ma stai viaggiando e non riuscirai a pagare il tuo proprietario (landlord) in tempo.
Se gli scrivessi un'email, cosa scriveresti?

B.
Mentre sei in Italia, condividi un appartamento con un'altra escursionista (backpacker) e devi pagare l'affitto ogni mese. La data per il pagamento è entro quattro giorni, ma stai viaggiando e non riuscirai a pagare la tua coinquilina (flatmate) in tempo.
Se le scrivessi un'email, cosa scriveresti?

Furto accidentale

A.
Sei appena tornato/a a Sydney dopo un periodo a Verona dove stavi a casa di un amico e di sua madre. Mentre stai disfacendo le valigie (unpacking), scopri due dei loro caricabatterie (chargers) insieme ai tuoi.
Se scrivessi un'email al tuo amico, cosa scriveresti?

B.
Sei appena tornato/a a Sydney dopo un periodo a Verona dove stavi a casa di un amico e di sua madre. Mentre stai disfacendo le valigie (unpacking), scopri due dei loro caricabatterie (chargers) insieme ai tuoi.
Se scrivessi un'email alla madre del tuo amico, cosa scriveresti?

Appendix D

DCT PROMPTS (IN ENGLISH)

Cancelled Meeting

A.
While completing an internship in an Italian firm, you agree to meet one of your Italian fellow interns at 2pm. However, you can no longer make it.
If you were to write an email to him, what would you write?

B.
While completing an internship in an Italian firm, you agree to meet your boss 2pm. However, you can no longer make it.
If you were to write an email to him, what would you write?

Please write your email below, using as little or as much space as you feel to be necessary:

Group Presentation

A.
You and a classmate are completing an assessment task which will need to be presented tomorrow, but you are ill and cannot make it to class to present.
If you were to write an email to your partner, what would you write to her?

B.
You and a classmate are completing an assessment task which will need to be presented tomorrow, but you are ill and cannot make it to class to present.
If you were to write an email to your professor, what would you write to her?

Unpaid Rent

A.
While in Italy, you are staying in an apartment and you must pay your rent monthly. The due date for next month's rent is in four days' time, but you have been travelling and won't be able to pay your landlord in time.
If you were to write an email to him, what would you write?

B.
While in Italy, you are sharing an apartment with another backpacker and you must pay your rent monthly. The due date for next month's rent is in four days' time, but you have been travelling and won't be able to pay your flatmate in time.
If you were to write an email to her, what would you write?

Accidental Theft

A.
You have just returned to Sydney after visiting a friend and his mother for several months in Verona. When unpacking, you discover two of their chargers caught up amongst your own.
If you were to write an email to your friend, what would you write?

B.
You have just returned to Sydney after visiting a friend and his mother for several months in Verona. When unpacking, you discover two of their chargers caught up amongst your own.
If you were to write an email to your friend's mother, what would you write?

Appendix E

ENGLISH TRANSLATION OF PARTICIPANT EMAIL

Dear [name],

First of all, I need to thank you (form.) once again for your (form.) incredible hospitality. My time in Verona was amazing and the friendship of your (form.) family was a large part of that unforgettable experience. I have just arrived home and have discovered that unfortunately I took two of your (form.) (phone)chargers with me. I ask your (form.) forgiveness for this mistake! I think that it would be best if I send them to you (form.) straight away. I'll go to the post office this afternoon. But in any case I believe that you (form.) were probably looking everywhere for those things and hence I would like to tell you (form.) they took a big journey with me!

Thank you very much for everything and I'm sorry for that error.

With affection,
[name]

Talia Walker, University of Sydney
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EN **Talia Walker** is a doctoral candidate in the Department of Italian Studies at the University of Sydney, investigating the performance of apologies by learners of Italian at Australian universities. Her interests lie within the fields of pragmatics, intercultural communication, and language acquisition. In recent years, Talia held research and teaching positions at the Australian National University, the University of Sydney, and UTS College.

ES **Talia Walker** es estudiante de posgrado en el Departamento de Estudios Italianos de la Universidad de Sydney, donde se ocupa de la investigación sobre la formulación de disculpas enviadas por e-mail por los estudiantes de italiano en las universidades australianas. Sus intereses incluyen los ámbitos de la pragmática, de la comunicación intercultural y del aprendizaje de la lengua. En los últimos años, Talia ha ocupado puestos de investigación y enseñanza en la Universidad Nacional de Australia, la Universidad de Sydney y el UTS College.

IT **Talia Walker** è dottoranda presso il Dipartimento di Italian Studies dell'University of Sydney, dove fa ricerca sulla formulazione di scuse da parte degli studenti di italiano nelle università australiane. I suoi interessi includono gli ambiti della pragmatica, della comunicazione interculturale e dell'apprendimento della lingua. Negli ultimi anni, Talia ha ricoperto incarichi di ricerca e insegnamento presso l'Università Nazionale Australiana, l'Università di Sydney e l'UTS College.

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Voice onset time (VOT) of L3 Spanish /ptk/ by multilingual heritage speakers of Ukrainian and Polish

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ABSTRACT

EN This study provides an acoustic analysis of voice onset time (VOT) of voiceless stops /ptk/ in Spanish, produced by heritage speakers (HSs) of Ukrainian and of Polish who are English-dominant and beginner or intermediate learners of Spanish as a third language (L3). Given that both Ukrainian and Polish, like Spanish and unlike English, are characterized by short-lag VOT, data were collected from six Ukrainian HSs and 11 Polish HSs in their heritage language (HL), in English, and in Spanish to compare potential effects of the HL on L3 VOT production. VOT was analyzed in three task types. The goals were: 1) to determine whether VOT values produced in Spanish by Ukrainian and Polish HSs are more reflective of VOTs in the HL or in English, and 2) to determine the effect of task type on VOT. Data show that Ukrainian and Polish HSs' VOTs in Spanish are shorter than those of L2 Spanish learners whose L1 is English, indicating a HL rather than dominant language influence on L3 VOT. Results suggest that the most crucial factors in L3 phonological acquisition are: 1) structural similarity between HL and L3, and 2) L3 proficiency (not language dominance). VOT was also affected by task type: like L1 Spanish speakers, VOT of Ukrainian HSs increases as task formality increases. This paper fills research gaps in HL and L3 phonetics/phonology as to the effects of a HL on the acquisition of subsequent sound systems in adulthood.

Key words: L3 PHONOLOGY, HERITAGE LANGUAGE PHONOLOGY, CROSS-LINGUISTIC INFLUENCE, VOICE ONSET TIME (VOT), L3 LEARNING

ES Este estudio ofrece un análisis acústico del tiempo de emisión de voz (VOT, *voice onset time*) de las oclusivas sordas /ptk/ en español, producidas por hablantes de herencia (AH) de ucraniano y polaco cuya lengua dominante es el inglés y que aprenden español como L3 a nivel inicial o intermedio. Dado que tanto el ucraniano como el polaco, al igual que el español y a diferencia del inglés, se caracterizan por un VOT de lazo corto, se recopilaron datos de seis AH ucranianos y 11 AH polacos en su lengua de herencia (LH), en inglés y en español. Los objetivos eran determinar: 1) si los VOT producidos en español por estos AH reflejan más la LH o el inglés, y 2) el efecto del tipo de tarea. Los datos muestran que los VOT en español de los AH de ucraniano y de polaco son más cortos que los de estudiantes de español L2 cuya L1 es el inglés, lo que indica una influencia de la LH –no de la lengua de dominancia– en la producción de VOT. Los resultados sugieren que los factores más cruciales en la adquisición fonológica de la L3 son: 1) similitud estructural entre la LH y la L3, y 2) competencia lingüística en la L3. El VOT de los AH ucranianos aumenta conforme aumenta la formalidad de la tarea. Este trabajo llena las lagunas de la investigación en fonética/fonología de LH y L3 en cuanto a los efectos de una LH en la adquisición de sistemas sonoros posteriores en la edad adulta.

Palabras clave: FONOLOGÍA DE L3, FONOLOGÍA DE LA LENGUA DE HERENCIA, INFLUENCIA INTERLINGÜÍSTICA, VOT, APRENDIZAJE DE L3

IT Questo studio fornisce un'analisi acustica del tempo di attacco della sonorità (VOT, *voice onset time*) delle occlusive sorde /ptk/ in spagnolo da parte di apprendenti di livello base o intermedio di spagnolo come L3 che sono i parlanti di ucraino e polacco come lingue ereditarie (LE) ma con l'inglese come lingua dominante (LD). I dati sono basati su sei parlanti di ucraino LE e undici di polacco LE. Il VOT è analizzato in tre lingue—LE, inglese e spagnolo—con l'obiettivo di determinare 1) se i valori di VOT prodotti in spagnolo dagli ucraini e dai polacchi riflettono di più la LE o la LD, 2) gli effetti del tipo di esercizio sul VOT. I dati dimostrano che i VOT in spagnolo dei parlanti di ucraino e polacco come LE sono più brevi di quelli degli apprendenti di spagnolo L2 con inglese L1. Ciò indica che la LE influenza la produzione del VOT rispetto alla LD. I risultati suggeriscono che nell'acquisizione fonologica di una L3 sono cruciali: 1) la similarità strutturale tra LE e L3, e 2) la competenza nella L3. Inoltre, come per i parlanti di spagnolo L1, il VOT dei parlanti di ucraino aumenta con l'aumentare della formalità dell'esercizio. Questo articolo colma un vuoto nello studio della LE e della fonetica/fonologia della L3 relativo agli effetti di una LE sull'acquisizione di un successivo sistema di suoni nell'età adulta.

Parole chiave: FONOLOGIA DELLA L3, FONOLOGIA DELLA LINGUA EREDITARIA, INFLUENZA CROSS-LINGUISTICA, VOT, APPRENDIMENTO DELLA L3

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1. Introduction

Over roughly the last decade, the field of third language (L3) phonetics and phonology has gained significant traction. Scholarship during this period has aimed to determine whether it is structural similarity (Rothman, 2015) or language dominance (Hammarberg & Hammarberg, 2005; Llama & López-Morelos, 2016; Wrembel, 2010, 2014, 2015) that is most influential in L3 phonetics and phonology.[1] Furthermore, since the turn of the century, but mostly within the last decade, the study of heritage language (HL) phonetics and phonology has also gained wider recognition. Studies on Spanish and Slavic heritage speakers (HSs) (e.g., Łyskawa et al., 2016; Nagy & Kochetov, 2013; Rao & Ronquest, 2015; Ronquest & Rao, 2018) show that HSs are a heterogeneous group of speakers who do not always perform like native monolingual speakers or late bilinguals, but have more native-like productions than second language (L2) learners, with accuracy often correlating with frequency of HL use. The goal of this investigation is to combine these two areas of multilingual phonetics and phonology in order to shed light on speakers of lesser-studied HLs in the United States by examining their experiences learning an L3. The particular focus is on the speech of Ukrainian and Polish HSs and their acquisition of Spanish /ptk/, a consonant series whose features are similar in Spanish and Slavic languages, both of which differ from English. The Ukrainian and Polish HS population in the United States is of a notable size; the 2019 American Community Survey (ACS) stated that there are 8,969,530 people of Polish ancestry in the United States, out of which, 510,430 speak Polish, and the American of Ukrainian descent population reaches 1,009,874, of which 321,876 speak Ukrainian. While these numbers are significant, Ukrainian and Polish are not commonly offered in schools and higher education institutions. Therefore, when choosing to learn an L3, these HSs often pick Spanish, the most popular world language option in the United States, motivated by the increase in career opportunities that knowledge of Spanish provides (Goldberg et al., 2015).

Focusing specifically on two unique groups of speakers, Ukrainian HSs and Polish HSs, allows us to address several questions in one study. First, it helps us understand how language acquisition during childhood influences subsequent language learning in adulthood, allowing us to identify the potential influence of an HL on the acquisition of L3 phonetics and phonology. Second, by selecting HSs whose HL realization of voiceless stops differs from that of the dominant language (DL), but coincides with that of the L3, this study allows us to present evidence as to which language exhibits greater influence on the L3. These aspects, in turn, help inform us whether it is language dominance and/or structural similarity that is/are the most influential during the acquisition of an L3 sound system, which can then inform theoretical frameworks addressing the acquisition of L3 sound systems (see Kopečková et al., 2016). Overall, the results and conclusions from this study on Ukrainian HSs and Polish HSs contribute to a recently growing field of research on HL and L3 phonetics and phonology.

2. Previous research on VOT

In this study, we investigate VOT of Spanish voiceless stops /ptk/. VOT is the interval between the stop burst (i.e., release of contact between articulatory organs) and the onset of vocal fold vibration in a following sound, and is used to differentiate between unaspirated voiceless stops and aspirated stops and to convey contrast between voiced and voiceless segments. Previous research on L2 acquisition has documented that Spanish /ptk/ cause difficulties for first language (L1) English learners of L2 Spanish because they are produced differently in English (see Zampini, 2019 for a summary). Spanish is a language with short-lag VOTs, where /ptk/ are produced with VOT values that are around 30 milliseconds[2] (ms) or shorter (i.e., unaspirated).[3] Ukrainian and Polish, both Slavic languages, also exhibit short-lag VOTs, although VOTs for the velar segment /k/ in Polish can exceed 50 ms. The acoustic analysis of VOT for Polish speakers in Keating et al. (1981) shows mean VOT values below 30 ms for /p/ and /t/. In their analysis, mean VOT values for /k/ slightly exceeded 50 ms, which was unexpected, but potentially influenced by the effect of place of articulation on VOT (Keating et

[1] In this paper, structural similarity refers to the phonetic properties (i.e., voice onset time (VOT)) of the languages investigated (i.e., Ukrainian, Polish, Spanish, and English).

[2] Cho and Ladefoged (1999) showed that velars have the highest VOT values, which can exceed 30 ms in languages with short-lag VOT.

[3] To our knowledge, there are no available data on concrete estimated VOT values for Ukrainian /ptk/. Therefore, we will rely on measurements provided by Ringen and Kulikov (2010), who worked with a group of Russian monolinguals. Since Ukrainian, Polish and Russian all belong to the Slavic language family, which is known for short-lag VOTs, it is reasonable to assume that the VOT values of /ptk/ in Ukrainian would be relatively comparable to those of Polish and Russian.

al., 1980; Lisker & Abramson, 1964). Waniek-Klimczak (2011) found similar VOT values for both /p/ and /k/, lower than 30 ms and slightly above 50 ms, respectively, for native monolingual speakers of Polish. English, on the other hand, exhibits long-lag VOTs, where voiceless stops, specifically those that appear in word-initial and stressed positions, are often produced with VOTs that are longer than 30 ms (i.e., aspirated). In fact, English stops usually have VOTs that are greater than 50 ms (Lisker & Abramson, 1964). In English, short-lag VOT values are reserved for the production of the voiced stops /bdg/, which in Spanish, Ukrainian, and Polish are realized with pre-voicing (i.e., voicing begins before the stop burst) and are described using negative VOT values. This contrast highlights the importance of VOT, which has both phonemic and allophonic consequences in the four languages in question (Cho & Ladefoged, 1999; Lisker & Abramson, 1964; Ringen & Kulikov, 2010; Rosner et al., 2010). Figure 1 presents a waveform and spectrogram image taken from *Praat* (Boersma & Weenink, 2016) highlighting a Spanish production of word-initial [p] in the word *papa* ('potato'), as produced by an L1 speaker of Spanish. VOT in this figure is indicated between the two vertical dotted lines and the time marker label at the bottom. The left vertical dotted line aligns with the stop burst (i.e., beginning of VOT measurement), where the waveform goes from an inactive to an active state, and the right one signals the first periodic cycle of the following [a] (i.e., end of VOT measurement). The VOT measurement of [p] in this figure is 6.8ms, indicative of a short-lag VOT classification, characteristic of Spanish, Ukrainian, and Polish.

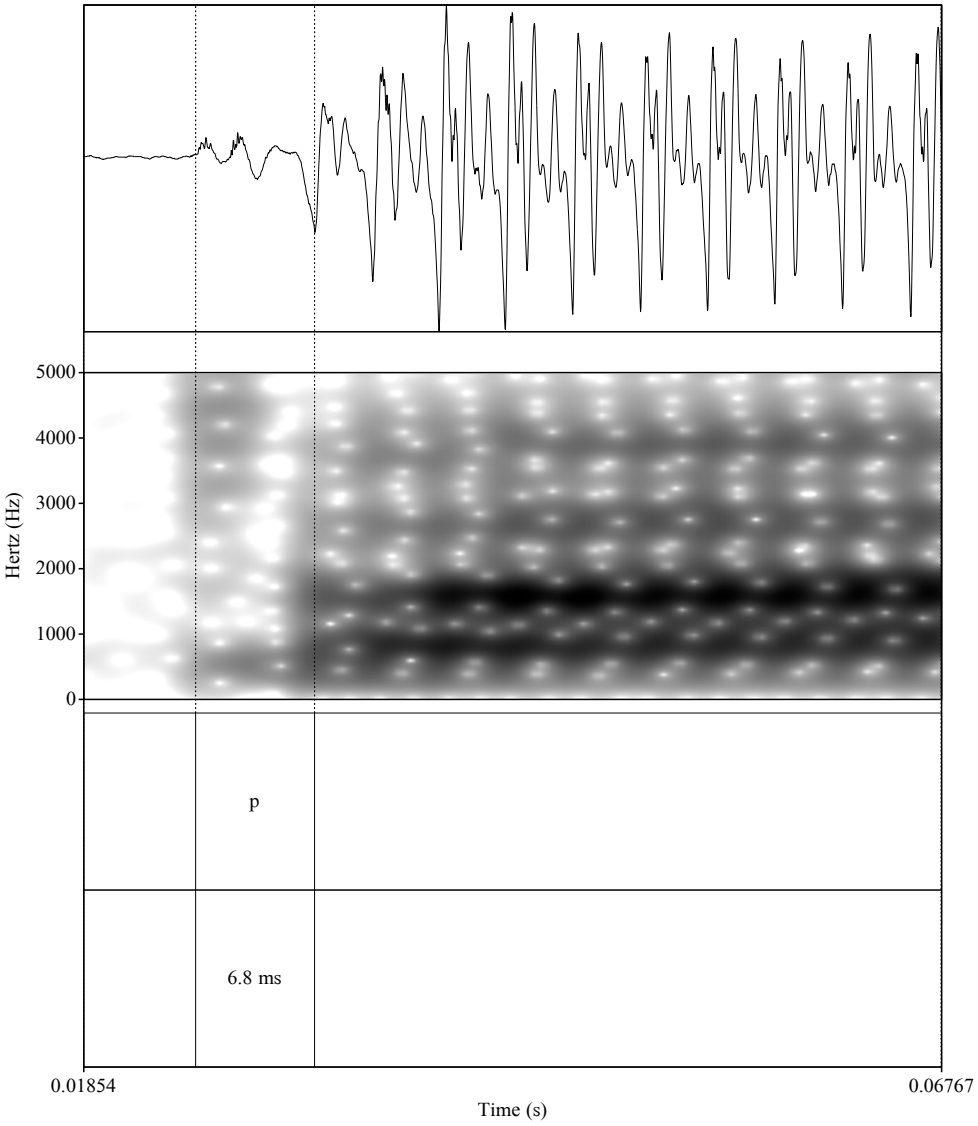

Figure 1. Spanish production of word-initial [p] in *papa* by an L1 Spanish speaker

3. Heritage and L3 VOT

Previous studies on HSs of Spanish have shown that they typically have more native-like productions than L2 learners, with accuracy strongly correlating with frequency of HL use. Au et al. (2008) and Knightly et al. (2003) examined the speech of HSs with different HL experiences and exposure rates, showing that HSs' productions of /ptk/ are more target-like than those of typical late L2 learners, with active HL users performing in a more native-like manner than HL overhearers. Kim (2011) showed that HSs' perception of Spanish /ptk/ also differs significantly from that of native English speakers who are learning Spanish, while showing no significant difference from native Spanish speakers. The studies by Hrycyna (2011) and Nagy and Kochetov (2013), which examined VOTs of Ukrainian and Russian HSs in an English-speaking environment, revealed that production also largely depends on generational shifts, with each generation displaying their own language norms.

When it comes to L3 learners, some studies suggest that L2 status is more influential than the L1 in the production of L3 segments. Llama et al. (2008, 2010) tested VOT production of Canadian L1 English L2 French and L1 French L2 English speakers who were intermediate learners of L3 Spanish and showed that L2 status, not structural similarity, was more significant in the production of L3 stops. Tremblay's (2007) work on L1 English L2 French L3 Japanese learners also examined voiceless stops, and like the previous two studies, found L2 influence to be stronger. Wrembel's (2011, 2014) studies on voiceless stops in the speech of L1 Polish L2 English L3 French and L1 Polish L2 English L3 German speakers, however, revealed contrasting VOT values in all three languages, which the author attributed to a combined influence of both the L1 and L2 on the L3.

Hammarberg and Hammarberg (2005) claimed that during the initial stages of L3 phonological acquisition, the L2 more strongly influences L3 phonology; this claim is supported by evidence from a well-known longitudinal study of an L1 British English L2 German L3 Swedish learner. As the speaker became more familiar with the Swedish sound system, reliance on German gradually reduced. Wrembel (2009) investigated L1 Polish L2 German L3 English speakers' perceived foreign accent in English and corroborated these findings, revealing that the perception of language background depended greatly on the state of L3 proficiency. Participants at higher levels of the L3 were correctly identified as native Polish speakers, while elementary and beginner groups tended to be placed in the L1 German category.

Llama and López-Morelos (2016) studied VOT production in adolescent trilingual HSs (i.e., heritage/L1 Spanish, L1 dominant in English and L3 French). Since Spanish and French are both characterized by short-lag VOT, the authors hypothesized that speakers would have a phonological advantage in the L3 with respect to VOT of /ptk/; however, their findings showed longer VOTs in the L3 in comparison to the monolingual French norm. The authors suggest two possible rationales to explain this divergence, given that the data from their HSs showed that they can and do produce short-lag VOTs in their HL. HSs were either transferring their VOT values from the DL, English, or were imitating the values of their classmates, who served as their main source of French input in the language classroom.

Studies have shown that speech style is another important variable to consider when working with language learners. While some have argued that task formality increases accuracy in L2 learners (Major, 1986), others have presented evidence showing that casual speech results in increased learner accuracy, with Rao (2015) and Zampini (1994) reporting more accurate productions of voiced intervocalic stops in L1 English L2 Spanish learners and Spanish HSs, respectively, in conversational tasks than in reading elicitations. Additionally, by examining vowel production in Spanish HSs, Ronquest (2016) showed vowel space expansion and lengthening in clear speech conditions, such as reading, and centralization of vowels in conversational speech. Finally, Asherov et al.'s (2016) study on Russian HSs demonstrated the value of implementing tasks with nonce words over real words, arguing that the former serve as a useful way of testing whether a phonological process is productive rather than lexicalized.

4. Motivations and research questions

As motivated by the literature reviewed to this point, the goal of this study is to investigate the phonological systems of two groups of Slavic HL speakers, Ukrainian HSs and Polish HSs, both of whom grew up in an English-dominant environment and are acquiring the Spanish sound system as L3 learners. This study sheds light on whether structural similarity between languages or language dominance exhibits the most influence on L3 acquisition. The specific research questions guiding this study are the following:

1) Is VOT production of Spanish /ptk/ by Ukrainian HSs and Polish HSs influenced by knowledge of their HL or DL sound system?
2) What is the effect of task type on VOT of Spanish /ptk/ for Ukrainian HSs and Polish HSs?

Given the structural similarity between the HL of the participants and their L3, Spanish, we hypothesized that this factor will be most influential in L3 production. Since the HLs and the L3 are all characterized by short-lag VOT, we predict that HSs of Ukrainian and Polish will produce shorter VOT values than L1 English L2 Spanish speakers, thus more closely reflecting the short-lag L1 VOT values of L1 Spanish L2 English speakers. Although Ukrainian HSs and Polish HSs are treated as two independent participant groups for this study, we hypothesize that they will both perform similarly with respect to VOT production and task type. Regarding the second research question, previous research suggests that more casual speech, such as that elicited by a narrative task, will yield more accurate VOT production when compared to the more formal speech style of sentence and nonce word reading tasks.

5. Methodology

5.1. Background measures

As emphasized by Cabrelli Amaro (2013), gathering sufficient background information on participants is the very first step to effective L3 research. For this purpose, two questionnaires were utilized. The first of these was a language history questionnaire, adapted from Oh and Au (2005), requesting basic information about place of birth (POB), POB of parents and grandparents, number of years residing in the United States (and age of arrival, if applicable) and outside of the country, places of residence, and current language use and self-perceived dominance. The speakers were also asked to self-assess their speaking, understanding, reading, and writing performance in Spanish on a 0-6 Likert scale.

The HS groups were also administered the Bilingual Language Profile (BLP) (Birdsong et al., 2012), which was developed to assess language dominance through self-reports.[4] It inquires about a variety of factors, such as age of acquisition and exposure, years of schooling, frequency and function of use, linguistic environment, language attitudes, and proficiency and processing ability. The final score ranges from -218 to +218, with a result closer to zero demonstrating that an individual is a balanced bilingual and more positive or more negative scores reflecting dominance in the language for which an individual accrues more points. Implementing this tool allowed for a direct comparison of dominance between participants in the interpretation of results.

5.2. Participants

For the current study, data were collected from 27 total participants. The two experimental groups included six Ukrainian HSs and 11 Polish HSs. Both HS groups are dominant in English and are L3 learners of Spanish. Cabrelli Amaro (2013) also argues for the inclusion of control groups, strongly urging that they not solely consist of monolingual native speakers, who represent a standard that is often out of reach for language learners. Therefore, the data set includes two bilingual control groups comprised of five participants each: L1 English L2 Spanish and L1 Spanish L2 English.

5.2.1. Ukrainian HSs

Six Ukrainian HSs living in Chicagoland, with a mean age of 29.7, were recruited for this study (see Table 1 for key participant background information). They reported using their HL with family members and some friends, and English in all other circumstances. Their mean BLP score was 34.5, indicating English dominance. The speakers began learning Spanish between ages five and 14, with a mean age of 10.7. They reported using it between 0-10% per week, with most activity occurring in a classroom setting. When asked to provide a self-rated proficiency (SRP) in Spanish, their reading score was the highest, averaging 4.75, followed by writing, at 4.5. Comprehension received an average score of 4.25 and speaking an average of 3.7. It is noteworthy to comment on speaker U6, since their biographical data differs from that of the other Ukrainian HSs in that Spanish is their L2. U6 was born in Argentina, learned Ukrainian as a HL at home, but had Spanish

[4] Because control group speakers are not the study's main focus and were used primarily for baseline comparison, they did not complete a BLP. L1 English L2 Spanish participants did not begin learning Spanish until at least age 12 and are thus assumed to be English dominant. L1 Spanish L2 English participants arrived in the United States in early adulthood. Spanish was their primary language prior to moving to the United States (for more, see Rao, 2019).

as the dominant language of the environment; however, upon arriving to the United States at eight-years-old, U6 began learning English in an English-dominant environment to the point that at 64 years old, the L3 was currently the dominant language. While these circumstances are distinct, U6 was still considered a Ukrainian HS that learned a HL at home.

Table 1
Ukrainian HSs' biodata

Speaker	Age	Place of birth (POB)	Language acquired (LA) first	LA second (age)	Reported L1	Reported L2	(BLP) score	Age of learning (AOL) Spanish (L3)	Spanish self-rated proficiency (SRP)
U1	20	IL	Ukrainian (since birth [SB])	English (3)	Ukrainian	English	33.4 (English dominant [ED])	12	3, 4, 5, 5*
U2	33	IL	Ukrainian (SB)	English (4)	English	Ukrainian	86.8 (ED)	10	4.5, 4.5, 4.5, 4.5
U3	21	Ukraine	Ukrainian (SB)	English (9)	Ukrainian	English	-103.8 (Ukrainian dominant)	14	2.5, 3, 4, 2.5
U4	19	IL	Ukrainian (SB)	English (3)	Ukrainian	English	30.7 (ED)	12	3, 4, 4, 5
U5	21	Ukraine	Ukrainian (SB)	English (5)	English	Ukrainian	82.3 (ED)	11	4, 4, 5, 4
U6	64	Argentina	Ukrainian (SB)	Spanish (5)	Ukrainian	Spanish	77.37 (ED)	5	5, 6, 6, 6

*scores indicate self-ratings in: speaking, listening, reading, writing

5.2.2. Polish HSs

The Polish HS group consisted of 11 speakers, with a mean age of 20.2, also residing in Chicagoland (see Table 2 for key participant background information). They reported using Polish with family and certain friends. Their mean BLP score was 51.8, meaning this group was more English dominant as a whole than the Ukrainian HSs.

The participants began learning Spanish between the ages of 10 and 15, with a mean age of 12.8 (later than the Ukrainian HSs), and estimated using it 0-20% of the time during an average week. Those who utilized Spanish reported using it in class, and occasionally with friends outside of class. In their SRP for Spanish, comprehension received a mean score of 3.8, reading 3.4, writing 3.4, and speaking 2.8. Overall, these scores were lower than those of the Ukrainian HSs.

Table 2
Polish HSs' biodata

Speaker	Age	POB	LA first	LA second	Reported L1	Reported L2	BLP score	AOL Spanish	Spanish SRP
P1	18	IL	Polish (SB)	English (3)	Polish	English	52.6 (ED)	14	3, 4, 5, 3*
P2	21	WI	Polish and English (SB)		English	Polish	62.8 (ED)	13	3.5, 3.5, 3.5, 4
P3	22	Poland	Polish (SB)	English (9)	Polish	English	59.6 (ED)	15	1, 2, 1, 1
P4	20	IL	Polish and English (SB)		Polish	English	100 (ED)	14	0, 0, 2, 0
P5	19	IL	Polish (SB)	English (4)	Polish, Russian	English	79.2 (ED)	12	3, 4.5, 6, 4.5
P6	21	IL	Polish (SB)	English (3)	Polish	English	15.1 (ED)	12	3, 4, 4, 4
P7	19	IL	Polish (SB)	English (3)	Polish	English	44.9 (ED)	12	4, 5, 5, 4
P8	21	IL	Polish and English (SB)		English	Polish	30.4 (ED)	12	5, 6, 5, 5
P9	21	IL	Polish and English (SB)		English, Polish		42.5 (ED)	10	4, 4, 5, 3
P10	18	IL	Polish (SB)	English (5)	Polish	English	-25.2 (Polish dominant)	15	2, 4, 5, 5.6
P11	22	MN	Polish and English (SB)		English	Polish	107.8 (ED)	12	3, 5, 4, 3

*scores indicate self-ratings in: speaking, listening, reading, writing

As indicated in Tables 1 and 2, some of the HSs, especially in the Polish group, reported learning their HL and English simultaneously since birth or at a very young age, rendering potential influence of order of language acquisition irrelevant. Therefore, the current study places its focus primarily on HL/DL influence on L3 phonology rather than order of acquisition.

The two background surveys administered to the HS participants (i.e., the language history questionnaire and the BLP) were primarily used to understand each participant's background. The BLP scores of both the Polish HSs and the Ukrainian HSs were statistically equivalent, indicating that their level of language dominance in their HL, Polish and Ukrainian, respectively, was the same.[5]

[5] Further examination of the BLP scores within the two HS groups rigorously explored whether they are indeed equivalently dominant in their HL. A standard two-sample t-test (which assumes equal variance across two samples) was run and yielded the following results: the t-stat is -0.66 with 15 degrees of freedom, and the corresponding *p*-value is > 0.05. These results indicate that the BLP scores between the two groups are statistically the same. In addition, a Welch two-sample t-test (which assumes unequal variance across two samples) was run where the p-value is > 0.05, further supporting equivalence in language dominance for both Polish and Ukrainian HSs. Another attempt to distinguish potential differences between the two HS groups was to determine an overall language ability score for each speaker; however, both production and comprehension ability scores are still not significant, despite the fact that the Ukrainian HS group did score higher than the Polish HS group.

5.2.3. Control groups

The L1 English L2 Spanish speakers (mean age = 19.4) were currently enrolled in an undergraduate program at a large university in the Midwest region of the United States at the time of this study (see Table 3 for key participant background information). The mean age of learning Spanish for these speakers is 12.6 years old. In the SRP, comprehension received a mean of 4.4, reading 3.9, writing 3.7, and speaking 3.6. These numbers overall more closely resembled those of the Polish HSs than those of the Ukrainian HSs. Finally, all five L2 Spanish participants reported using Spanish between 10-20% of the time per week, only during class time.

Table 3
L1 English L2 Spanish participants' biodata

Speaker	Age	POB	AOL Spanish	Spanish SRP
E1	18	WI	12	3.5, 5, 4, 4*
E2	21	IL	13	3, 3, 3, 3
E3	19	WI	12	3, 4, 3, 3
E4	19	WI	13	4.5, 5, 4.5, 4.5
E5	20	WI	13	4, 5, 5, 3

*scores indicate self-ratings in: speaking, listening, reading, writing

The L1 Spanish L2 English participants (mean age = 32.6) were graduate students in the Spanish Department of a large university in the Midwest region of the United States at the time of this study (see Table 4 for key participant background information). They began learning English between 3-21 years of age, with a mean of 11. When asked to assess their L2 proficiency in English, the average reported scores were as follows: reading – 5.6, writing – 4.6, comprehension – 5, and speaking – 5. All speakers reported using English in their daily life on a regular basis, both personally and professionally.

Table 4
L1 Spanish L2 English participants' biodata

Speaker	Age	POB	AOL English	Age of arrival to USA	English SRP
S1	28	Mexico	Kindergarten (briefly)/21	21	4, 5, 5, 4
S2	41	Mexico	7	31	6, 5.5, 6, 6
S3	29	Mexico	9	20	6, 5, 6, 5
S4	26	Mexico	15	17	4, 5, 5, 4
S5	39	Mexico	3	28	5, 5, 6, 4

*scores indicate self-ratings in: speaking, listening, reading, writing

5.3. Instruments and procedure

Three tasks were completed by all participants: a narrative task (NT), a sentence-reading task (SRT), and a nonce words reading task (NWRT). This approach was motivated by previous findings related to style effects on speech production. In the NT, participants were shown a five-minute silent animation clip about a woman and a man running into each other at a bus stop and were asked to describe it in their HL, in English and in Spanish. This task elicits data in the most spontaneous speech style possible in a controlled setting, while allowing us to gather data produced in all three relevant languages (inspired by insight in Cabrelli Amaro, 2013). The SRT consisted of 64 short sentences in Spanish. Each phrase contained one to three target words to test /ptk/ production, with words housing instances of /ptk/ ranging in length from two to four syllables. The controlled aspect of the task helped to gather a uniform number of tokens from all speakers and compare productions in controlled speech versus those in spontaneous speech. In the NWRT, 44 nonce items that ranged in length from two to four syllables were tested (e.g., *noca*, *mítabusa*; taken from Face, 2005). The nonce words were embedded in the carrier phrase *Yo digo __ para ti* ("I say ___ for you") to avoid listing intonation.

Data collection was carried out in quiet locations on two large university campuses in the Midwest region of the United States, where participants individually met with the first author. They first filled out the

previously described questionnaires and then completed the NT. Prior to each iteration of the NT, participants were addressed in the language of interest in order to trigger a specific language mode (see Grosjean, 1998). Next, the speakers were asked to complete the SRT before concluding with the NWRT.

5.4. Analysis

The recorded data were analyzed with *Praat* (Boersma & Weenink, 2016), through which VOT duration was measured for all instances of /ptk/ in both word-initial and word-medial stressed position (for comments on positional effects on /ptk/, see Torreira & Ernestus, 2011; Zampini, 2019). Mean and standard deviations were calculated using R statistical software (R Core Team, 2017). Once the acoustic analysis was complete, we fit two Linear Mixed Effects Models (LMEMs) to determine the effect of speaker group on phoneme: Model 1 assumed that only phoneme (i.e., /ptk/), would influence VOT measures; Model 2 assumed that both phoneme and language (i.e., Ukrainian, Polish, English, Spanish) would influence VOT measures. In order to test the significance of the language spoken, we conducted a likelihood ratio test between these two models, which under the null hypothesis follows a chi-squared distribution with 3 degrees of freedom and a *p*-value of < 0.05. Given this result showing that both phoneme and language indeed significantly affect VOT, Model 2 was selected as optimal. Therefore, the Model 2 approach was used for the entire analysis and allowed us to determine whether there were any statistically significant differences between the means of the four groups of speakers in English and Spanish, while also accounting for inter-participant variation. The variables used in the analysis include speaker, language, phoneme, and task type.[6] In the LMEM, speaker is used as a random effect, and phoneme and language are fixed effects.

As with the LMEMs run for speaker group effect on phoneme, we used a similar approach to determine the effect of task type on phoneme: Model 1 assumed that task type (i.e. NT, SRT, NWRT) would not influence VOT measures whereas Model 2 assumed that task type would influence VOT measures, given the speakers' dominant language and phoneme. To test the significance of task type, we conducted a likelihood ration test between Model 1 and Model 2, which under the null hypothesis follows a chi-squared distribution with 2 degrees of freedom and a *p*-value of < 0.05. Based on the results of the likelihood ratio test showing that task type does have an effect on VOT measures, Model 2 was selected as optimal and used throughout the analysis to determine the effect of task type on VOT measures according to phoneme.

6. Results

This section reports the results of the data analysis and is organized according to the research questions presented previously in (1) and (2). First, we present the basis for comparison for English VOT of /ptk/ for all four groups. Next, we present mean VOT values for both control groups, the L1 English L2 Spanish group, and the L1 Spanish L2 English group. Following this is the experimental group data for both Ukrainian HSs and Polish HSs for all languages and tasks. The results section concludes with two subsections including intergroup comparisons of VOT values in Spanish for all four speaker groups, as well as the results of the inferential statistical analysis. Presenting the data in this way allows us to first establish VOT values in English and Spanish from L1 speakers of these languages, which, in turn, can be used as points of comparison when examining VOT values for Ukrainian HSs and Polish HSs across all three of their languages: the HL, the DL, and the L3. We then consider the effect of task type on VOT values for speakers from all groups. The final subsection reports the results of our inferential statistical modelling with respect to the effect of language and task type on VOT values.

6.1. English VOT productions

Regarding VOT baselines for /ptk/ in English for speakers from all groups, Table 5 and Figure 2 below show that all speakers produce long-lag VOT values in English. The L1 Spanish speakers' productions differed the most from the realizations of the L1 English speakers, while the Polish HSs' results approximated them the most.

[6] Word stress, position within the word, and syllable type were entered as factors in the LMEMs, but will not be addressed in this paper.

Table 5
Mean VOT values (ms) in English for all speaker groups

Group	Phoneme	Mean / SD	Phoneme total
Ukr HSs	/p/	58.2 / 22.4	10
	/t/	62.8 / 34. 7	46
	/k/	54.8 / 13.6	28
Polish HSs	/p/	43.5 / 23.6	27
	/t/	68.3 / 27.7	55
	/k/	58.4 / 25.8	46
L1 English	/p/	53.6 / 26.8	6
	/t/	76.4 / 37.4	20
	/k/	58.7 / 24.8	17
L1 Spanish	/p/	40.2 / 24.3	25
	/t/	49.4 / 22.5	53
	/k/	64.6 / 27.3	48

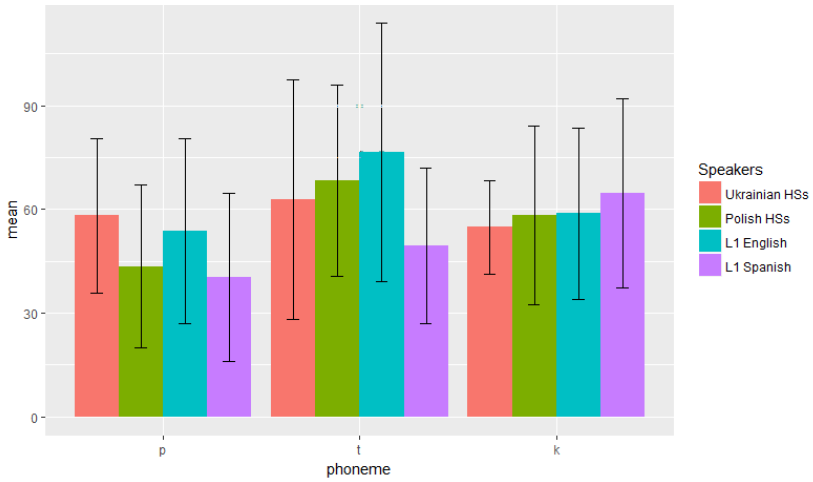

Figure 2. Mean VOT values (ms) in English for all speaker groups

The following subsection on control groups include mean VOT values for English and all three tasks in Spanish. In all tables that follow, statistically significant effects are marked with an asterisk (*) with all *p*-values at <0.05. After a complete presentation of the results for the control groups, the next subsection details the results for both experimental groups, the Ukrainian HSs and the Polish HSs, with data from the HL, the DL (i.e., English), and L3 Spanish.

6.2. Control groups

6.2.1. L1 English L2 Spanish speakers

Table 6 summarizes voiceless stop productions by L1 English speakers for /ptk/ in English, as well as for all three tasks in Spanish. As seen in the table, /ptk/ were produced with long-lag VOTs in all instances in both English and Spanish, aligning with monolingual English speaker norms (Lisker & Abramson, 1964; Nagy & Kochetov, 2013). All three stops have the shortest VOTs in the SRT, which may indicate that this is the most familiar speech style for this group of speakers, who are more acquainted with reading in their L2 than actively speaking it.

Table 6
Mean VOT values (ms) for L1 English, L2 Spanish speakers

Language/Task	Phoneme	Mean / SD	Phoneme total
L1 English	/p/	53.6 / 26.8	6
	/t/	76.4 / 37.4	20
	/k/	58.7 / 24.8	17
L2 Spanish NT	/p/*	52.5 / 27.1	45
	/t/*	57.7 / 30.6	33
	/k/	58.1 / 36.6	36
L2 Spanish SRT	/p/*	41.5 / 27	182
	/t/*	47 / 26.7	220
	/k/	54.2 / 28.3	164
L2 Spanish NWRT	/p/*	60.5 / 29	45
	/t/*	56.2 / 29.7	95
	/k/	55.8 / 22.5	45

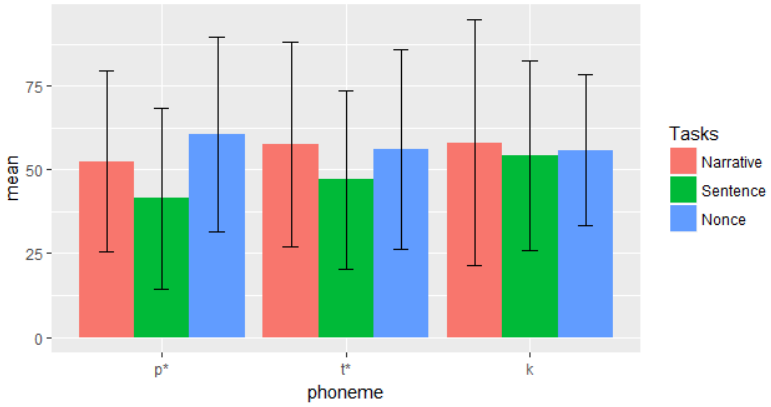

Figure 3. Mean VOT values (ms) in Spanish for L1 English, L2 Spanish speakers

6.2.2. L1 Spanish L2 English speakers

Table 7 includes mean VOT values for /ptk/ productions by L1 Spanish L2 English speakers in English, as well as for all three tasks in Spanish. The production results here suggest that the L1 Spanish speakers' performance becomes at least partially less target-like as tasks become less natural. This trend is most clear when observing the results for /k/ in Figure 4.

Table 7
Mean VOT values (ms) for L1 Spanish L2 English speakers

Language/Task	Phoneme	Mean / SD	Phoneme Total
L2 English	/p/	40.2 / 24.3	25
	/t/	49.4 / 22.5	53
	/k/	64.6 / 27.3	48
L1 Spanish NT	/p/	15.6 / 6.5	100
	/t/	18 / 7.1	70
	/k/*	27.9 / 10.8	148
L1 Spanish SRT	/p/	14.9 / 8.1	183
	/t/	17.5 / 7.2	219
	/k/*	30.4 / 9.7	165
L1 Spanish NWRT	/p/	18 / 11.1	45
	/t/	17.6 / 6.7	94
	/k/*	33.6 / 12.7	44

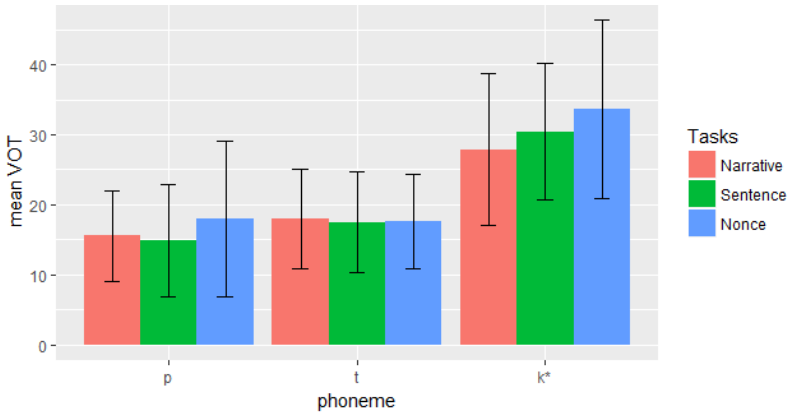

Figure 4. Mean VOT values (ms) in Spanish for L1 Spanish speakers

6.3. Experimental groups

6.3.1. Ukrainian HSs

Table 8 presents Ukrainian HSs' productions of /ptk/ in their HL, in their DL (i.e., English), and in L3 Spanish for all three tasks. As evidenced in this table, Ukrainian HSs' mean VOT productions of voiceless stops in both the HL and the L3 fall within or close to the upper limit of the short-lag category, in line with the average Slavic language values reported in Ringen and Kulikov (2010), and reflecting the L1 Spanish speaker results. A visual representation of the mean VOT values in Spanish for the Ukrainian HSs is illustrated in Figure 5. The raw data results show that as task formality increases, /p/ and /t/ also show an increase in VOT.

Table 8
Mean VOT values (ms) for Ukrainian HSs

Language/Task	Phoneme	Mean / SD	Phoneme Total
HL Ukrainian	/p/	24.2 / 18.9	37
	/t/	23.3 / 12.4	107
	/k/	30.9 / 14.1	55
DL English	/p/	58.2 / 22.4	10
	/t/	62.8 / 34. 7	46
	/k/	54.8 / 13.6	28
L3 Spanish	/p/*	18.6 / 20.5	46
NT	/t/*	20.5 / 11.4	51
	/k/	31.5 / 10.8	65
L3 Spanish	/p/*	20.3 / 10.2	215
SRT	/t/*	19.7 / 9.6	262
	/k/	33.5 / 13.1	196
L3 Spanish	/p/*	25.2 / 15.4	54
NWRT	/t/*	23.6 / 15.7	114
	/k/	31.4 / 10.8	54

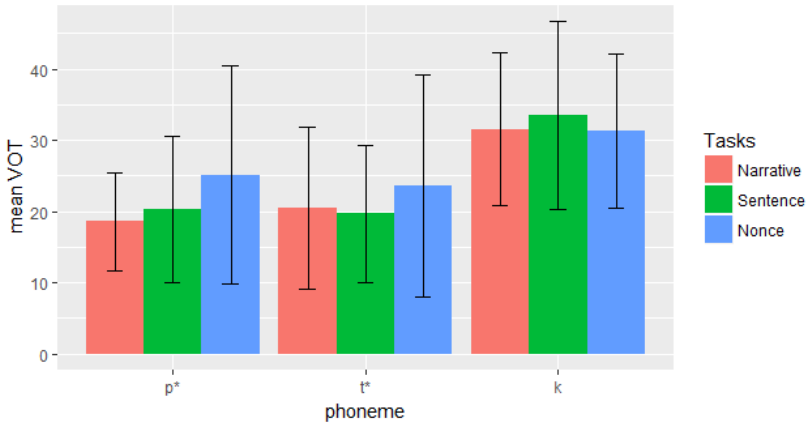

Figure 5. Mean VOT values (ms) in Spanish for Ukrainian HSs

6.3.2. Polish HSs

Table 9 summarizes Polish HSs' mean VOT values for /ptk/ in their HL, DL (i.e., English), and Spanish for all three tasks. In contrast to the Ukrainian HSs, the Polish HSs' VOT productions of /ptk/ are not consistently realized with short-lag. The phoneme /p/ is realized with a short-lag VOT in the NT and SRT, and /t/ in the SRT and NWRT; however, other segments show long-lag VOT values, exhibiting evidence of influence of both the HL and the DL. A visual representation of the mean VOT values in Spanish for the Polish HSs is displayed in Figure 6. While /p/ shows an increase in VOT as tasks become more formal, /t/ and /k/ decrease in VOT as elicitation becomes more controlled.

Table 9
Mean VOT values (ms) for Polish HSs

Language/Task	Phoneme	Mean / SD	Phoneme Total
HL Polish	/p/	29.3 / 16.5	76
	/t/	27.3 / 11.1	123
	/k/	36.9 / 15.4	82
DL English	/p/	43.5 / 23.6	27
	/t/	68.3 / 27.7	55
	/k/	58.4 / 25.8	46
L3 Spanish NT	/p/*	28.6 / 17.9	65
	/t/*	42.7 / 22.6	73
	/k/*	53.6 / 25.8	94
L3 Spanish SRT	/p/*	33.7 / 19.4	401
	/t/*	33.2 / 18. 6	472
	/k/*	49.4 / 22.1	350
L3 Spanish NWRT	/p/*	39.6 / 22.7	100
	/t/*	32.2 / 18.8	206
	/k/*	44.8 / 19	97

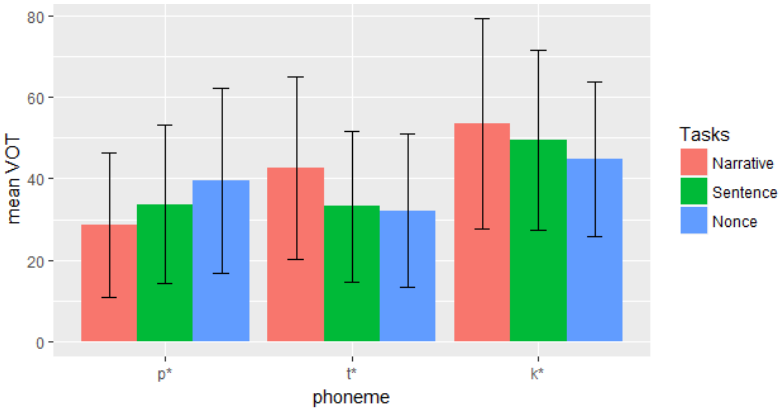

Figure 6. Mean VOT values (ms) in Spanish for Polish HSs

6.4. Intergroup comparisons

Figure 7 summarizes the productions of Spanish /ptk/ by all four groups in each of the three tasks. The L1 Spanish speakers produced the lowest VOT values in all three tasks with one exception: in the NWRT, the Ukrainian HSs displayed the lowest VOT values for the velar segment /k/. The Ukrainian HSs demonstrated the second lowest VOTs, followed by the Polish HSs. The L1 English speakers produced all segments in the three tasks with the longest VOT durations.

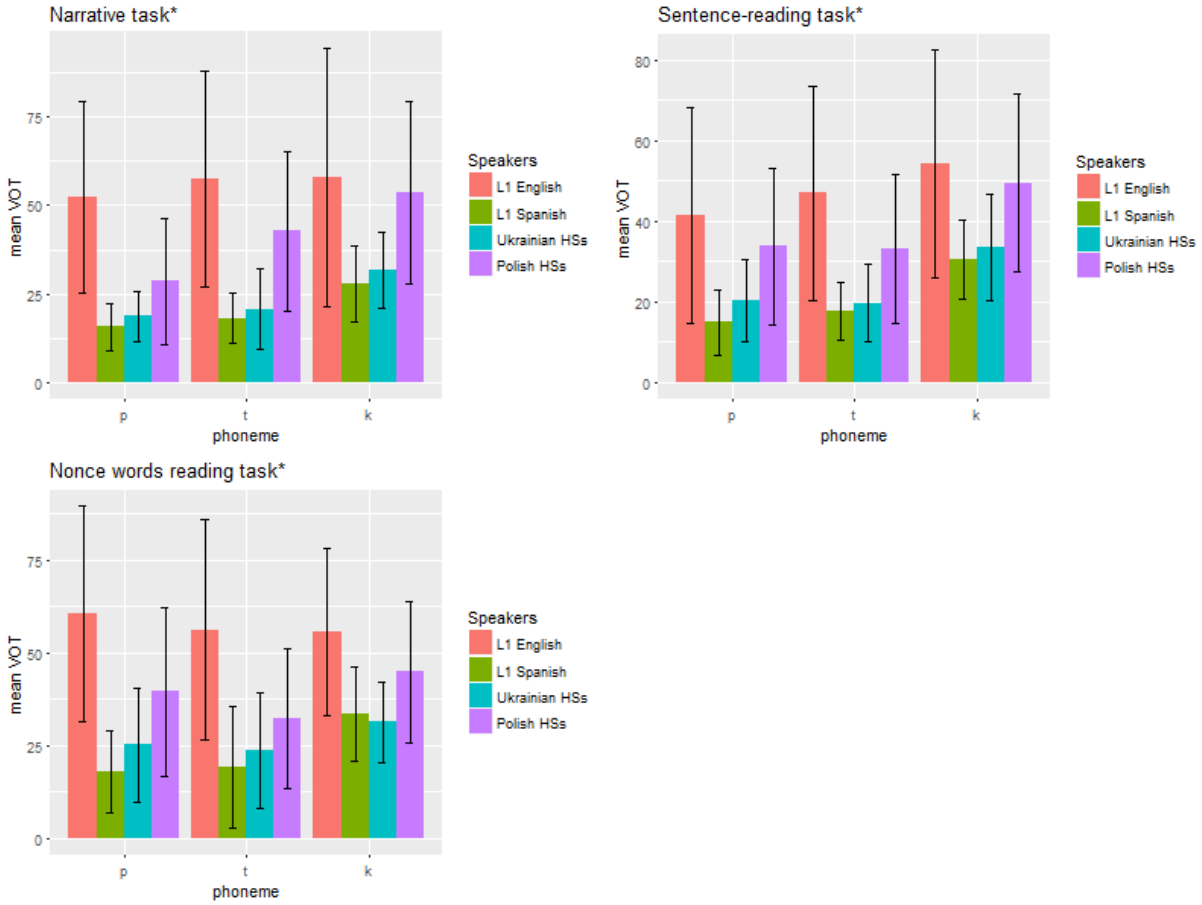

Figure 7. Mean VOT (ms) values in Spanish for all four speaker groups. Statistical significance of task type is indicated with an asterisk (*).

6.5. LMEM Findings

The LMEM revealed that the productions of the four groups were significantly different in all three tasks (NT: $p < 0.05$, SRT: $p < 0.05$, NWRT: $p < 0.05$). For a closer examination of the four groups, we performed a post-hoc Tukey test with a Bonferroni adjustment which examines pairwise mean differences across speakers groups. The results revealed that the L1 English speakers' results are significantly different from those of the L1 Spanish speakers in all three tasks (NT: $p < 0.05$, SRT: $p < 0.05$, NWRT: $p < 0.05$). The Polish HSs differ significantly from the L1 Spanish baseline in the NT ($p < 0.05$) and SRT ($p < 0.05$). The Ukrainian HSs' productions do not differ significantly from those of the L1 Spanish speakers in any of the tasks ($p > 0.05$), thus most closely approximating the control group's VOT values. The following subsections and tables further detail the results of the LMEM for each task, supporting the descriptive analysis.

6.5.1. Narration Task

Table 10 identifies all variables incorporated in the model and their significance for the NT. Note that phoneme /p/ and L1 Spanish were treated as the baselines to which all other variables were compared. The *p*-values in Table 10 indicate the significant effect of /t/ and /k/ when compared to /p/. Both L1 English speakers and Polish HSs show a significant effect when compared to the L1 Spanish speaker profile. VOT values of Ukrainian HSs are not significantly different from those of the L1 Spanish group.

Table 10
Results for the NT (Speakers = 27; Number of observations = 826)

	Estimate	SE	t	p
Intercept	14.340	5.590	2.566	<0.05
/t/	5.198	1.509	3.445	<0.05*
/k/	14.723	1.356	10.856	<0.05*
L1 English	38.375	7.944	4.831	<0.05*
Heritage Polish	21.890	6.747	3.244	<0.05*
Heritage Ukrainian	3.796	7.563	0.502	>0.05

We further conducted a post-hoc Tukey test to compare the VOT measure differences between the various speaker groups in the NT. The results in Table 11 show that all pairwise comparisons are significant with the exception of heritage Ukrainian versus L1 Spanish and heritage Polish versus L1 English. Based on these results, VOT trends are present among the four speaker groups, where the speakers of heritage Ukrainian are most closely approximating the short-lag VOT of the Spanish control group and the remaining two groups show more divergence from this trend in Spanish.

Table 11
Results of post-hoc Tukey test for the NT

	Estimate	SE	z	p
L1 English – L1 Spanish	38.375	7.944	4.831	<0.05*
Heritage Polish – L1 Spanish	21.890	6.747	3.244	<0.05*
Heritage Ukrainian – L1 Spanish	3.796	7.563	0.502	>0.05
Heritage Polish – L1 English	-16.484	6.892	-2.392	>0.05
Heritage Ukrainian – L1 English	-34.579	7.693	-4.495	<0.05*
Heritage Ukrainian – Heritage Polish	-18.095	6.449	-2.806	<0.05*

6.5.2. Sentence Reading Task

Table 12 identifies all variables incorporated in the model and their significance for the SRT. Again, phoneme /p/ and L1 Spanish were treated as the baselines to which all other variables were compared. For the SRT, results are similar to the NT; however, phoneme /t/ is not significant when compared to the baseline /p/. This result is in line with other research on VOT values of /ptk/, where the velar segment /k/ is, in general, more distinct. Like the NT, both L1 English speakers and Polish HSs effects are significant when compared to the L1 Spanish speaker profile; however, the effect of Ukrainian HSs does not demonstrate significance, meaning their VOT productions reflect those of the L1 Spanish group.

Table 12
Results for the SRT (Speakers = 27; Number of observations = 3,029)

	Estimate	SE	t	p
Intercept	15.7344	4.8776	3.226	<0.05
/t/	1.1494	0.6701	1.715	>0.05
/k/	14.5634	0.7202	20.221	<0.05*
L1 English	26.9268	6.8739	3.917	<0.05*
Heritage Polish	17.6097	5.8624	3.004	<0.05*
Heritage Ukrainian	3.4568	6.5815	0.525	>0.05

A post-hoc Tukey test compared the VOT differences between the four speaker groups for the SRT. The results in Table 13 show similar trends to those of the NT in terms of group pairings; however, the difference between the two HS profiles does not reach significance here.

Table 13
Results of post-hoc Tukey test for the SRT

	Estimate	SE	z	p
L1 English – L1 Spanish	26.927	6.874	3.917	<0.05*
Heritage Polish – L1 Spanish	17.610	5.862	3.004	<0.05*
Heritage Ukrainian – L1 Spanish	3.457	6.582	0.525	>0.05
Heritage Polish – L1 English	-9.317	5.862	-1.589	>0.05
Heritage Ukrainian – L1 English	-23.470	6.582	-3.566	<0.05*
Heritage Ukrainian – Heritage Polish	-14.153	5.517	-2.565	>0.05

6.5.3. Nonce Words Reading Task

Finally, Table 14 shows all variables incorporated and their significance for the NWRT. As with the NT and the SRT, phoneme /p/ and L1 Spanish were treated as the baselines to which all other variables were compared. Trends found in the NWRT are similar to those of the NT in that the *p*-values in Table 14 indicate the significant effect of /t/ and /k/ when compared to /p/. Concerning speaker group, only L1 English speaker effects are significant as compared to the baseline L1 Spanish speaker profile; that is, Polish HSs and Ukrainian HSs effects are not significant, indicating that their VOT productions in this task parallel those of the L1 Spanish group.

Table 14
Results for the NWRT (Speakers = 27; Number of observations = 993)

	Estimate	SE	t	p
Intercept	23.007	5.133	4.482	<0.05
/t/	-3.854	1.337	-2.883	<0.05*
/k/	5.474	1.561	3.508	<0.05*
L1 English	34.941	7.133	4.899	<0.05*
Heritage Polish	14.616	6.083	2.403	>0.05
Heritage Ukrainian	3.521	6.829	0.516	>0.05

A post-hoc Tukey test compared the VOT differences between the four speaker groups for the NWRT. The results are in Table 15, where we notice that the L1 English versus L1 Spanish difference is most salient, but that the two heritage groups are not significantly different from the L1 Spanish group. Both Ukrainian HSs and Polish HSs, however, are significantly different from L1 English speakers, suggesting that the heritage groups have an "advantage" over L1 English speakers when producing VOT in Spanish, especially since some researchers suggest that employing a nonce word reading task is most effective in determining phonological awareness; that is, previous knowledge of lexical items does not interfere with the results, ultimately levelling the task for all speakers.

Table 15
Results of post-hoc Tukey test for the NWRT

	Estimate	SE	z	p
L1 English – L1 Spanish	34.941	7.133	4.899	<0.05*
Heritage Polish – L1 Spanish	14.616	6.083	2.403	>0.05
Heritage Ukrainian – L1 Spanish	3.521	6.829	0.516	>0.05
Heritage Polish – L1 English	-20.325	6.083	-3.341	<0.05*
Heritage Ukrainian – L1 English	-31.419	6.829	-4.601	<0.05*
Heritage Ukrainian – Heritage Polish	-11.095	5.723	-1.938	>0.05

7. Discussion

7.1. Influence of HL/DL on L3 VOT

The Ukrainian HSs produced Spanish /ptk/ with short-lag VOT in all three tasks, potentially relying on the knowledge of their HL, where they also produced the three voiceless stops as short-lag. This finding differentiates itself from the one in Llama and López-Morelo (2016), where the DL, and not the HL, had a greater influence on the production of L3 French voiceless stops. The Polish HSs, however, produced some instances of Spanish /ptk/ as unaspirated stops and some as long-lag, showing evidence of features of both the HL and the DL. While we found evidence of a separate short-lag category for HL stops and a long-lag category for DL stops, the Polish HSs did not exclusively rely on only one category in the production of L3 segments. As suggested by Llama and López-Morelo (2016), this finding may imply that the Polish HSs are mimicking the values that they hear from their classmates (particularly in the production of /k/), who serve as their main source of L3 input; however, when looking at the production of the Spanish /ptk/ by the L1 English speakers, who produced all three stops as aspirated, this argument may not be completely valid. Alternatively, it is possible that the Polish HSs perceive /p/ and /t/ as structurally similar to Polish, but /k/ as structurally similar to English. As mentioned previously, the participants in Llama and López-Morelo (2016) were adolescent HSs, whereas the majority of HSs in the current study are young adults. Several studies have shown that adult speech development differs from that of children and adolescents (e.g., Baker et al., 2008; Brown, 2000; Granena & Long, 2013; Kopečková et al., 2019; Long, 1990; Stoel-Gammon et al. , 1994), which could potentially explain the difference in our results. The majority of the younger participants here were enrolled in a university-level Spanish course and could have potentially experienced the effects of classmate input in Spanish such as those in Llama and López-Morelo (2016); however, the older participants were not. Therefore, more research is needed to tease apart the influences of age and exposure to classmates in order to determine the validity of this claim.

According to Kupske (2016), languages in contact often interact in a state of continuous movement, and as a result, language attrition of some aspects of the L1 may occur due to a speaker's abilities in another language. The effects of language attrition on VOT were confirmed by Schereschewsky et al. (2019), where L1 VOT productions by bilingual speakers, L1 Brazilian Portuguese L2 English, and trilingual speakers, L1 Brazilian Portuguese L2 English L3 German, were modified when compared with monolingual Brazilian Portuguese VOT values. This conclusion highlights the multidirectional nature of language transfer in multilinguals. With respect to the differential treatment of /k/ by the Polish HSs, some previous studies on VOT with L2 speakers show that the velar segment is first to exhibit cross-linguistic influence. For example, Lord (2008) investigated VOT attrition of /ptk/ in the L1 of L1 English L2 Spanish speakers and L1 Spanish L2 English speakers and found that the velar segment /k/ was the only segment that continuously showed modified VOT values in the L1 for L1 English L2 Spanish speakers. Bilabial /p/ and dental /t/ VOT values, however, remained similar to those produced by monolingual English speakers. In addition, Alves et al. (2019) found that the velar segment /k/ was realized with a semi-aspirated production even in monolingual speakers of Spanish, with a mean VOT value of /k/ of 46.61 ms. Therefore, it is possible that the compromised VOT productions of /k/ in L3 Spanish produced by the Polish HSs have been influenced by their L2 English; this is further evidence that the velar segment is first to present signs of attrition.

When determining HL/DL influence on L3 VOT production, it is important to note the sample size of each group of participants. The data presented thus far in this section highlights the HSs' short-lag VOT values in their L3 Spanish, suggesting influence from their HL, also characterized by short-lag VOT, instead of influence from their DL, English, where long-lag VOTs are the norm. Casillas (2021) points out that similar studies in the social sciences are often underpowered due to the relatively small participant pool (see also Brysbaert, 2021; Ellis, 2010; Plonsky & Oswald, 2014). Since research on the intersection of HL and L3 phonology is in its

incipient stages and is largely exploratory at this point in time, the participant pool for the current study is relatively small; however, this research presents a useful point of departure for further exploration in this field, and the results support future directions for HS and L3 phonology.

7.2. Experimental group divergence

Since our hypotheses predicted that the Ukrainian HSs and the Polish HSs would behave similarly, the fact that the Ukrainian and Polish HSs produced some different results in their productions of Spanish /ptk/ has prompted us to look for additional explanations. One potential factor that could contribute to this difference may be the speakers' different levels of proficiency in Spanish. Ukrainian HSs demonstrated at least an intermediate level of proficiency in their L3, but the Polish HS group, on the other hand, had four speakers with a very low level of Spanish proficiency. As shown by Hammarberg and Hammarberg (2005) and Wrembel (2010), the types of transfers observed during various stages of L3 acquisition are different and continue to change as speakers become more proficient L3 users. Although our study does not aim to investigate HSs' development in their L3 over time, it may provide clues as to which language plays a bigger role in the early stages of L3 production. It is possible that during the initial stages of L3 acquisition, HSs are more reliant on their DL, but once they become more proficient in L3 Spanish, the link is severed. Alternatively, when considering L2 studies (e.g., González-Bueno, 1997), which show that typical L1 English L2 Spanish learners are producing aspirated stops even at intermediate and advanced levels unless they receive explicit instruction, the Ukrainian HSs' results in particular may suggest that these speakers are helped by their HL, and that their unaspirated productions of Spanish /ptk/ are not simply due to their development as Spanish learners. Nonetheless, without more research on HSs at different acquisitional stages of their L3, it is difficult to state with certainty whether the increased target-like productions in the Ukrainian HSs is due to level of Spanish development or positive influence from HL's short-lag feature.

Another possible explanation for the discrepancy in the Ukrainian and Polish HSs' results are the HSs' ties with their HL communities. Nagy and Kochetov (2013), for example, showed that HS communities are highly diverse, and each group may have their own language norms, which may be undergoing generational shifts. On average, the Polish HSs' VOTs of the Polish stops were slightly greater than those of the Ukrainian HSs in Ukrainian. If the Polish HSs are shifting to longer VOTs in Polish across generations, this phenomenon may influence these speakers' VOT acquisition in other languages; however, since this investigation does not aim to study the community ties of the HSs, nor does it have the evidence to fully support this claim, this statement merely serves as a call for future research.

Overall, our data do emphasize that Ukrainian and Polish HSs' Spanish VOTs were shorter than those of the L2 Spanish group. This implies that exposure to the short-lag feature from an HL does appear to help HSs achieve a more target-like production of voiceless stops in comparison to L2 learners who are only familiar with the long-lag category.

7.3. Effect of task type

Task type clearly affected the VOTs of Spanish voiceless stops. Concerning the Ukrainian HSs, while the highest VOT values appeared in the two controlled tasks, the difference was small in comparison to the spontaneous elicitation and still did not place any of the stops into the long-lag category; however, the results did show that as tasks became more formal, their VOTs increased, a pattern that was also observed with L1 Spanish speakers. Perhaps, this phenomenon also relates to the speakers' proficiency level in Spanish, signaling that as speakers become more proficient in their L3, speaking becomes the most natural speech style.

In the Polish HSs' data, the bilabial segment /p/ showed a gradual increase in VOT as task formality increased, mimicking the general trends seen in the L1 Spanish and Ukrainian HSs' data. The phonemes /t/ and /k/, on the other hand, displayed an inverse relationship in comparison to /p/. What is particularly intriguing is that /t/ was produced as long-lag in the NT, but as short-lag in the NWRT task, possibly suggesting that underlyingly, it is classified as short-lag in the productive grammars of these speakers. Although Polish HSs may be implicitly classifying /t/ differently than L2 learners, overall, this finding seems to support Llama and López-Morelo's (2016) claim that HSs learning an L3 may be mimicking their L2 classmates' VOT productions. The /t/ and /k/ results also seem to support our claim that more controlled tasks better reflect the learners' use of L3 Spanish at lower proficiency levels. The Polish HSs' results coincide closely with those of the L1 English speakers, who produced the shortest VOTs in the SRT. Since the two groups have comparable mean SRP scores, which are lower than those of the Ukrainian HSs, the results suggest that this speech style is the most familiar for these language learners, backing Tarone's (1979) observation that L2 learners produce more

target-like results in formal speech; however, unlike Polish HSs, the L1 English speakers produced the Spanish /ptk/ as long-lag in all three tasks, presenting clear evidence of transfer of the long-lag feature from their L1, regardless of task formality.

7.4. Theoretical implications

Since our results demonstrate evidence of both facilitative and non-facilitative transfer from the HL and the DL, we believe that our findings may shed light on the Linguistic Proximity Model (LPM) (Westergaard et al., 2016). The LPM, which argues that all previously learned languages are available throughout the L3 acquisition process, allows us to account for the differences observed in the Ukrainian and Polish HSs' data. According to the LPM, cross-linguistic influence will take place when a linguistic property in the L3 input displays an abstract structural similarity to the structure of previously acquired languages. In order for cross-linguistic influence to be facilitative, learners must have received sufficient L3 input to perceive linguistic similarities at an abstract level. Without sufficient exposure to an L3, learners are relying on superficial similarities, which results in non-facilitative transfer. It may be possible that due to higher proficiency in L3 Spanish, the Ukrainian HSs perceived L3 Spanish /ptk/ as structurally similar to Ukrainian voiceless stops, which triggered influence of the short-lag feature from the HL. While the Polish HSs also might have perceived /p/ and /t/ as structurally similar to Polish, resulting in mainly short-lag values for these segments, due to their lower L3 proficiency level, they appear to have perceived /k/ as more similar to English at a superficial level, which led to increased VOT values for this segment. Our theoretical claims support the LPM by providing evidence of transfer from both the HL and the DL to an L3, which depends on the quantity of L3 input.

7.5. Pedagogical implications

The results from this study have important pedagogical implications for instructors, more specifically, Spanish instructors in the world language classroom who have HSs of HLs other than Spanish as students. In other words, given that L3 learners of Spanish are able to draw on phonological characteristics from both their HL (in our case, Ukrainian or Polish) and their DL (in our case, English), instructors' awareness of the linguistic history and abilities of their students can facilitate the connections that they make between the target language and the students' other languages when providing pronunciation instruction. In this case, bringing this conversation to the level of the student, making a connection between the pronunciation of /ptk/ in Spanish and in the HL rather than the DL, highlights the similarities between their HL and L3 and further supports their acquisition of a target-like realization of /ptk/. More broadly, the life experiences of students have the potential to make valuable contributions to overall student success and proficiency. Language instructors can design and modify their instruction by tapping into this resource, ultimately making the student learning experience more positive and productive.

8. Conclusion

The purpose of this study was to describe the acquisition of L3 Spanish voiceless stops by Ukrainian and Polish HSs, thus contributing to the fields of phonetics and phonology, language contact, and multilingualism. It allowed us to establish a comparison between languages that, to our knowledge, have never been examined together using our type of methodological approach. The conclusions provide critical information about the development of Slavic HSs' sound systems as L3 learners by describing VOT values of voiceless stops of Ukrainian and Polish HSs in their full set of languages, and make significant contributions to the growing field of L3 phonetics and phonology within the specific context of HSs of Slavic languages.

In sum, we hope that our methodological and analytical approach and the issues we have raised inspire future investigations on other language combinations that will allow us to broaden our knowledge of overarching empirical and theoretical issues related to L3 phonology and HL research.

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Pautas atípicas. Las conversaciones en los materiales auditivos para la enseñanza de español L2 publicados en Suecia

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ABSTRACT

ES Este estudio de caso utiliza el análisis de la conversación para examinar la interacción verbal en las conversaciones didácticas de tres manuales de español como lengua extranjera (de ahora en adelante ELE) empleados en la educación secundaria sueca. La observación de dichas conversaciones revela algunos patrones problemáticos en cuanto a la secuencialidad de las acciones, a la presencia sistemática de silencios entre turnos de palabra y, en general, a la falta de coordinación entre co-participantes. Otros fenómenos típicos de la interacción espontánea, como por ejemplo los solapamientos entre turnos de palabra, las reparaciones o las co-construcciones faltan por completo en los materiales analizados. En la perspectiva de una enseñanza de idiomas comunicativa y orientada a la acción, el artículo sostiene que en la preparación de este tipo de soportes didácticos habría que tener más en cuenta la estrecha relación existente entre lengua hablada y acción social.

Palabras clave: ANÁLISIS DE LA CONVERSACIÓN, COMPRENSIÓN AUDITIVA, ELE, ENSEÑANZA DE ELE, SUECIA, INTERACCIÓN, SECUENCIALIDAD, ACCIÓN SOCIAL

EN This case study adopts the theory and method of conversation analysis to examine recorded dialogues in three textbooks for Spanish as a Foreign Language used in Swedish secondary education. The analyses of these conversations reveal some problematic patterns regarding the sequence of actions, the systematic presence of gaps between turns at talk, and a frequent lack of coordination between co-participants. Other phenomena that are typical of spontaneous interactions, such as overlaps between turns, repair sequences or co-constructions, are completely missing in the analyzed materials. From the perspective of communicative and action-oriented language teaching, the article maintains that in the preparation of this type of pedagogical supports, the authors should consider the close relationship between spoken language and social action.

Key words: CONVERSATION ANALYSIS, LISTENING COMPREHENSION, SPANISH AS A FOREIGN LANGUAGE, SPANISH AS A FOREIGN LANGUAGE TEACHING, SWEDEN, INTERACTION, SEQUENTIALITY, SOCIAL ACTION

IT Questo studio di caso si avvale dell'analisi della conversazione per esaminare le interazioni verbali nelle conversazioni didattiche di tre manuali di spagnolo come lingua straniera adottati presso le scuole secondarie svedesi. L'osservazione di queste conversazioni rivela alcune costanti problematiche relativamente alla sequenzialità delle azioni, alla presenza sistematica di silenzi tra i turni di parola e, in generale, alla mancanza di coordinamento tra i co-partecipanti. Inoltre, altri fenomeni tipici dell'interazione spontanea, come, per esempio, le sovrapposizioni dei turni, le riparazioni e le co-costruzioni mancano del tutto nei materiali analizzati. Nell'ottica di una glottodidattica comunicativa e orientata all'azione, questo studio sostiene che la stretta relazione esistente tra lingua orale e azione sociale dovrebbe essere tenuta in maggiore considerazione nella preparazione di questo tipo di materiali didattici.

Parole chiave: ANALISI DELLA CONVERSAZIONE, COMPRENSIONE ORALE, SPAGNOLO COME LINGUA STRANIERA, INSEGNAMENTO DI SPAGNOLO COME LINGUA STRANIERA, SVEZIA, INTERAZIONE, SEQUENZIALITÀ, AZIONE SOCIALE

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1. Introducción

Según el currículo nacional sueco de lenguas modernas el objetivo de la enseñanza de idiomas es que el alumnado desarrolle por un lado conocimientos sobre la lengua meta y, por el otro, una versatilidad comunicativa tal que le permita utilizar la lengua en diferentes contextos (Skolverket, 2011). En este sentido, las actividades de comprensión auditiva en el aula de ELE son extremadamente importantes, puesto que le proporcionan al aprendiz un *input* indispensable (Vandergrift & Goh, 2012). Field (2008) pone de relieve la escasa importancia que tradicionalmente se le ha prestado a la destreza auditiva, ya que para el progreso en el aprendizaje de una lengua siempre se han considerado fundamentales aspectos como el vocabulario, la gramática y el hecho de poder expresarse oralmente o por escrito. Wilson (2008) opina que el desarrollo de la destreza auditiva tiene suma importancia, siendo ésta imprescindible para estar al tanto de lo que ocurre en el mundo, ya que, si no entendemos a nuestro interlocutor, no podremos llevar a cabo ninguna actividad propiamente comunicativa. Al vivir en un país no hispanohablante como Suecia[1], el aprendiz de ELE se encuentra en evidente desventaja al no poder aprovechar el entorno social como recurso pedagógico (Álvarez Montalbán, 2007). De esta manera, para la mayoría del alumnado el aula es en muchos casos el único lugar donde es posible escuchar, leer, escribir y hablar el idioma meta. Es cierto que la posibilidad de utilizar las TIC (Tecnologías de Información y Comunicación) existe, pero ha supuesto un reto didáctico complicado en el ámbito de las lenguas extranjeras (en sueco *moderna språk,* "lenguas modernas"), ya que el alumnado no posee los niveles lingüísticos adecuados para explotar todas las posibilidades que –en principio– el acceso a las nuevas tecnologías brinda (Bardel, Falk & Lindqvist, 2016). Si el objetivo de la enseñanza de idiomas es que los aprendices, al final del proceso, puedan utilizar de forma autónoma y eficaz la lengua meta fuera del aula, es importante entre otras cosas que los materiales didácticos que presentan el *input* oral tengan características parecidas a las de las conversaciones espontáneas[2] (Widdowson, 1978), ya que pueden servir como recurso y modelo para desarrollar la competencia interaccional de los aprendices (Batlle, 2020; Batlle & Suárez, 2020). Por consiguiente, el objetivo de este trabajo es averiguar en qué medida se acercan a las características interaccionales del habla cotidiana ("talk-in-interaction"; Schegloff, 2007, p. xiii) los materiales auditivos para la enseñanza del español L2 que acompañan tres manuales de ELE dirigidos a estudiantes suecos de educación secundaria. Con este fin, se contrastarán algunas conversaciones didácticas incluidas en dichos manuales con lo que sabemos acerca del habla en interacción gracias a los estudios que se han realizado en este ámbito en las últimas cinco décadas (véase Kasper & Wagner, 2014).

Hasta ahora se han publicado pocos estudios en esta área, tanto en lo referente al español como a otras lenguas, pero todos ellos coinciden en destacar la escasa correspondencia entre los patrones observados en los diálogos didácticos y lo que suele ocurrir en las interacciones cotidianas en aspectos como la estructura secuencial (Pauletto, 2020; Wong, 2002), la extensión y densidad léxica de los turnos de habla, la falta de fenómenos como pausas, vacilaciones, comienzos fallidos ("false starts"), repeticiones, *backchannels* y solapamientos (Gillmore, 2004, 2007), la escasa presencia de secuencias tan importantes como las de reparación (Batlle & Suárez, 2020) y, en general, la ausencia de dinamismo y creatividad en los diálogos (Padilla García, 2012). El presente estudio se propone integrar los resultados hasta aquí obtenidos en este ámbito, esta vez a partir de datos suecos (referidos al español). En la próxima sección se introducirá el marco teórico a partir del cual se ha llevado a cabo esta investigación.

2. Teoría y método: el análisis de la conversación

En este estudio se hará un uso *aplicado* del análisis de la conversación (AC, de aquí en adelante), al *aplicar* unos conocimientos generales sobre el habla en interacción a otros tipos de interacciones verbales (ten Have, 2007, pp. 173-212; para otros ejemplos de usos aplicados del AC véase André, 2018; Batlle, 2020; Batlle & Suárez, 2020; Bernsten, 2002; Chepinchikj & Thompson, 2016; Pauletto, 2020; Wong, 2002). Las conversaciones didácticas aquí analizadas en principio no reúnen las condiciones ecológicas necesarias para

[1] Según el servicio nacional sueco de estadística (*Statistiska centralbyrån*) en el año escolar 2016/17 el español fue el idioma extranjero más elegido – después del inglés, que sin embargo goza de un estatus muy distinto a las demás lenguas en el contexto escolar sueco – entre los estudiantes suecos de secundaria, con un 47% de las preferencias, seguido por el alemán, con el 23%, por el francés, con el 18%, y por "otros idiomas", con el 12% (https://www.scb.se/hitta-statistik/artiklar/2018/drygt-halften-laser-moderna-sprak-pa-gymnasiet/).

[2] En el contexto de este estudio los adjetivos *espontáneo*, *cotidiano* o *auténtico* han de entenderse como "(T)he features that identify a text as a discourse sample produced by native speakers", es decir, '(L)as características que identifican un texto como ejemplo de discurso producido por hablantes nativos' (Batlle & Suárez, 2020, p. 3).

llevar a cabo un análisis de este tipo, al ser diálogos basados en un guion que se interpreta a favor de una audiencia de oyentes. No obstante, creemos interesante examinarlas como *actuaciones* que pretenden ofrecer al alumnado un modelo de lo que es la interacción entre nativos, y queremos hacerlo partiendo de los conocimientos acumulados sobre el habla en interacción, para resaltar similitudes y diferencias y así intentar establecer si estos materiales pueden representar una base fiable para emprender la exploración del uso situado de la lengua meta en la clase de idiomas.

El AC es un enfoque teórico surgido en el ámbito sociológico que estuvo profundamente influenciado por la etnometodología (Garfinkel, 1967). La perspectiva etnometodológica se manifiesta en el AC en el hecho de que esta disciplina hace suyo el punto de vista del participante: partiendo del *procedimiento de prueba del turno siguiente* ("next turn proof procedure"; Vázquez Carranza, 2019, p. 36) cada turno de palabra demuestra la interpretación del turno anterior por parte del hablante actual. Esto permite analizar lo que los participantes hacen, turno tras turno (Sacks, Jefferson, & Schegloff, 1974, p. 729), partiendo de una perspectiva émica, es decir, la perspectiva propia del ambiente secuencial en el cual la acción social se produce (Seedhouse, 2004)[3].

Una asunción importante en el AC es que la conversación es fundamentalmente metódica y organizada, al ser producida y mantenida por los hablantes mismos en su orientación mutua (Sacks, 1984, p. 22). La intersubjetividad entre individuos se basa por lo tanto en la posibilidad de que los sujetos sincronicen mutuamente sus conciencias al percibirse en el aquí y ahora de la interacción contingente. En este proceso, cada acción producida por los hablantes (preguntas, saludos, quejas etc.) a la vez depende de y renueva el contexto de interacción, de forma tal que cada turno de palabra tiene una doble orientación: hacia atrás – al responder al turno anterior – y hacia adelante, al constituir el contexto a partir del cual el turno siguiente deberá ser producido[4]. A partir de estas premisas, las/los analistas de la conversación buscan e identifican patrones recurrentes en las interacciones cotidianas, enfatizando la posición secuencial en la que se encuentra el rasgo distintivo e identificando la función que dicho rasgo desempeña en ese lugar. Por consiguiente, el interrogativo fundamental del AC, "why that now?" ("¿Por qué (ocurre) esto, ahora?"; Schegloff & Sacks, 1973, p. 299), captura el interés de la disciplina por los actos sociales en el contexto de la interacción cotidiana (Seedhouse, 2004, p. 3). En el próximo apartado se presentarán los datos y la metodología adoptada en el presente estudio.

3. Datos y metodología

Los datos sobre los cuales se basa este trabajo consisten, por un lado, en tres diálogos pertenecientes a tres distintos manuales de ELE utilizados en los cursos de tercer nivel del bachillerato sueco, y por el otro, en ejemplos provenientes de conversaciones espontáneas en español[5]. Los manuales se eligieron consultando en un foro público a dieciocho profesores y profesoras de ELE de distintos institutos de secundaria suecos: los que resultaron ser los más utilizados por el profesorado del foro –y que por eso decidimos incluir en nuestro corpus– fueron *Caminando 3* (Westermann, Gustafsson, Waldenström, & Wik-Bretz, 2016), *Vistas 3* (Rönnmark & Quintana, 2012) y *La próxima estación 3* (Gröndahl, Fernández García, Liven, Lund Moss & Rosén, 2018).

El segundo paso consistió en escuchar el material para encontrar audios comparables por duración y cuadro de participación (Goffman, 1981). Por ello, el primer criterio fue encontrar conversaciones de entre dos y cuatro participantes, evitando los monólogos. Se encontraron así varias grabaciones que cumplían con dichos criterios. Dado el carácter cualitativo del presente estudio, al final se eligieron las tres más comparables en términos de duración y cuadro de participación (una por cada manual) para delimitar el corpus y favorecer un

[3] "(T)he perspective from within the sequential environment in which the social actions were performed" (Seedhouse, 2004, p. 3).

[4] "(E)l contexto da forma a los enunciados de los participantes en la interacción y, a su vez, lo dicho contextualiza lo que se va a decir consecutivamente, por lo que el contexto también es un elemento que se renueva constantemente" (Batlle, 2015, p. 68; véase también Heritage, 1984, p. 280).

[5] Además de los ejemplos tomados de Sacks (1992, 1987) y de Vázquez Carranza (2019), se han utilizado a este efecto dos conversaciones pertenecientes al corpus Val.Es.Co (Valencia Español Coloquial; http://www.valesco.es/), un corpus de español coloquial creado a partir de 1990 por el profesor Antonio Briz y su grupo de investigación en la universidad de Valencia (Grupo Val.Es.Co. 2014; Briz & Grupo Val.Es.Co. 2003, 2002). Para facilitar la comparación con los demás ejemplos, los extractos del corpus Val.Es.Co aquí analizados se han transcrito de nuevo utilizando las convenciones de transcripción empleadas en AC.

análisis más detallado de los extractos[6]. El diálogo "El partido" (*Caminando 3*) tiene una duración de 03:04 minutos, "La moda y la identidad" (*Próxima Estación 3*) de 02:37 minutos, y el audio "Y tú, ¿cómo eres?" (*Vistas 3*) de 02:02 minutos.

Finalmente, se contrastaron los resultados del análisis de estos datos con los conocimientos que tenemos acerca del habla en interacción. Las conversaciones analizadas fueron transcritas según las convenciones utilizadas en AC (Jefferson, 1984, 2004), para poder representar todos los detalles potencialmente relevantes, como, por ejemplo, volumen de la voz, inspiraciones, énfasis, alargamientos vocálicos, risas, solapamientos, etc.

4. Análisis

4.1. La toma de turno en la conversación cotidiana

La interacción verbal está organizada en turnos de habla, los cuales incorporan las distintas acciones sociales llevadas a cabo por los participantes (Vázquez Carranza, 2019, p. 55). En la conversación cotidiana, la alternancia entre hablantes es un proceso coordinado y colaborativo que se ve condicionado por varios factores locales. En primer lugar, el cambio de hablante no es preestablecido[7] sino que ocurre en tiempo real, en el transcurso de la interacción, y es negociado localmente. En segundo lugar, lo más común es que una sola persona hable en cada momento. Por último, los solapamientos entre más de un hablante son por lo general breves y transitorios (Sacks, Schegloff, & Jefferson, 1974, p. 706).

Los turnos de habla están constituidos por *unidades de construcción de turno* (UCT de aquí en adelante; en inglés "turn-constructional unit", TCU*;* Sacks *et al.,* 1974, p. 704) las cuales pueden coincidir con distintas unidades lingüísticas, tales como partículas discursivas, sintagmas nominales, frases sencillas o incluso oraciones complejas (Sacks *et al.,* 1974, p. 702). Veamos aquí un ejemplo:

Extracto 1. (Adaptado de Vázquez Carranza, 2019, p. 57)

```
01        ((suena el teléfono))
02   m:   Bueno.
03   p:   e:h buenas tardes [es:-
04   m:                     [Hola Pedro
05   p:   Hola Cómo está Señora?
06   m:   Muy bien y tú?
07   p:   Muy bien gracias...
```

El turno en la línea 02 está compuesto por una sola UCT, lo que vendría a ser un adjetivo, y que aquí representa la respuesta ritualizada a la llamada telefónica (línea 01). El turno en la línea 05 de esta conversación, en cambio, está constituido por dos UCTs: "Hola" (un saludo) y "¿Cómo está señora?" (una frase de cortesía formulada como frase interrogativa). El turno en la línea 06 está otra vez compuesto por dos UCTs: "muy bien" (la respuesta ritualizada a la pregunta del turno anterior) y "y tú?" (otra pregunta). Las UCTs forman turnos potencialmente acabados en el momento en que llegan a ser completas a nivel sintáctico y/o prosódico y/o pragmático, en cuyo caso *se puede* producir la transición del turno a otro hablante (Sacks *et al.,* 1974, p. 703). A este espacio interaccional se le llama *lugar pertinente para la transición* (LPT, de aquí en adelante; en inglés "transition-relevance place"*,* TRP; Sacks *et al.*, 1974, p. 704; Vázquez Carranza, 2019, p. 56), es decir, el momento en el cual es legítima la transición del turno entre participantes. Si volvemos al ejemplo (1), vemos que en la línea 03 el hablante está a punto de producir una nueva UCT después del saludo (*e:h buenas tardes*), pero la nueva UCT se solapa con la respuesta del otro hablante, el cual evidentemente considera el saludo como un posible turno completo y procede a contestar con un turno de reconocimiento. La transición entre participantes se logra a través de algunas normas organizadas de forma jerárquica:

1) El hablante actual selecciona al siguiente hablante (Sacks *et al.,* 1974, pp. 703-704) con una pregunta directa, con el uso de los pronombres personales o nombrando directamente al otro hablante.

[6] Las demás grabaciones, aquí no consideradas, comparten con estas los rasgos principales: entre ellos, la temporalidad y la secuencialidad problemáticas y la ausencia de muchos de los fenómenos que caracterizan el habla en interacción, como solapamientos, reparaciones, turnos de apoyo, co-construcciones etc.

[7] A no ser que haya una organización local de la toma de turno específica, como ocurre en algunos ámbitos institucionales, como por ejemplo en las entrevistas o durante una ponencia o en la interacción en clase.

2) El próximo hablante se autoselecciona. Si el hablante que tiene el turno no selecciona al siguiente, quienquiera puede tomar el turno en concomitancia con un LPT.
3) Si las dos anteriores posibilidades no se realizan, el hablante actual, en correspondencia con un LPT, se autoselecciona manteniendo el turno (Sacks *et al.,* 1974, pp. 703-704).

Cada vez que una UCT llega a ser potencialmente completa, la transición entre hablantes se puede lograr de forma legítima, en correspondencia con el LPT. Observemos el extracto siguiente:

Extracto 2. (Adaptado de Vázquez Carranza, 2019, p. 67)

```
01 C: yo puedo ir a la iglesia.=a la iglesia puede
02    ir el quien quiera.
03 M: exacta[mente
04 C:       [a poco no,
05 M: exactamente
```

Aquí podemos ver a C mantener el turno en correspondencia con un posible LPT (línea 01, después de "iglesia"), a M auto-asignarse el turno en correspondencia con un LPT (líneas 03 y 05) y a C autoseleccionarse en proximidad de un LPT pero con un ligero solapamiento (línea 04). En el siguiente extracto, en cambio, vemos un típico caso de heteroselección (es decir, de selección del hablante siguiente por parte del hablante actual):

Extracto 3. (Adaptado de Vázquez Carranza, 2019, p. 68)

```
01 V: quién es Sheila Durcal?
02 R: la hija de Rocío Durcal.
03 V: ah.
```

En este caso V selecciona directamente a R con su pregunta (línea 01). R responde, ofreciendo la información requerida (línea 02) y V cierra la secuencia, autoseleccionándose en correspondencia con un LPT para producir un recibo informativo (línea 03). Para resumir, existe un mecanismo que gobierna la toma de turnos que los participantes gestionan de forma local. El sistema opera en solo dos UCTs a la vez: la actual y la siguiente, de manera que el hablante actual tiene inicialmente derecho a producir una sola UCT y, en el primer punto de posible finalización, la transición a un siguiente hablante se convierte en una posibilidad relevante. Veremos en el próximo apartado cuál es la situación en los diálogos didácticos.

4.2. La toma de turno en los diálogos didácticos

En las conversaciones de los tres manuales de ELE, el sistema que acabamos de describir se encuentra reflejado, aunque con matices. Analizaremos ahora un extracto de "El partido" de *Caminando 3.* Antonio comenta con su tía Sonsoles el partido de fútbol que los dos están viendo juntos, en un estadio.

Extracto 4. (Caminando 3; An= Antonio; So = Sonsoles)

```
01 An Enrique ha quedado suspendido para el resto del partido. me
02    cago en la leche.
03    (0.8)
04 So ay cómo te emocionas Antonio. seguro que: no quieres
05    sentarte en el club de los ultras?
06    (1.1)
07 An shhh.
08    (.)
09 An ¿ahora qué pasa?
10    (0.1)
11 An sí. tiro libre para el Málaga.=un balón alto que va por
12    encima de la defensa.=el portero se -lanza y ↑GO::L,
13    (0.3)
14 An ↑SÍ::: ya te dije que son la leche.
```

Primero vemos a Antonio producir una observación ("noticing"; *Enrique ha quedado suspendido para el resto del partido.;* línea 01), asimilable a una queja, para después volver a autoseleccionarse –manteniendo así el turno en correspondencia con un posible LPT– y producir una interjección que subraya y enfatiza el carácter de queja del turno (*me cago en la leche.;* línea 02). Después de un silencio significativo[8] (línea 03), se autoselecciona Sonsoles, la cual produce a su vez una observación (*ay cómo te emocionas Antonio.*; línea 04) para luego volver a autoseleccionarse: su pregunta dicotómica, en clave irónica (líneas 04-05), no recibe ninguna respuesta directa. La falta de reacción por parte de Antonio contrasta con los resultados de los estudios interaccionales sobre la ironía, según los cuales a una evaluación irónica del hablante el receptor suele responder bien de manera afiliativa, con risas o con otro turno de respuesta irónico, o de manera seria y argumentada, en el caso de que no haya entendido la ironía inherente en el turno anterior (Clift, 1999). En este caso, el turno de Sonsoles es seguido por un silencio de más de un segundo (línea 06). En su respuesta (línea 07), Antonio en primer lugar acalla a la co-participante mediante una interjección directiva (*shhh*), para luego producir una pregunta retórica *(¿ahora que pasa?*; línea 09) en lo que parece el comienzo del relato de un periodista para su público radiofónico (líneas 11-12): la descripción momento por momento de la acción que lleva al gol no parece de hecho ir dirigida a Sonsoles, puesto que ella también tiene acceso visual directo a la acción en curso. Al igual que en los dos anteriores extractos, en este diálogo didáctico también observamos ejemplos de los tres tipos de selección: el hablante actual selecciona (sin éxito) al próximo hablante (Sonsoles, líneas 04-05); el hablante actual se autoselecciona para mantener el turno en correspondencia con posibles LPTs (ambos, líneas 01-02; 04-05; 11-12); el co-participante se autoselecciona cerca de un LPT (Sonsoles, línea 04). Como observan Sacks *et al.*, "Transitions from (one turn to a next) with no gap and no overlap are common. Together with transitions characterized by slight gap or slight overlap, they make up the vast majority of transitions" (1974, p. 700). En trabajos posteriores, tanto Jefferson (1984) como Schegloff (2000) subrayaron la frecuente presencia de ligeros silencios entre turnos, llegando Schegloff a hablar de una sílaba (150-200 ms) como "normal value for the transition space". En un estudio experimental posterior, Heldner y Edlund (2010) muestran que los solapamientos en las conversaciones cotidianas también ocurren con frecuencia, de forma tal que en correspondencia con el LPT se observan en un 40 % de los casos. Si comparamos los dos extractos a la luz de lo anterior, podemos ver similitudes, pero sobre todo notables diferencias. Entre las similitudes, se encuentra el hecho de que se vean reflejados todos los tipos de auto- y heteroselección del próximo hablante. Entre las diferencias, se observa, en primer lugar, el hecho de que en el diálogo de *Caminando 3* los turnos de los participantes estén separados por silencios sistemáticos y más o menos prolongados (en tres casos, iguales o superiores a 0,3 segundos). Esto no ocurre en los tres extractos anteriores, donde además podemos observar un solapamiento entre turnos (extracto (2), líneas 03-04). En segundo lugar, la manera de participar en la interacción tiene carácter distinto, en el sentido de que en los tres primeros ejemplos los hablantes van exhibiendo en el transcurso de la interacción, momento por momento, su análisis atento de lo que está ocurriendo gracias a las características de *proyectabilidad*[9] del turno de habla (Batlle, 2015). En el extracto (4), en cambio, la impresión es que Antonio a veces esté hablando como si Sonsoles no estuviera presente (líneas 11-12). Podemos observar los mismos fenómenos en un breve extracto de la conversación "La moda y la identidad":

Extracto 5. (La próxima estación 3 –Nu=Nuria; Em=empleada)

```
01 Em qué tal el vestido?
02    (0.6)
03 Nu bue:no, no estoy segura del color.
04    (0.7)
05 Nu es muy amarillo.=normalmente prefiero el negro.
06    (0.5)
07 Em pues, atrévete a probar algo nuevo. el amarillo está muy
08    de moda esta primavera.
09    (17.5)
```

[8] Según Kendrick y Torreira (2015), un silencio de más de 300 ms es suficiente para proyectar que una acción preferida en un formato preferido es menos probable, aunque aún posible. Después de silencios de 700 a 800 ms o más, la proporción de acciones no preferidas se vuelve mayor que la de las preferidas y prácticamente todas las respuestas tienen un formato de turno no preferido (Kendrick y Torreira, 2015, p. 32).

[9] "La proyección de un turno (…) guarda una estrecha relación con la habilidad que un hablante tenga de predecir cómo actúa interaccionalmente su interlocutor" (Batlle, 2015, p. 32).

Aquí notamos para empezar la presencia de todos los mecanismos de selección del próximo hablante (heteroselección: línea 01; autoselección cerca de un posible LPT o coincidiendo con un posible LPT: líneas 05 y 07; mantenimiento del turno en el caso de que nadie se autoseleccione: línea 05). Por otra parte, se observa otra vez la presencia constante de silencios ("gaps") prolongados entre turnos a la vez que no siempre los hablantes parecen orientarse hacia las acciones de los coparticipantes: véase por ejemplo la falta de ratificación por parte de la empleada a la evaluación moderadamente negativa de Nuria (*no estoy segura del color*; línea 03) o la ausencia de reacción por parte de Nuria al turno informativo en primera posición ("news delivery"; Couper-Kuhlen & Selting, 2018, p. 269) de la empleada (líneas 07-08), una acción que normalmente hace relevante en el turno siguiente una respuesta mínima que subraye el carácter informativo del turno anterior ("newsmark"; Couper-Kuhlen & Selting, 2018, pp. 268-273). Otra observación que podemos hacer, y que se puede extender a todas las conversaciones didácticas observadas, tiene que ver con el formato de los turnos: por lo general, siempre se trata de oraciones breves, sintácticamente completas y lexicalmente sencillas.

La *temporalidad atípica* de la conversación didáctica y la escasa orientación de los participantes hacia la acción en desarrollo parecen así rasgos típicos de los diálogos de los manuales de ELE analizados. Schegloff y Sacks (1973) afirman que los silencios prolongados entre turnos de palabra suelen prefigurar problemas de *preferencia*, de tal forma que, si un silencio relevante ocurre después de una acción en primera posición, dentro de un par adyacente, esto puede ser interpretado por parte del hablante como un aviso de que la respuesta será de alguna manera problemática (Kendrick & Torreira, 2015). El concepto de *preferencia* en este caso no tiene nada que ver con la dimensión psicológica e individual, sino con problemas de afiliación y desafiliación (sobre el concepto de des/afiliación en interacción véase Stivers, 2008) en relación con las acciones sociales que producen los participantes en la interacción. En la conversación cotidiana, los participantes pueden elegir entre una amplia gama de posibilidades a la hora de llevar a cabo una acción de respuesta. El concepto de preferencia tiene que ver, por un lado, con las diferentes maneras de realizar dichas acciones (Atkinson, 1984, p. 53) y, por el otro, con la necesidad subyacente de mantener la solidaridad social entre los participantes (Heritage, 1984, p. 268). Pomerantz (1984) hace una distinción entre turnos preferentes ("preferred") y no preferentes ("dispreferred"), señalando cómo algunos turnos de respuesta pueden resultar problemáticos a nivel social mientras que otros no lo son. Por ejemplo, la aceptación de una invitación –en cuanto respuesta– tiene una estructura simple y se suele producir con rapidez y sin perturbaciones que alejan la primera acción de la segunda. Sin embargo, los turnos no preferentes, como por ejemplo el rechazo de una invitación, suelen tener una estructura más compleja, además de ser acompañados por explicaciones y/o justificaciones –indicadores frecuentes de que la respuesta ofrecida no es la preferente– y suelen producirse con retraso, titubeos y partículas pragmáticas de varios tipos que retrasan la producción de la respuesta *verdadera*, entorpeciendo de esta forma la progresión de la interacción[10], como el siguiente extracto demuestra:

Extracto 6. (Sacks, 1987, p. 58)

```
A: Yuh comin down early?
B: Well, I have a lot of things to do before getting cleared up
   tomorrow. I don't know. I w- probably won't be too early.[11]
```

Como subraya Sacks en su análisis, la respuesta negativa de B en este caso es mitigada al máximo y literalmente empujada hacia el final del turno de respuesta, de forma tal que no solamente debilita la solidaridad social, sino que también retrasa el avance de la interacción)[12]. Como ejemplo de lo que ocurre en

[10] "If an agreeing answer occurs, it pretty damn well occurs contiguously, whereas if a disagreeing answer occurs, it may well be pushed rather deep in to the turn that it occupies." (Sacks 1987, p. 58)

[11] A: Vas a venir pronto?
B: Bueno, tengo muchas cosas que hacer antes de liberarme mañana. No sé. N- Es probable que no llegue demasiado temprano.

[12] "Ya sea una palabra, un turno, una secuencia, o las acciones y actividades que estos encauzan, cuando conversamos con otros, solemos continuar hasta dar por terminado lo que hemos iniciado. Aunque destacar esto parezca una trivialidad, estamos ante un principio universal que gobierna el habla en interacción y que denominaremos *progresividad*. En una conversación, se espera que un próximo turno avance la trayectoria de acción iniciada por el turno anterior, que una siguiente palabra en un turno avance el desarrollo de la acción de ese turno, que una sílaba lo haga respecto de la palabra en curso, y así la interacción prosiga el curso que tiene señalado en cada nivel de detalle. […] (E)n la conversación, la

las conversaciones cotidianas, podemos observar el siguiente extracto: B le está relatando a sus compañeros de carrera, A y C (Nacho), un problema que ha tenido con otra persona:

Extracto 7. (Adaptado de Val.Es.Co, p. 174)

```
01 B  es que si↑empre, .hhh se descojona pero a mí no me hace
02    ni puñetera gracia porque yo- yo quiero hacerme
03    resúme↑nes, (0.9) y estoy
04    (toda [la) semana (                    )]
05 A        [(¿te) estás (descojonando de) noso]tras? ((a Nacho))
06    (1.6)
07 A  pero coño Nacho con↑testa:.
08    (2.8)
09 B  se le ha comido la lengua el gato.
10    (0.3)
11 C  no jodas.
```

El turno de B (líneas 01-04) tiene todas las características de una queja dirigida a una persona ausente ("third-party complaint"; Traverso, 2009). No sabemos cuál es la orientación espacial de los hablantes al no existir datos visuales, pero lo que ocurre a continuación es bastante elocuente: A se autoselecciona cuando el turno de B todavía no ha alcanzado un posible LPT, para dirigirse a C (Nacho) con un turno interrogativo que sintácticamente es una pregunta polar y sin embargo incorpora un reproche hacia el compañero por su actitud no afiliativa (línea 05). En casos como estos, la respuesta preferente por parte del acusado sería la desmentida inmediata ("not at fault"; Dersley & Wootton, 2000). La falta o el retraso en la producción de dicha desmentida, en cambio, suelen preceder a alguna forma de admisión de culpabilidad (Dersley & Wootton, 2000). En este caso, no se realiza ni la una ni la otra opción. Retrospectivamente, la acción de C se puede caracterizar como *manifiestamente ausente* ("noticeably absent"; Schegloff, 1968): por esta razón, después de un silencio prolongado (línea 06), A solicita de forma agravada una respuesta por su parte (línea 07), que C sin embargo no ofrece. Después de otro silencio extremadamente largo (línea 08), B ofrece una justificación indirecta ("vicarious account"; Sterponi, 2009) en clave irónica, que es finalmente rechazada por C (línea 11). Lo que observamos en el extracto (7) es que el silencio entre la primera y la segunda parte de una pareja adyacente es un indicador bastante fiable de la presencia de algún tipo de problema incipiente a nivel interaccional y de que el turno siguiente, si se produce (algo que no ocurre en (7)), tendrá con mucha probabilidad forma no preferente.

Resumiendo, vemos que entre las conversaciones auténticas y las de los manuales hay algunas similitudes y muchas diferencias: entre las primeras, el hecho de que todos los tipos de selección del próximo hablante se vean reflejados. Entre las segundas, en lo que se refiere a los manuales, hemos observado la presencia de silencios sistemáticos y prolongados entre turnos (en ningún caso relacionados con problemas interaccionales) y la escasa orientación de los hablantes hacia las acciones de los co-participantes. En el próximo apartado analizaremos la secuencialidad de las acciones llevadas a cabo por los participantes a través de sus turnos de palabra.

4.3. Secuencialidad de las acciones en la conversación cotidiana

La interacción es un proceso colaborativo en el cual los hablantes, a través de cada turno de palabra, cumplen acciones que responden a las acciones anteriores y que proyectan sobre el turno siguiente la relevancia de cierto tipo de acción de respuesta por parte del/de la co-participante. Sacks (1987) identificó un patrón importante en la organización de las secuencias: la preferencia por la contigüidad entre turnos en la conversación cotidiana, es decir, por la producción inmediata de una acción de respuesta en segunda posición (la segunda parte de un par adyacente) a la acción en primera posición (la primera parte), sin que otros elementos se interpongan entre ellas (Sacks, 1987, pp. 59-60). Con la expresión *par adyacente* se denomina justamente esta unidad secuencial básica de la interacción verbal: dos turnos contiguos, producidos por dos hablantes distintos y diferenciados entre una primera parte y una segunda parte (saludo-saludo, pregunta-respuesta, oferta-aceptación/rechazo de la oferta, etc.; Schegloff & Sacks, 1973; Vázquez Carranza, 2019, pp.

progresividad es una preferencia de carácter general a la que se orientan los participantes." (Raymond & Olguín, en prensa, p. 128).

60-61). Cualquier acción en primera posición, dentro del par adyacente, proyecta la relevancia de una respuesta específica en la segunda posición (el turno siguiente). Como demuestra lo que ocurre en el extracto (7), la falta de una acción relevante en segunda posición es manifiesta e implica consecuencias a nivel de la interacción (Schegloff, 1968, 2007, p. 19). Ahora, para enfatizar el carácter colaborativo, secuencial y temporalmente constituido de la conversación, antes de analizar los diálogos didácticos desde el punto de vista secuencial vamos a describir otros tres fenómenos típicos del habla en interacción que contribuyen significativamente a su organización y que nosotros utilizaremos para evaluar hasta qué punto las conversaciones didácticas pueden considerarse "espontáneas": nos referimos a las prácticas de reparación, a los turnos de apoyo y a las enunciaciones conjuntas.

Las prácticas de reparación tienen como objetivo solucionar problemas recurrentes ("problems in hearing, speaking, and understanding"; Schegloff, Jefferson & Sacks, 1977, p. 361) que ponen en entredicho la intersubjetividad (Batlle, 2015, pp. 28-30) entre participantes a la vez que entorpecen la progresividad de la interacción. Un procedimiento de reparación incluye tres componentes básicos: la *fuente del problema* (una palabra mal pronunciada o desconocida, por ejemplo), el *inicio de la reparación* (con una señal que indica el inicio del procedimiento) y *la solución de la reparación* (la reformulación de la palabra mal pronunciada, por ejemplo). Tanto el hablante que ha originado el problema como el receptor pueden iniciar el procedimiento de reparación y/o producir la solución. De esta forma, distinguimos, entre otras, entre la reparación auto-iniciada y auto-resuelta, en la que la persona que produce el problema también inicia y completa la reparación de forma independiente, y la reparación hetero-iniciada y auto-resuelta, en la que el co-participante inicia el procedimiento y el hablante produce la solución (Vázquez Carranza, 2019, pp. 77-87). A continuación, veremos un ejemplo de reparación auto-iniciada y auto-resuelta:

Extracto 8. (Adaptado de Val.Es.Co, p. 146)

```
01 C pero qué to- (0.3) no:: he tenido un fa↑LLITO ME
02   DE(h)CÍA:=[HIH]
03 B           [per]o yo qué sé pero yo no ↑sé,]
04 C           [(                            )]
05   (0.5)
06 B tantas:, si tienen tantos fal- (0.2) fa- m:: >o sea<
07   si tienen tantas [faltas           (     ,)]
08 C                  [¿sabes por qué se ha pres]entao? porque le
09   caducaba el teórico.
10   (0.6)
11 B a::h.
```

Aquí la fuente del problema reside en el referente "faltas", que la hablante consigue reparar (línea 07) en el mismo turno, después de algunos titubeos y de dos intentos fallidos (*si tienen tantos fal- (0.2) fa- m:: >o sea<;* línea 06). En muchos casos, sin embargo, el proceso es puesto en marcha por el/la co-participantes: veamos a continuación el extracto de una conversación telefónica:

Extracto 9. (Adaptado de Vázquez Carranza, 2019, p. 78; An = Antelmo; Ch = Chelita)

```
01 An: bueno.
02 Ch: sí hola buenos días.
03 An: hola:
04 Ch: qué milagro que te dejas oír o↑ye↓
05     (0.5)
06 An: mandé?
07 Ch: qué milagro QUE TE DEJAS ESCUCHAR
08 An: heheheh hehe.hh [no pues es que- hh..hh es que me fui a:
09 Ch:                 [sordo:
```

En este caso, la fuente del problema se encuentra en el turno de Chelita (*qué milagro que te dejas oír o↑ye↓*; línea 04): después de un silencio de 0,5 segundos, que de por sí puede proyectar algún problema, Antelmo inicia la reparación en el turno siguiente (línea 06), solicitando con *mandé?* una repetición del turno entero, lo cual indica que el problema no esté localizado en algún elemento aislado del mismo sino que afecta a

todo el turno de palabra. El resultado de la reparación se puede apreciar en el siguiente turno de Chelita (línea 07): obsérvese en particular la reformulación de la segunda parte y el volumen más alto utilizado por la hablante (*qué milagro QUE TE DEJAS ESCUCHAR*). La respuesta de Antelmo (línea 08) nos indica que el turno de Chelita ha sido analizado como un reproche amistoso (véase la risa de Antelmo al comienzo del turno y la subsiguiente justificación).

Los turnos de apoyo son señales a través de las cuales el oyente toma el turno de forma transitoria en correspondencia con o cerca de un LPT para ratificar el seguimiento no problemático del turno prolongado del/de la co-participante hasta ese momento (Cestero, 2000). Podemos observar el fenómeno en el extracto siguiente. Tres amigas están hablando de la utilidad del carnet de conducir:

Extracto 10. (Adaptado de Val.Es.Co, p. 146)

```
01 A no es lo ↑mis[mo:.]
02 C              [no t]iene tanta necesidad pero hay gente
03   que sí que la tiene. entiendes?
04 A ↑mh↓mh.
05   (0.4)
06 C es que::, (0.6) es crearte tú la necesidad.
07   (1.0)
08 C no:: (eh) yo desde luego:, (0.2) ( ) me lo tengo que
09   sacar.=lo que pasa que::,
10   (.)
11 C .hhh eh a'más es muy bueno [(vas)  esperan↑d]o:::, (.)=
12 B                            [↑para:  pa↓ra::,]
13 C =terminar la carrera tienes trabajo y qué::?
14 B y[a:.]
15 C  [qué] le vas a decir. mamá llevamé?
16   (0.2)
17 A [(  )]
18 B [ cla]ro:.
19 C o sea. yo lo tengo claro. me lo tengo que sacar.
```

C está argumentando a favor del carnet de conducir: su turno, constituido por múltiples UCTs, no es interrumpido en ningún momento por sus co-participantes (con la excepción del intento abortado de toma de turno por parte de B, lejos del LPT, y que parece en continuidad con el anterior turno incompleto de la misma hablante; líneas 08-09, 12). Por otra parte, vemos que tanto A como B, en varias ocasiones, y siempre en proximidad de o en correspondencia con un LPT, producen unos turnos de apoyo de distinto tipo (*↑mh↓mh*, *ya*, *claro*) con los cuales ratifican la comprensión no problemática del turno *in fieri* de C y, en general, manifiestan su escucha activa (líneas 04, 14 y 18).

Terminamos esta breve reseña describiendo otro fenómeno que pertenece a la dimensión secuencial y cooperativa del habla y que subraya el alto grado de coordinación epistémica entre participantes: las enunciaciones conjuntas o co-construcciones (Helasvuo, 2004; Lerner, 1991; Sacks, 1992, pp. 647-655). Esta práctica se caracteriza por la producción colaborativa de turnos de habla entre dos o más hablantes, y es un fenómeno colaborativo en la medida en que se compone de la secuencia de dos turnos de habla, de los cuales el segundo se produce en continuidad con el primero, al que completa:

Extracto 11. (Sacks, 1992, p. 651)

```
A: You were / / trying to be-
B: (I hid my anger,)
A: You were trying uh
B: -to play along with us.[13]
```

[13] A: Estabas // intentando ser-
B: (Escondí mi enfado)
A: Estabas intentando eh

Aquí vemos que la frase "You were trying to play along with us" es producida por dos personas distintas. El hecho de que un participante pueda terminar una frase aún incompleta añadiendo elementos sintácticamente coherentes es evidencia directa de la capacidad de examinar en tiempo real los turnos de los co-participantes (Sacks, 1992, p. 651) y, en general, de la naturaleza colaborativa de la interacción humana.

Los fenómenos descritos hasta ahora representan las prácticas organizadas (Harvey Sacks habla en este sentido de "machinery", *maquinaria;* Sacks, 1992, p. 226) que permiten a los hablantes analizar momento a momento la conducta interaccional de los co-participantes para producir acciones coherentes, inteligibles y calibradas en tiempo real. Veamos en el siguiente párrafo cuál es la situación en las conversaciones didácticas que hemos analizado.

4.4. Secuencialidad de las acciones en los diálogos didácticos

A pesar de su frecuencia en el habla en interacción y de su relevancia a nivel interaccional, las prácticas que acabamos de detallar no están representadas de ninguna manera en los diálogos de los manuales de ELE analizados. A continuación, veremos cuáles son las características de dichas interacciones desde el punto de vista secuencial. El primero es el extracto del inicio de la conversación de *Próxima Estación* ya examinada en el extracto (4):

Extracto 12. (Próxima Estación 3; Em = empleada; Ma = María)

```
01 Em ↑hola.
02    (0.9)
03 Em ¿os puedo ayudar en algo?
04    (0.4)
05 Ma sí gracias.
06    (0.5)
07 Ma quería probarme aquel vestido amarillo del escaparate.
08    (0.4)
09 Em ¿y qué talla usas?
10    (0.5)
11 Ma normalmente uso la talla treinta y ocho.
12    (0.7)
13 Ma ¿dónde están los probadores?
14    (0.7)
15 Em están allí al fondo.
16    (10.6)
```

Aquí vemos a la empleada saludar a la cliente al principio del encuentro (*↑hola.*; línea 01). Un saludo es una acción que inicia una secuencia, al proyectar otro saludo como respuesta preferente en segunda posición. Sin embargo, al turno de la empleada le sigue un silencio de casi un segundo (línea 02), después del cual la empleada vuelve a autoseleccionarse para ofrecer ayuda (*¿os puedo ayudar en algo?*; línea 03). Después de otro silencio (línea 04), la cliente responde aceptando el ofrecimiento (*sí gracias*; línea 05). En este caso, no hay ratificación en el turno siguiente por parte de la empleada, ni siquiera en forma mínima, por ejemplo de turno de apoyo (por ejemplo *vale*, *perfecto* o *muy bien*). Después de otro silencio (línea 06), María vuelve a auto-seleccionarse, especificando en qué consiste la ayuda que necesita (línea 07). Después de otro *gap* importante (línea 08), la empleada –en lugar de ratificar en el turno siguiente la información proporcionada por la cliente– pasa directamente a la formulación de una pregunta técnica (línea 09), la cual parece proyectar una posible oferta de asistencia en la búsqueda de la prenda adecuada, una vez recibida la información relevante. En realidad, la respuesta de la cliente (*normalmente uso la talla treinta y ocho*; línea 11) no recibe por parte de la empleada ninguna validación. La siguiente pregunta de la cliente (*¿dónde están los probadores?*; línea 13) recibe una respuesta en forma preferente por parte de la empleada (*están allí al fondo*; línea 15): sin embargo, la secuencia se cierra sin ninguna expresión de agradecimiento por parte de la cliente para clausurar de forma preferente este encuentro de servicio. Rutinas esenciales a nivel social son así pasadas por alto en un material didáctico que por otra parte pretende ofrecer a los aprendices de otro entorno cultural un modelo a seguir

B: -seguirnos el juego.

tanto a nivel lingüístico como pragmático. Encontramos otro ejemplo de pareja adyacente incompleta (y de *desfase* pragmático) en el siguiente extracto:

Extracto 13. (Caminando 3; An = Antonio; Ta = taquillero)

```
01 An hola.
02    (.)
03 An queremos dos entradas para el partido por favor.
04    (0.9)
05 Ta muy bien.
06    (0.2)
```

Al igual que en el ejemplo anterior, el saludo que da inicio al encuentro de servicio (línea 01) no recibe respuesta por parte del taquillero. Antonio, después de una micropausa, pasa directamente a la transacción (línea 03). Situación similar en el siguiente diálogo. Es el primer día de clase en un instituto y Julia entabla una conversación casual con Tamara, otra estudiante:

Extracto 14. (Vistas 3; Ju = Julia; Ta = Tamara)

```
01 Ju ↑hola.
02    (0.4)
03 Ju puedo sentar↑me:? (.) o está ocupado?
04    (0.5)
05 Ta no:::::. (.) €claro que no.€
06    (0.2)
07 Ta €siéntate. siéntate.€
08    (0.5)
09 Ju mira, (0.3) soy nueva aquí, (.) y no conozco a nadie.
10    (0.4)
```

Como podemos ver, al saludo de Julia (línea 01) no le corresponde una respuesta adecuada por parte de Tamara: después de un silencio de 0,4 segundos (línea 02), Julia se vuelve a autoseleccionar y formula su petición (línea 03). Observamos también que al turno de Tamara (línea 07) Julia no responde de alguna manera, cuando la acción de la co-participante proyectaría una expresión de agradecimiento o una ratificación como acción preferida en el turno siguiente.

Este patrón, con acciones en primera posición dentro de un par adyacente que no reciben una respuesta adecuada y/o preferente en segunda posición, es sorprendentemente frecuente en las grabaciones analizadas. Veamos a continuación otro ejemplo proveniente esta vez del manual *Caminando 3*:

Extracto 15. (Caminando 3; An= Antonio; So = Sonsoles)

```
01 An ya sa-bes que yo soy del Málaga de toda la vida.
02    (0.6)
03 So ¿no me di:gas?
04    (0.8)
05 So ¿pero el Málaga son los azules o los rojos?
06    (0.6)
07 An ay no seas tonta.
08    (0.5)
09 An claro que son los azules.
```

Aquí vemos a Antonio producir un turno informativo (*ya sabes que yo soy del Málaga de toda la vida*; línea 01). El turno es seguido por un silencio largo (línea 02), después del cual Sonsoles se autoselecciona, reaccionando al enunciado de Antonio (*¿no me di:gas?*; línea 03). El turno tiene carácter irónico y se puede clasificar como una burla ("tease"; Drew, 1987) que pone de manifiesto cómo la información recibida no es nueva o sorprendente para Sonsoles. Este tipo de turno suele recibir respuestas que van desde la risa (con consiguiente reconocimiento del carácter irónico del turno anterior) hasta respuestas que, al contrario, tratan de forma literal (es decir, seria) la acción anterior (Drew, 1987, pp. 221-222). Antonio, sin embargo, no

reacciona. Con un cambio de trayectoria abrupto, después de otro silencio importante (línea 04), Sonsoles vuelve a autoseleccionarse para dirigirle al co-participante una pregunta (*¿pero el Málaga son los azules o los rojos?*; línea 05): después de otro silencio pronunciado (línea 06), Antonio responde de manera no preferente (*ay no seas tonta*; línea 07), al no contestar directamente a la pregunta. En realidad, con su acción Antonio parece poner en duda la sinceridad misma de la pregunta de Sonsoles, la cual, sin embargo, no reacciona a una afirmación que en otro contexto podría incluso tener implicaciones negativas para su *imagen* ("face"; Goffman 1955). Después de otro *gap* relevante (línea 08), Antonio contesta a la pregunta, aclarando la duda y subrayando la redundancia de la pregunta de Sonsoles (*claro que son los azules*; línea 09).

Otro ejemplo del fenómeno (junto con la constante presencia de silencios entre turnos de palabra) proviene del diálogo de *Vistas 3* ya analizado en (13).

Extracto 16. (Vistas 3; Ju = Julia; Ta = Tamara)

```
01 Ju mira, (0.3) soy nueva aquí, (.) y no conozco a nadie.
02    (0.4)
03 Ju estoy tan ner-viosa que me muero.
04    (0.7)
05 Ju es que el primer día es horroroso y a la -ve:z, (0.2)
06    superexcitante.
07    (0.5)
08 Ju me llamo Julia.
09    (0.2)
10 Ju y tú:?
11    (0.5)
12 Ta €yo: soy Tamara.€
```

Esta secuencia empieza justo después de la secuencia inicial de saludos. Vemos a Julia producir un turno informativo (*mira, (0.3) soy nueva aquí, (.) y no conozco a nadie;* línea 01) seguido por un silencio (línea 02). Normalmente, en las conversaciones espontáneas, los participantes subrayan el estatus de la información recibida (nuevo/conocido) respondiendo de forma acorde en el turno siguiente (Couper-Kuhlen & Selting, 2018, pp. 276-279). Aquí, en cambio, Tamara no reacciona de ninguna manera. Seguidamente, Julia vuelve a auto-seleccionarse y produce otro turno informativo (*estoy tan nerviosa que me muero*; línea 03): en este caso, hace explícito un problema (un ejemplo de "troubles telling"; Jefferson, 1988) que podría hacer relevante en el turno siguiente una muestra de afiliación por parte de Tamara, que tampoco llega. De hecho, este turno de Julia viene seguido por otro silencio consistente (línea 04), que en condiciones normales podría ser el reflejo de la actitud poco o nada afiliativa de la otra persona. Como Tamara no reacciona, Julia sigue y produce una evaluación (*es que el primer día es horroroso y a la ve:z, (0.2) superexcitante.*; líneas 05-06) que sirve para justificar su estado anímico. En este caso también, la investigación en AC ha demostrado que después de un turno de evaluación suele haber respuestas de confirmación y también segundas evaluaciones del mismo tipo, en ocasiones incluso intensificadas (Pomerantz, 1984). Después de otro silencio relevante (línea 07), Julia sigue con su monólogo: se presenta (*me llamo Julia*; línea 08), seleccionando a continuación a Tamara (*y tú:?*; línea 11), la cual, finalmente, contesta de forma preferente (línea 20), después de otro silencio prolongado (línea 12). El análisis pormenorizado de los extractos nos permite concluir que estos fenómenos son transversales, al caracterizar todas las grabaciones de los tres manuales examinados.

En el último extracto vamos a analizar, entre otros, el fenómeno de las parejas adyacentes *desplazadas*, algo que no ocurre en los datos espontáneos que hemos tomado en consideración. Unos amigos están teniendo una conversación distendida:

Extracto 17. (Próxima Estación 3; Nu = Nuria; Ja = Jaime; Ma = María)

```
01 Nu te veo diferente Jaime.
03    (1.1)
03 Nu es que tienes nuevo corte de pelo?
04    (0.7)
05 Ja no. no me he cortado el pelo. pero seguid adivinando.
06    (0.7)
07 Ma tus gafas son nuevas?
```

```
08    (0.8)
09 Ma no. no es eso.
10    (0.6)
11 Nu aho:ra si. lo veo.
12    (1.1)
13 Nu llevas u:na camisa nueva.
14    (0.6)
15 Nu y qué bien te queda el color.
16    (0.9)
17 Ja correcto Nuria.
18    (0.7)
19 Ja casi siempre llevo camisas blancas pero dicen que el
20    amarillo está muy de moda esta primavera.
```

Aquí vemos a Nuria realizar una observación (un "noticing"), es decir, la primera parte de un par adyacente (*te veo diferente Jaime.*; línea 01). Después de un predecible silencio (línea 02), Nuria se autoselecciona nuevamente para dirigirle a Jaime una pregunta que requiere un *sí* o un *no* como respuesta preferente en el turno siguiente (*es que tienes nuevo corte de pelo?*; línea 03). Jaime responde a la pregunta con un *no*, respetando por lo tanto su polaridad (línea 05), y mantiene el turno invitando a las amigas a que sigan adivinando. Esta vez, después de otro largo silencio (línea 06), se autoselecciona María, cuya pregunta polar proyecta, otra vez, un *sí* o un *no* como respuesta preferente (línea 07). Después de otro silencio pronunciando (línea 08), y sin que Jaime conteste, la misma María descarta su anterior hipótesis (línea 09). A continuación observamos otro silencio (línea 10), un pre-anuncio por parte de Nuria (*aho:ra si.=lo veo.*; línea 11), seguido por otro silencio muy relevante (línea 12) y por el turno de la misma hablante (*llevas u:na camisa nueva*; línea 13). La suposición de Nuria proyectaría una confirmación o una desmentida como respuestas preferentes en el turno siguiente por parte de Jaime. Sin embargo, después de otro silencio (línea 14), es Nuria la que vuelve a auto-seleccionarse para producir una nueva UCT sintácticamente ligada a la anterior (véase la conjunción *y* al comienzo del turno: *y qué bien te queda el color*; línea 15): es un cumplido que haría relevante una ratificación de algún tipo como respuesta[14] en el turno siguiente. En cambio, después de otro silencio (línea 16), Jaime, en lugar de responder a dicho cumplido, confirma la exactitud de la observación producida por Nuria en el turno anterior (*correcto Nuria.*; línea 17), rompiendo así la contigüidad entre acciones que conforman un par adyacente. Este turno de Jaime no es seguido por ninguna reacción por parte de Nuria, en forma por ejemplo de evaluación (*bien*) o de ratificación (*vale*), como sería de esperar en un caso como este (sobre respuestas candidatas véase Pomerantz, 1988). Después de otro silencio muy largo (línea 18), Jaime se autoselecciona nuevamente, y su turno informativo (líneas 19-20) exhibe, una vez más, escasa orientación hacia las acciones de sus co-participantes. Para resumir: en el extracto hay un par adyacente contiguo (líneas 03 y 05; obsérvese sin embargo el silencio de 0,7 segundos entre los dos turnos), un par adyacente desplazado, es decir no adyacente (líneas 13 y 17), y tres primeras partes de pares adyacentes que no reciben ningún tipo de respuesta, es decir, pares adyacentes *mutilados* (líneas 01, 15 y 17). En definitiva, se trata de un comportamiento inusual comparado con lo que acontece en las conversaciones de todos los días, aun sin tener en cuenta la constante presencia de largos silencios entre un turno y otro.

5. Conclusiones

En este estudio de caso hemos analizado a partir del método y de la teoría del análisis de la conversación (Schegloff, 2007) tres grabaciones de audio incluidas en tres manuales de español L2 utilizados en el bachillerato sueco. El objetivo era averiguar en qué medida se acercan o se alejan de los patrones interaccionales observables en las conversaciones espontáneas. Nuestro estudio se alinea con las investigaciones realizadas anteriormente en este ámbito: se ve así confirmada la ausencia de fenómenos relevantes en el habla en interacción como los solapamientos, las disfluencias o los turnos de apoyo (Gilmore, 2004), así como la escasa coherencia secuencial de algunas prácticas (Wong, 2002), la presencia esporádica de las prácticas de reparación (Batlle & Suárez, 2020) –del todo ausentes en nuestro estudio– y la existencia de

[14] Contestar a un cumplido es una acción socialmente compleja: "most compliment responses lie somewhere in between acceptances and agreements on the one hand and rejections and disagreements on the other hand" (Pomerantz, 1978, p. 81).

fenómenos peculiares como los pares adyacentes *desplazados* o *mutilados* (Pauletto, 2020), que reflejan la problemática coherencia discursiva de estos materiales.

Por otra parte, hemos podido averiguar cómo en los diálogos didácticos la toma de turno no se diferencia notablemente de la que se realiza en las interacciones cotidianas: todos los tipos de auto- y heteroselección del hablante se ven de hecho reflejados en los extractos de los manuales. Sin embargo, y a diferencia de lo que suele ocurrir en las conversaciones espontáneas, los turnos de palabra de dichos diálogos suelen estar separados entre sí por silencios sistemáticos y prolongados que casi nunca son indicio de algún tipo de problema incipiente en el turno de respuesta, dado que en la mayoría de los casos aparecen seguidos por turnos preferentes (es decir, por turnos que favorecen la solidaridad social y la progresión de la interacción). En cambio, en las conversaciones naturales, los silencios superiores a 300 ms pueden ser precursores de respuestas no preferentes o, en algunos casos, manifiestamente ausentes.

En cuanto a la secuencialidad de las acciones, hemos descrito en general una frecuente falta de coordinación entre hablantes, evidente en la ausencia de participación y de atención al/a la co-participante (véase por ejemplo la inexistencia de turnos de apoyo). Este fenómeno resulta a veces en verdaderos fallos a nivel pragmático. En este sentido, la secuencialidad se puede entender en algunos casos como mermada o fallida, ya que los pares adyacentes se caracterizan en ocasiones por ser incompletos (véanse los extractos (11), (12), (13), (14) y (15)) o desplazados (extracto (16)). Además, faltan por completo prácticas como las reparaciones, los turnos de apoyo o las co-construcciones que, como hemos podido explicar, son fenómenos centrales en el habla en interacción, al contribuir a la secuencialidad, a la progresividad de la interacción y al mantenimiento de la intersubjetividad entre participantes. A todo esto, podemos añadir un hecho que salta a la vista comparando las mismas transcripciones: los turnos de palabra de las conversaciones didácticas suelen ser breves, sintácticamente completos y sin perturbaciones de ningún tipo (alargamientos vocálicos, inspiraciones, autorreparaciones etc.). Observando las conversaciones que ocurren de forma natural, en cambio, vemos que el entramado de acciones simultáneas es mucho más complejo, con contribuciones de distinta amplitud y complejidad sintáctica, y turnos que a veces se quedan incompletos y/o se vuelven a reanudar por varias razones contingentes (reparaciones, interrupciones etc.). Resumiendo, a pesar del carácter exploratorio y cualitativo del presente estudio, parece evidente que hay sensibles diferencias entre las conversaciones de los manuales de ELE y la conversación auténtica: como afirman Hale, Nanni y Hopper, "(R)eal communication is much more complicated and interdependent than textbooks have led (students) to believe" (2018, p. 66).

Desde el punto de vista didáctico, los materiales de audio (y video) son un *input* importante tanto para los/las aprendices, en cuanto al contacto con la lengua meta hablada, como para los/las docentes, siendo un material listo para el uso en su práctica didáctica. Sin embargo, si el único *input* oral que recibe los/las aprendices es similar al de los audios aquí analizados, esto puede acarrear problemas a nivel del desarrollo de la competencia interaccional, ya que el alumnado no habrá sido sensibilizado a los aspectos centrales y más complejos de la organización secuencial de la lengua hablada. Por consiguiente, nos parece necesario un replanteamiento en la forma de construir estos materiales didácticos, que invierta la tendencia a la simplificación y que permita tanto al profesorado como al alumnado disponer de materiales que reflejen de forma más fiel y sistemática lo que ocurre en las interacciones reales en la lengua meta. De esta forma, la clase de lenguas podrá convertirse en un lugar donde a quien aprende se le ofrezca la oportunidad de convertirse en *hablante intercultural* ("intercultural speaker(s)"; Kramsch, 1998), es decir, en personas interaccionalmente competentes y capaces de negociar significados entre marcos conceptuales culturalmente variables.

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Convenciones de transcripción

(0.7)	el número entre paréntesis indica la duración de un silencio en segundos o décimas de segundos;
(.)	el punto entre paréntesis indica un silencio de duración inferior a 0,2 segundos;
[ ]	los corchetes indican el punto en que el solapamiento empieza y termina;
=	este símbolo indica que la transcripción del turno en curso sigue dos líneas más abajo;
>why<	palabra(s) producida(s) rápidamente;
<why>	palabra(s) producidas lentamente;
↓↑	las flechas indican el subir y / o el bajar de la entonación;
wo:rd ":"	indica un alargamiento de la vocal / consonante de una décima de segundo por cada ":";
.	indica entonación final;
,	indica entonación suspensiva;

?	indica una subida de la entonación;
( )	indica que lo que dice el/la hablante no es inteligible;
(why)	palabra / enunciado de difícil comprensión (“best guess”);
WHY	indica un incremento del volumen;
w(h)y	indica la presencia de partículas de risa interpoladas;
€why€	tono alegre (“smiley voice”);
((xx))	texto que describe una acción encarnada (“embodied action”);
wh-	indica la interrupción de la palabra o de la enunciación (cut-off);
.hh	indica inhalación (0,1 segundos por “h”);
hh.	indica exhalación (0,1 segundos por “h”).

(adaptado de Vázquez Carranza, 2020, p. 16-17)

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Medical communication and advocacy through eye-tracking AAC: Implications for applied linguistics

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ABSTRACT

EN Historically, individuals with Rett syndrome, a rare neurodevelopmental disorder, have been cast as "silent angels," "nonverbal," and "speechless." As a consequence, they have not been consulted in their medical care. Recently, however, augmentative and alternative communication (AAC) devices that use eye-tracking technology have facilitated communication for individuals with Rett syndrome. Yet, no prior research has investigated how such communication occurs within medical settings. Through an applied linguistics lens that centers the analysis of language use, we construct a case report capturing how Kalika, a child with Rett syndrome, offers medical information. Kalika's device-mediated language use suggests multiple implications for applied linguistics scholars and language educators, including: broadening notions of speaking, increasing consideration of AAC, exploring more device-mediated language use, extending multimodal considerations, nuancing notions of communicative competence, presuming competence, and, last but not least, more deliberately espousing principles of linguistic justice in our field.

Key words: RETT SYNDROME, EYE TRACKING, AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (AAC), DISABILITY, MEDICAL COMMUNICATION

ES Históricamente, los individuos con síndrome de Rett, un trastorno raro del desarrollo neurológico, han sido presentados como "ángeles silenciosos", "no verbales" y "mudos". Como consecuencia, estos individuos no han sido atendidos en consulta médica. Recientemente, los dispositivos de comunicación aumentativos y alternativos (AAC) que utilizan tecnología de seguimiento ocular han facilitado la comunicación de individuos con síndrome de Rett. Sin embargo, ningún estudio ha investigado cómo se produce dicha comunicación en entornos médicos. Desde la perspectiva de la lingüística aplicada que analiza el uso del lenguaje, construimos un caso clínico que captura cómo Kalika, una niña con síndrome de Rett, proporciona información médica. El lenguaje mediado por dispositivos de Kalika sugiere implicaciones para académicos de lingüística aplicada y educadores del lenguaje, que incluyen: ampliar las nociones del discurso y la consideración de AAC, explorar más el uso del lenguaje mediado por dispositivos, ampliar las consideraciones multimodales, matizar las nociones de la competencia comunicativa, suponer competencia y apoyar deliberadamente los principios de justicia lingüística.

Palabras clave: SÍNDROME DE RETT, SEGUIMIENTO OCULAR, COMUNICACIÓN AUMENTATIVA Y ALTERNATIVA, DISCAPACIDAD, COMUNICACIÓN MÉDICA

IT Storicamente le persone con la sindrome di Rett, un raro disturbo del neurosviluppo, sono state considerate "angeli silenziosi", "non verbali" e "senza parole"; questo ha comportato che non venissero consultati per le loro cure mediche. Di recente, però, i dispositivi di comunicazione aumentativa e alternativa (CAA) con tecnologia eye-tracking hanno facilitato la comunicazione di queste persone. Nessuna ricerca ha però indagato come tale comunicazione avvenga in contesti medici. Utilizzando una prospettiva di linguistica applicata che analizza l'uso del linguaggio, presentiamo un caso che illustra come Kalika, una bambina con la sindrome di Rett, offra informazioni mediche. Il linguaggio di Kalika, mediato da dispositivi, suggerisce, tanto agli studiosi di linguistica applicata quanto docenti ed educatori in ambito linguistico, molteplici implicazioni per ampliare le nozioni di parlato e la considerazione della CAA, approfondire l'uso del linguaggio mediato da dispositivi, estendere le considerazioni multimodali, dettagliare le nozioni di competenza comunicativa, presumere la competenza, e sostenere in modo deliberato i principi di giustizia linguistica nel nostro campo.

Parole chiave: SINDROME DI RETT, EYE TRACKING, COMUNICAZIONE AUMENTATIVA E ALTERNATIVA CAA, DISABILITÀ, COMUNICAZIONE MEDICA

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1. Introduction

As Demjén (2020) has noted, "most aspects of illness and healthcare are mediated by language" (p. 1). Applied linguistics as a field, in particular, has deep ties to communication in medical settings and provides a powerful lens for elucidating the intricacies of high-stakes communication exchanges within them (Udvardi, 2019). However, applied linguistics approaches remain limited in the study of medical settings, and are mostly absent in significant disability and rare disease contexts (Demjén, 2020; Pickering, 2020; Roberts & Satangi, 2003). Our study intervenes within this neglected area, taking on Brumfit's (1995) call that a key charge of applied linguistics is to analyze "real-world problems in which language is a central issue" (in Demjén, 2020, p. 2; see also Patricia, 2019). We harness an applied linguistics perspective to frame a medical case report of a 5-year-old child, Kalika, with Rett syndrome (a rare neurological disorder), who is medically classified as "nonverbal", but powerfully uses an Augmentative and Alternative Communication (AAC) device to navigate medical settings. In the process of elucidating her purposeful languaging of medical and health-related information as well as advocacy of her own care using the device, we highlight important implications for applied linguistics scholars and educators. These include a call for: broadening notions of speaking; increasing consideration of AAC; exploring more device-mediated language use; extending multimodal considerations; continuing complication of notions about communicative competence; presuming competence; and, last but not least, more deliberately espousing principles of linguistic justice.

Historically, individuals with Rett syndrome have been characterized as "silent angels" (e.g., Dziwota et al., 2016, p. 285), "nonverbal" (e.g., Djukic et al., 2016, p. 52), and "speechless" (e.g., Oldfors et al., 1990, p. 310). Resulting from mutations on the X-linked MECP2 gene, Rett syndrome occurs mostly in females, with a prevalence of about 1 in 10,000 to 23,000 girls worldwide (Armstrong, 2005). Children with Rett syndrome develop somewhat "typically" until regression sets in, between one to two years of age (Bartolotta, Zipp, Simpkins, & Glazewski, 2011). *Regression* marks the onset of a variety of symptoms, such as near total loss of verbal speech, poor fine and gross motor skills, development of hand stereotypies, breathing dysfunction, gastrointestinal difficulties, sleep disruption, and seizures, among others. Due to the combination of the first three symptoms in particular, individuals with Rett syndrome experience complex communication challenges. These challenges impact every aspect of daily life, but the stakes are particularly high from a medical perspective. Given that the disease entails management of a wide variety of symptoms, individuals with Rett syndrome frequently encounter medical settings and professionals across a range of disciplines (Lotan, 2006). However, the communication challenges mean that their input is rarely and/or inadequately considered in their care. This has significantly impacted treatment of symptoms, restricted research into Rett syndrome, and limited the development of robust outcome measures for clinical trials (which benefit from patient input), among other issues (see Hou, Bhattacharya, Pradana, & Tarquinio, 2020). Fortunately, cutting-edge AAC devices using eye-tracking technology have recently begun reshaping patients' communicative possibilities. AAC technology is powered by intentional eye gaze, which is largely preserved in Rett syndrome. While such devices are prescribed out of medical necessity in Rett syndrome, no previous study has explored how they are used in practice for providing medical information or for medical advocacy. Situated within this gap in research, this study aspires to contribute to cross-disciplinary knowledge about the languaging of medical advocacy in a significant disability setting, with implications for applied linguistics scholars and educators more broadly.

2. Complex communication

AAC refers to all the ways we share our thoughts that do not involve spoken language. There are two main types of AAC: 1) *unaided AAC*, i.e., ways of non-spoken communication without the use of external aid, e.g., facial expressions, gestures, eye-contact, and posture; and 2) *aided AAC*, i.e., communication that involves external aids, e.g., writing a note, picture communication board, and speech generating devices. Researchers across disciplines have noted the critical role of AAC in improving the quality of life of individuals with complex communication repertoires, i.e., in assisting with daily needs, facilitating family and community engagement, and developing language and literacy skills (Campbell, Milbourne, Dugan, & Wilcox, 2006; Floyd, Smith Canter, Jeffs, & Judge, 2008; Kemp, 1999; Kling, Campbell, & Wilcox, 2010; Schall, Targett, & Wehman, 2006). Importantly, Pickering (2020) has argued that the field of applied linguistics can answer Pullin, Treviranus, Patel, and Higginbotham's (2017) call for "new research tools as apparatus for engaging, accessible, and contextual participatory research" (p. 146). This study hopes to help craft a path forward in this area.

Broadly conceived language-focused investigations into the speech of individuals with complex communication challenges is useful in this regard; they do communicate in powerful, multimodal ways, even if

it is not always recognized (Beukelman & Mirenda, 2005; Pickering, 2020; Townend, Bartolotta, Urbanowicz, Wandin, & Curfs, 2020). There has been limited research on this in Rett syndrome. Some researchers have explored the various ways that AAC is used in dyadic communication among families with individuals with Rett syndrome. For example, Skotko, Koppenhaver, and Erickson (2004), studied a variety of strategies in parent-implemented story reading activities to enhance the communication and literacy skills in children with Rett syndrome. One important finding was the effectiveness of multimodal engagement during reading mediated by various AAC tools. Additionally, Koppenhaver et al. (2001) examined the supportive effects of resting hand splints, use of low tech AAC systems, and parent training on labeling and symbolic communication of children with Rett syndrome in story reading activities. There is also emerging interest in newer AAC devices that track eye gaze to trigger speech (Vessoyan et al., 2018). Townend et al. (2016), for instance, investigated family perception on the use of eye tracking AAC devices to promote communication of individuals with Rett syndrome. The findings indicated that the device provided substantial benefits to mediate communication within families. Further, Wandin, Lindberg, and Sonnander (2021) examined the efficacy of communication intervention in individuals with Rett syndrome and suggested that aided language modeling, responsive partner strategies, and the use of gaze-controlled devices could effectively increase expressive communication in individuals with Rett syndrome. While these studies have illuminated the complex, rich, and multimodal communication possibilities that exist within a significant disability context like Rett syndrome, deficit perspectives regarding communication challenges endure.

3. Eye-tracking AAC

The idea of eye-tracking has garnered scholarly interest since the 1800s, but it was not until much later, in 2005, when the first eye-tracker was used as assistive technology to help individuals with communication disorders. An eye-tracking AAC device allows a user to control a computer with one's eye movements to generate speech (see Vessoyan et al., 2018). Many thousands of individuals now use eye-tracking AAC devices to communicate. For individuals with complex communication challenges who have limited functional hand use, such as those with Rett syndrome, eye-tracking AAC devices hold revolutionary and life-changing communicative potential.

Currently, there is nascent research on the use of eye-tracking AAC devices for elicitation of medical/health information specifically. Limited studies have involved individuals using AAC devices across a variety of diseases, such as spinal muscular atrophy type II and Ewing Sarcoma (Costello, Patak, & Pritchard, 2010), neck cancer (Rodriguez et al., 2012; Happ, Roesch, & Kagan, 2005), head cancer (Rodriguez et al., 2012), and pneumonia and lung cancer (Happ, Tuite, Dobbin, DiVirgilio-Thomas, & Kitutu, 2004). These studies examined individuals' use of eye-tracking to communicate with medical personnel and families using various types of AAC devices, such as DynaMyte (Happ et al., 2004, 2005; Costello, 2000), and software, such as BoardMaker (Costello, 2000). Various themes were noted regarding the topic of communication. These include medical attention (Costello et al., 2010; Happ et al., 2005), personal care and comfort (e.g., Happ et al., 2005; Costello, 2000), psychosocial aspects (e.g., Costello et al., 2010; Costello, 2000), pain (e.g., Costello, et al., 2010), feelings (e.g., Happ et al., 2004; Etchels et al., 2003), greetings (e.g., Happ et al., 2005), and establishing relationships with others/general chit-chat (e.g., Etchels et al., 2003). As noted earlier, information regarding how individuals with Rett syndrome navigate medical information specifically is non-existent (in applied linguistics and beyond); in this manner, our study hopes to contribute new knowledge in this area. As we take the field into a new technological frontier, we hope that scholarly interest continues to grow in the affordances of AAC devices for facilitating medical communication .

4. Methods

4.1. Participant

At the time we began to collect the caregiver reports, Kalika, the focal participant, was five years old. She was diagnosed with Rett syndrome in 2018, at two and a half years of age. She met most developmental milestones until about a year and a half of age, after which she began to experience regression. Prior to regression, she had a vocabulary of more than 80 words in Bengali and English. In the ensuing years, she experienced a variety of symptoms, including anxiety, limited mobility, hand stereotypies and poor functional hand use, vision difficulties (accommodative esotropia, myopia, and astigmatism), seizures, sleep disruptions, cataplexy, kyphosis, swallowing difficulty, teeth grinding, and dystonia, among others. During the period of this study, she had a limited range of verbal production by mouth, a total of 5-6 words across both Bengali and

English. Kalika was prescribed an eye-tracking AAC device in October 2018 and, after receiving it on her third birthday in December of 2018, used it daily. Starting with a relatively restrictive speech software, which focused on basic needs, she transitioned to higher-level speech software, speaking hundreds of words a day. Speech therapy services from speech and hearing clinic at a local university provided support in developing her language skills. She navigated the software both in English and Bengali (the latter language section created by her mother on the device). Though she began with just a few words, Kalika made extensive progress in communicating using the AAC device over time, and she used it daily at home, in school, and in other contexts. She also used the AAC device for a variety of activities beyond communicating, including playing online games and painting using eye gaze software.

4.2. Study design

Case reports are used in medical literature to offer a window into extraordinary and unanticipated issues and events (Guidelines To Writing A Clinical Case Report, 2017). Such reports also provide new perspectives on patients' experiences (Woolston & Connelly, 2017), and have the potential to shed light on "important scientific observations that are missed or undetected in clinical trials" (Rison, 2013, p. 3). The chief goal of this type of report is the development of a singular, particular, multi-layered portrayal of a single case (Hyett, Kenny, & Dickinson-Swift, 2014). Importing this format within applied linguistics research, this study focuses on unusual observations related to medical and health communication (Guidelines To Writing A Clinical Case Report, 2017), centering the use of language within the descriptions. We employed methods from qualitative case study design as well; we drew on specific data sources (anecdotes), aimed for triangulation, and conducted the coding process through qualitative means. This allowed us to treat the case report as we would have a qualitative study framed within the boundaries of applied linguistics research.

For this report, our main goal was to arrive at a comprehensive, context-bound understanding of how Kalika engaged in medical/health discourse using her eye-tracking AAC device. We used a purposive sampling of one person with Rett syndrome. Given that Rett syndrome is a rare neurological disorder, and that eye-tracking AAC communication had never previously been reported for medical and health information, a case report was particularly well suited to capturing its complexity. This combined approach is relatively novel within the literature on Rett syndrome, allowing us to bridge applied linguistics and medicine through this unique structure. The study protocol was submitted for ethics review and the IRB deemed that approval was not required given the nature and goals of the study.

4.3. Data sources

We used a variety of data sources to achieve triangulation, which entails "the observation of the research issue from (at least) two different points" (Flick, 2004, p. 179). This allowed us to offer depth and detail on Kalika's language use. We considered data from two sources in this study, both involving Kalika's speech software TD Snap. The first involved eye-tracking language usage reports gathered from mytobiidynavox.com, an online tool supported by Tobii to provide users with service and assistance in setting and managing their AAC devices and getting feedback. The usage reports were connected to a concussion Kalika had on April 29, 2020. They tracked the top 20 words and phrases that she said on her AAC device from April 15, 2020 to May 15, 2020. Secondly, we collected 50 written caregiver observational reports about Kalika's use of the AAC device over a 14-month period. We coded the observational reports to focus on medical/health related information using the same approach that we employed for coding the usage reports. The research team reviewed the full data corpus to get a broader sense of how Kalika used language related to health, then dove into it a second time, isolating and then coding data related to medical discourse more narrowly (see Saldaña, 2021). The research team then examined salient patterns and used those to develop themes (e.g., "asking for assistance"). The themes organize the discussion section, leading us to new ideas and perspectives in understanding how medical and health-related language use is mediated through innovative AAC devices.

4.4. The speech software: TD snap

Kalika's speech software, TD Snap, was loaded within her AAC device with words and phrases stored in different cells that she could speak (i.e., "trigger") with her eyes. A critical issue was the dwell time, which was set to a specific time. Kalika learned within the first hour of using the AAC device that any cell containing speech would be triggered only after she stared at a cell for that set dwell time. Here is an example of this in practice. Kalika was taken to her "Occupations'' category page in her software, and asked: "Who is Joe Biden?"

Kalika scanned the page quickly, and then paused for 0.4 seconds (the dwell time set for her) on the word she did wish to trigger: the occupation "president," the last cell in the second row. This cell was one of 13 options for occupations (alongside six other options that were linked to other pages). She selected the correct response out of multiple possibilities; this provides clear evidence of her intentionality.

Figure 1. Kalika communicating using her AAC device

TD Snap is described as "a comprehensive, evidence-based solution that makes communication, literacy and independence possible" (Hagen, 2020, para. 2). It is organized around "core vocabulary, a small number of words that make up 70-90% of what we all use in many daily situations" (Hagen, 2020, para. 3). Core words are a popular organizing principle for such types of software because they "(a) are generic to many communication situations; and (b) allow for the generation of unique novel sentences" (Mothapo, Tönsing, & Morwane, 2021, p. 296). The structural organization for the English (U.S.) version is that the main (Core[1]) page has the words/phrases "I," "you," "it," "is," "want," "like," "do," "go," "help," among others. From this page, one link takes the user to Action Verbs, and another link to different Word Forms (where, for example, can be turned into "be," "was"). There is also a link to Quickfires, which offers messages that can be used in various contexts, such as "don't," "Mom," "wait," and "thank you." Additionally, there is a Topics page, where individuals can find language concentrated around a specific topic. For example, Kalika's "Arguing" page had phrases such as "you are mean." Another link takes users to Little Words which has words like "if" and "but." There is also an All Word Lists page, which contains categories of different units, such as a Descriptions page with adjectives. Additional pages are embedded within these pages, such as Positions within Descriptions, with adjectives that only relate to location. In order to say one sentence with a subject, verb, and an object, Kalika thus needed to navigate across multiple pages, and paused a mandatory 0.4 seconds to trigger (speak) any word or phrase. The per minute count of word production with such AAC devices, thus, was low overall.

Importantly, Kalika conveyed health-related information daily using a variety of pages on TD Snap. There were several different areas of her software which she routinely navigated for this purpose. Under her All Word Lists category, for example, there was a Feelings page. This page allowed her to express a range of feelings related to health and medical conditions, for example, "thirsty," "hungry," "sleepy," and "sick." Another section of her software dealt with health-related feelings, this was the Feelings page under the Quickfires category. This section included items such as "Can I tell you how I feel?" among others. Under her Personal Needs section in Quickfires, she could say things like "I don't feel well" or "I am uncomfortable" or "Something

[1] Underline indicates specific pages within the software.

is hurting me." Kalika also had access to pages specifically dedicated to health and medical issues. Among these, there was an External Body Parts page with items such as "head," "stomach," and "nose"; Internal Body Parts with items such as "Nervous system," "heart," and "bowels"; Health problems page with items such as "headache," "fever," and "tired"; Medical Items such as "shot," "stethoscope," and "bandage." In addition, Kalika also had certain Topics pages that contained phrases useful in medical contexts. For example, her Appointment page had "I want an earlier time," "Sorry that I am late," and "I need an appointment." In this manner, Kalika had access to a wide range of vocabulary to express herself in medical (and other) contexts.

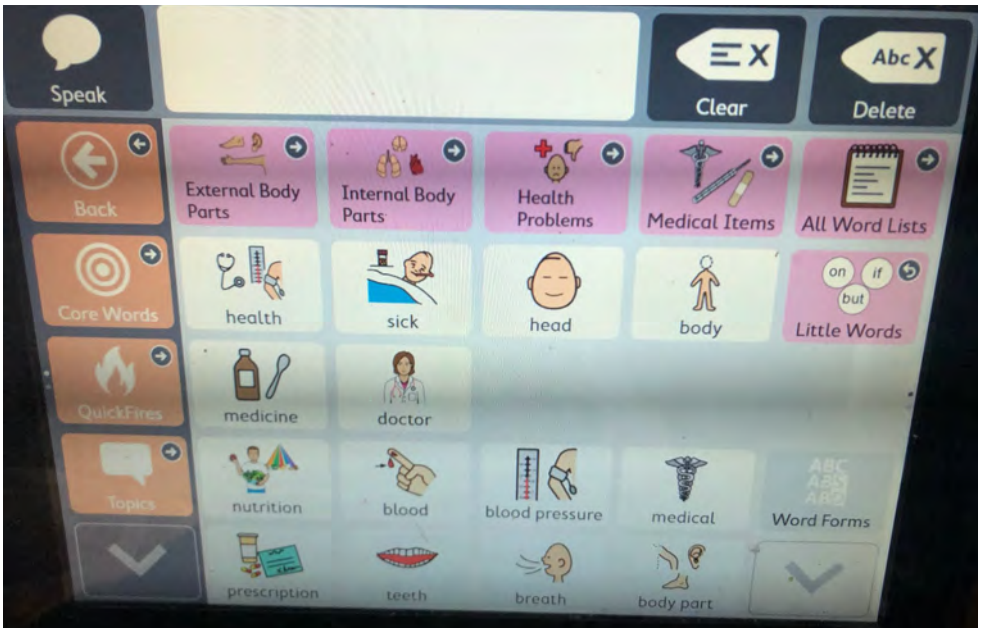

Figure 2. Kalika's pages specifically dedicated to health/medical issues

4.5. Reflexivity

Given the qualitative grounding of this study, the authors engaged in reflexivity individually and as a team. The team involved the mother of the focal participant, her neurologist, the mother's PhD advisees, and graduate and undergraduate students who collaborated as part of an interdisciplinary Rett Communication Lab. The reflexivity was modeled on previous work in this area (Barry, Britten, Barber, Bradley, & Stevenson, 1999), which constructed it as "awareness of the researcher's own presence in the research process" (Barry et al., 1999, p. 30). This prior research showed that "[t]hrough sharing common ground, enabling multiple voices to emerge, and developing a productive dialectic, we have improved our conceptual thinking, capitalized on our multiple disciplines, and improved the rigor and quality of our research" (Barry et al., 1999, p. 40). Inspired by this work, the authors of this present study reflected on issues such as: How their backgrounds positioned them within the project; their perspectives on qualitative inquiry; the theories that framed their thinking; and their intellectual (and other) investments in the research.

5. Findings

The findings section highlights different ways in which Kalika offered health and medical information using the eye-tracking AAC device: the first section examines usage reports, and the second section entails anecdotes from medical visits.

5.1. Behind the scenes: Usage reports before and after a medical event

The authors closely examined Kalika's language use with the eye-tracking AAC device as revealed by usage reports generated online. The mytobiidynavox.com site stored such reports, capturing the top 20-most triggered lexical items (words, phases, and expressions) in TD Snap in a day for each subscriber. The data discussed here relates to a major medical event, in this case , a concussion Kalika experienced after lunging and falling from a toilet the day after moving into a new home on April 29, 2020. The reports collected included her

language use in the 14 days preceding and succeeding the event. The data was reviewed and coded, with the team isolating terms that related specifically to her health and medical condition. Figure 3 outlines 13 select lexical items (words and phrases) that were determined to be related to conveying medical/health information out of the full corpus.

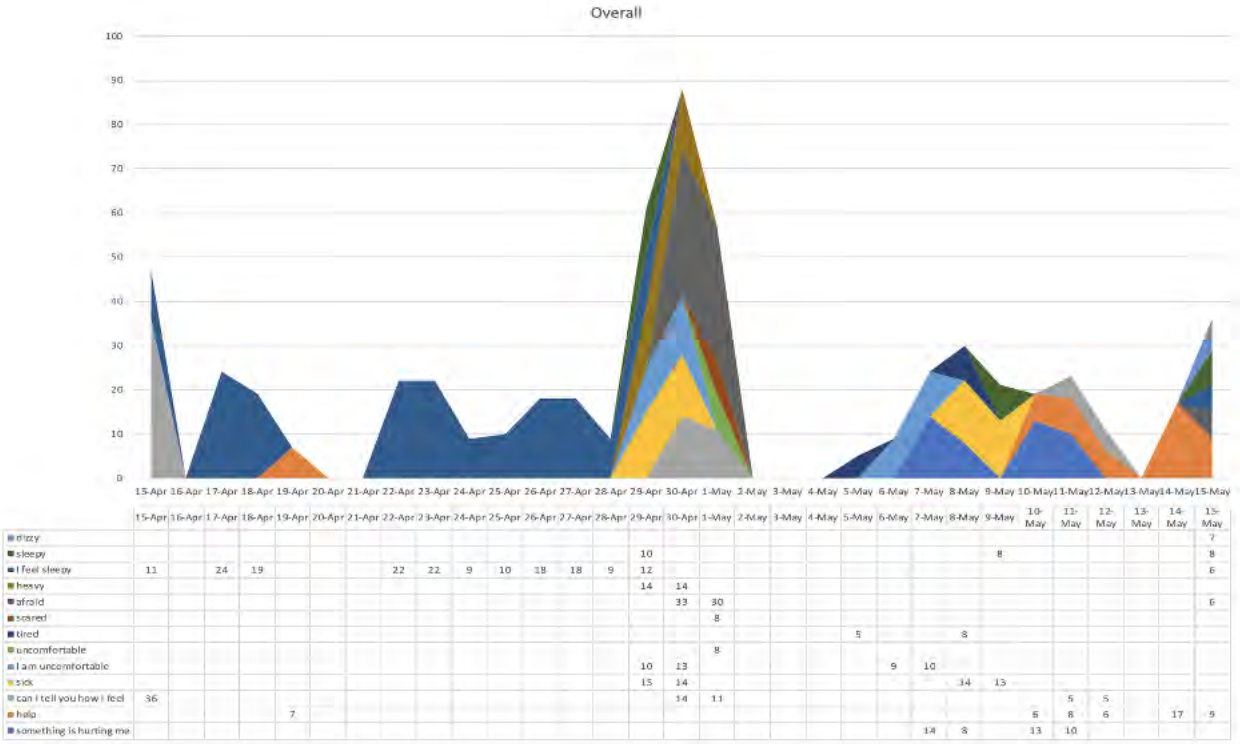

Figure 3. Lexical items related to medical/health communication

We found that in the two weeks prior to the concussion, the mean of her word counts was 238.7, with a minimum of 108 words to a maximum of 361 words per day. On the day of the incident and the day after, she spoke a total of 427 lexical items and 479 lexical items respectively.

Figure 3 lists all of the words and phrases that Kalika used to describe her medical/health state. The figure maps out the lexical items used to describe her medical/health state before, during, and after the concussion. Before the concussion occurred, the health-related words used by her were limited to items such as "I feel sleepy" and "can I tell you how I feel." When the concussion happened, the total number of health-related words uttered increased significantly. Further, the range of words related to health/medical vocabulary expanded considerably. For example, in addition to the previously used health related words, she also used terms such as "uncomfortable," "heavy," "afraid," "scared," "sick," and "something is hurting me."

5.2. Observational reports

5.2.1. Observational report 1: Participating in medical exams

Kalika used her AAC device during eye appointments to assist her doctor in assessing her vision. Kalika's vision issues primarily revolved around the development of strabismus, which became noticeable a few days after her second birthday in late December of 2017. Nine months later, her pediatric ophthalmologist conducted surgery to correct the turns in both of Kalika's eyes. In order to continue monitoring the health of her eyes, her ophthalmologist recommended that she attend eye appointments every four months.

During one visit in January 2020, Kalika sat on her father's lap in the large patient chair. Her mother helped her navigate between the AAC device (set up on a chair in front of her) and an illuminated eye chart on a facing wall approximately 20 feet away. After a quick exchange of greetings, the ophthalmologist asked gently, "Is it ok if I look at your eyes?" Kalika turned quickly to her AAC device and said: "Yes." After a physical examination of the eyes, the ophthalmologist started a shape matching exam: Kalika was asked to match shapes

on her AAC device with those on the eye chart. Some of the shapes on the eye chart, it was discovered, were not available on her AAC device (e.g., a shape that outlined a house). Her mother quickly added the missing shapes to Kalika's Shapes page, and the exam continued. Kalika was then again directed to look at the eye chart and match the shapes there with what she was seeing on her AAC device. Next, the ophthalmologist flashed letters on the eye chart, which Kalika had to match with letters on the Alphabets page on her AAC device. Kalika matched two of the three shapes and letters correctly, which was consistent, according to the ophthalmologist, with measurements assessed by the physical examination of the eyes.

Kalika's next eye appointment occurred in March 2021, delayed as a result of the pandemic. In order to prepare for the visit, Kalika's father called the office a few days prior to the appointment and was informed about the shapes and HOTV visual acuity charts that Kalika would be tested with during the upcoming visit. Kalika was then familiarized with an updated Shapes page and an HOTV page (with just the letters H, O, T, V) over a two-day period. During the appointment, after Kalika and the ophthalmologist shared brief greetings, Kalika was told by the ophthalmologist that she was going to have to match the letter and shapes on the distant eye chart to the letters and shapes on her AAC device. The first procedure was called "HOTV single letter matching" and was conducted with both eyes open. The ophthalmologist stood close to the eye chart to draw Kalika's attention to it. It was noticed by her mother that Kalika was giving the correct response, but in a delayed manner, by which time the doctor had moved on to the next letter. After discussing this delayed response with the ophthalmologist (likely a result of attention issues in Rett syndrome [see Rosa et al., 2016]), the process was slowed down, and Kalika then gave four right answers of the six letters and shapes presented, which matched the results obtained through the physical eye examination. Thus, using the AAC device, Kalika was able to successfully participate in eye exams over different visits.

5.2.2. Observational report 2: Describing symptoms

Kalika also routinely used her AAC device to describe and discuss the impact of her symptoms. For example, in summer 2021 she developed what were characterized as head drops, diagnosed as either atonic seizures or a result of cataplexy (investigations were ongoing). When these drops first started, she appeared confused. One day in June, she asked "can what's going on" right after a head drop, and then described her feelings: "worried, awful, weird, stressed." Later that day, she said "try doing stop" right before the head drops started, stating that she felt "confused, terrible, weird" afterward. This happened often: she described the aftereffect as making her feel "funny, dizzy, worried, worried" (July 1), "bad, afraid, hot, dizzy, awful" (July 6), and "afraid, afraid, sleepy, weird, weird, awful, awful, weird, weird, weird, weird, dizzy" (July 15), as some examples. She consistently used these words to describe her feelings, navigating between two pages of her Feelings page, scrolling down to the second page herself to say "weird" and "dizzy" in particular.

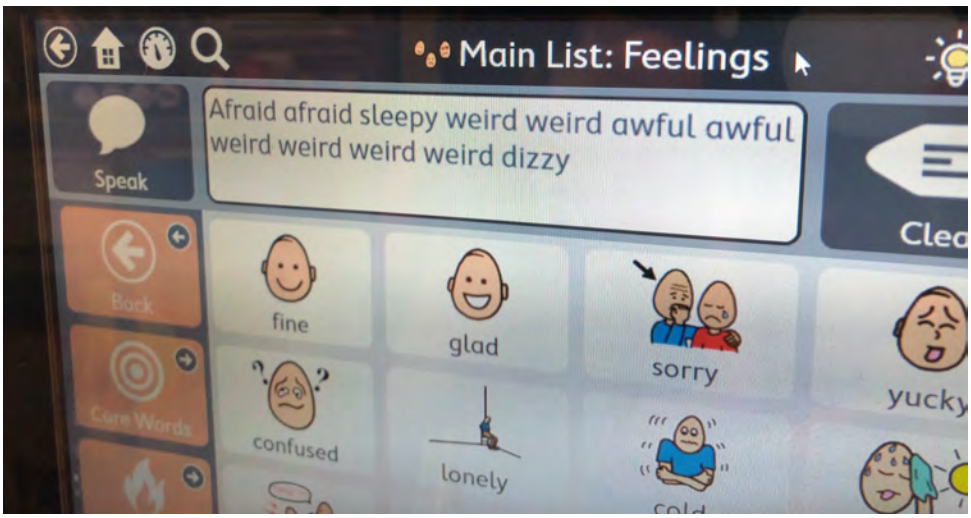

Figure 4. Kalika described her feelings related to symptoms using her AAC device

After a serious seizure at school on Aug 12, she returned home and upon being asked by her parents how she felt, she said: "bad, bad, bad, bad." Perhaps most poignantly, on August 10, after two severe head drop

sequences, Kalika's mother took her to her Health Problems page. The mother started trying to model saying "head drops," but Kalika said, "sick of pain." She had to navigate across two sets of pages, with "sick" and "pain" on the same page and "of" on another in order to express this sentiment.

5.2.3. Observational report 3: Asking for assistance

In July of 2021, about three weeks into the development of head drops, Kalika began to appeal for help in stopping these before they occurred. She would alert caregivers to the head drops prior to their starting. On July 21st, for example, she told her parents: "your happen have and helped ask a stop more have" right before she started head drops. At speech therapy summer camp, the next day, she told her attending therapist: "help like stopping do" immediately prior to having head drops. The therapist reported this to the mother by text; after hearing Kalika's words, the therapist immediately stopped the activity they were engaged in and worked to calm her and support her. A few days later, on July 29, Kalika told her father, who briefly stepped away from the breakfast table where they were eating: "stop having gone help help help your your your help ask ask do ask try stop happening" and then immediately started head drops. These were the only words she uttered in a ten-minute span and entailed navigation across three pages (2 Core pages and Action Words).

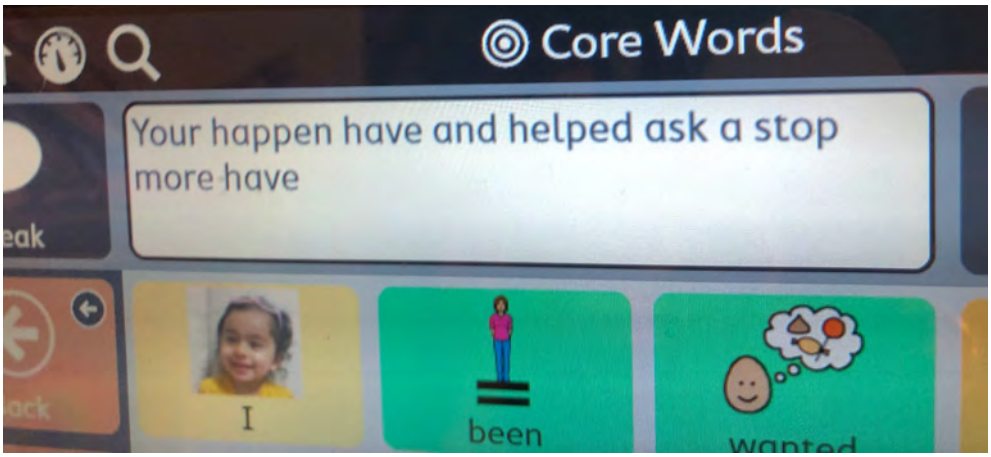

Figure 5. Kalika used the main page of her TD snap to ask for help for seizures

On August 11, as another example, in the middle of her physical therapy session at school, she informed her therapist: "I don't feel very well" followed by "I am scared." The therapist, alerted to the fact that she typically expressed these sentiments prior to the start of head drops, paused and made sure Kalika was in a safe and comfortable position, just as the head drops commenced. The therapist outlined this incident in an email to the parents. A similar event occurred the next day when Kalika was at school. She had a three-minute-long seizure which led to administration of Diastat[2] for seizure cessation as well as a call to her parents and emergency medical services. One of her teachers later messaged the parents to inform them that Kalika went to her medical Appointments page and said to her teacher: "I need an appointment please." Becoming alarmed, they prepared for a seizure, which started immediately after.

While pleas for help were most consistently tied to head drops, they had previously occurred in other contexts as well. In December of 2020, for example, Kalika had a virtual appointment with her Rett specialist/neurologist. Her parents wanted to discuss the worsening of two common Rett syndrome symptoms that Kalika was experiencing: hyperventilation and gastrointestinal issues. A day prior to the appointment, Kalika was told by her parents that her specialist would be able to help her with those issues. As soon as the visit started, Kalika greeted him and repeated "Do help" several times. During a different visit, she listened intently to a discussion of her symptoms between her parents and her specialist. As her parents brought up bouts of severe forced breathing and hyperventilation, she interjected by saying, "out of breath stop," navigating across three pages to do so.

[2] Diastat is a medication that treats increased seizures in individuals who are already on medications to control seizures.

5.2.4. Observational report 4: Reporting injuries

Kalika also used the AAC device to provide information about injuries during multiple incidents. On the evening of September 8, 2020, Kalika lunged off a living room sofa while watching a TV show, landing face-first on the hardwood floor. Blood poured out of her mouth at first, subsiding only after a few minutes. Later, she expressed discomfort using her AAC device: "I am uncomfortable," but managed to eat reasonably well and go to sleep at her usual time. Her father then checked her mouth again and noticed a gaping wound on her gums that continued to bleed. He rushed Kalika to the emergency department at a hospital nearby, where they spent some three hours waiting before being seen by the attending physician. The physician examined her mouth and said that Kalika only needed over the counter pain medications and would recover quickly. They returned home around midnight, with Kalika barely stirring. The next morning, Kalika's mother asked her father whether the doctor had checked Kalika all over for injuries or if he had only focused on her mouth. Kalika's father responded that it was the latter. Realizing that she might have been injured elsewhere as well, Kalika's mother took her to the External Body Parts page and asked: "Does anything else hurt apart from your mouth?" Kalika said: "elbow, elbow." It was not a word she had spontaneously uttered before. Kalika's father repeated: "Elbow?" He rolled up Kalika's sleeves and checked her elbows, one of which showed large purple bruising that had been missed.

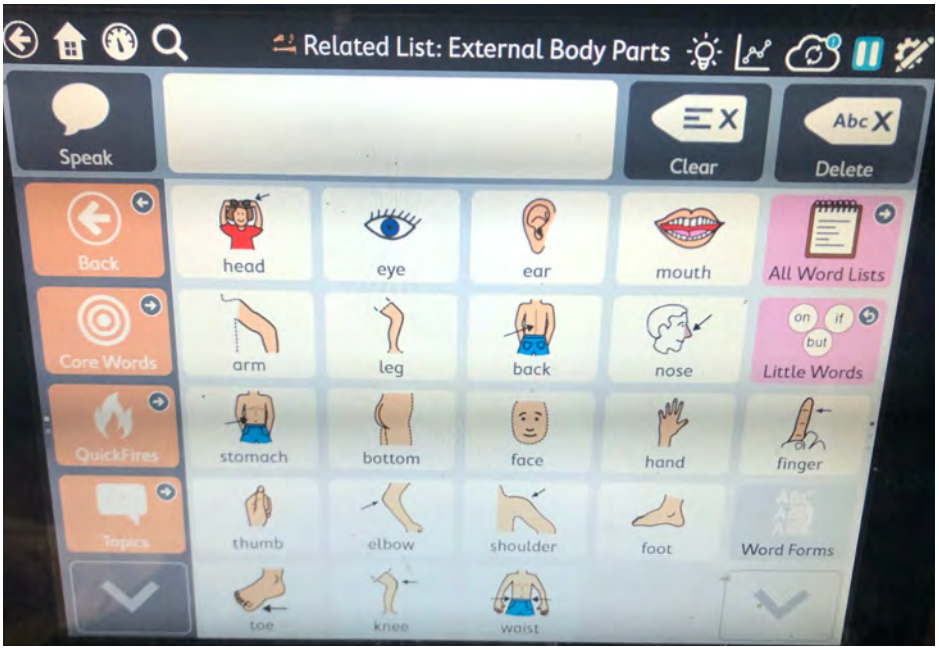

Figure 6. Kalika selected the word "elbow" from different options on this External Body Parts page

A similar incident occurred a few months later, on March 16, 2021. That evening, Kalika appeared to be feeling unwell. She used her AAC device to say that her "head hurt." When asked if she was hurt anywhere else, Kalika said "nose." Given no outward indications of injury to the nose, her parents figured that she had misspoken. The next morning, however, a small bruise appeared on the bridge of Kalika's nose. The parents were informed that she had taken a tumble in the backyard while in the care of another caregiver. She had fallen on her face, and the lenses had been knocked out of her glasses. The description of her head hurting and the injury to the nose then made sense. The bruise on her nose, likely the result of that fall, only became visible overnight. As a result of both of these incidents, Kalika's parents were able to note and attend to the injuries.

5.2.5. Observational report 5: Advocating during medical visits

Kalika also advocated for herself in a variety of ways during medical appointments. In January of 2021, for example, Kalika and her parents had a meeting with her nutritionist. When the session started, Kalika went to her Topics page, then selected her Advocacy page. When the nutritionist asked how Kalika had been doing since they had last met, Kalika said "Let's review that." Then, as the nutritionist and her parents began discussing what the nutritional goals needed to be for the coming three weeks, Kalika said "Let's develop a

plan." Further, while discussing melatonin gummy drops as an option for sleep disruption, the parents expressed concern about her ability to consume them. However, Kalika said: "I can do it myself." This made sense, the parents reported, since Kalika had recently started practicing eating gummy worms during feeding therapy. Next, when Kalika's father inquired about valerian root, an unfamiliar supplement, Kalika said: "I want to discuss." A discussion ensued. Finally, when her mother brought up some of Kalika's gastrointestinal issues, Kalika went to her Topics/Arguing page and said: "I can't believe you said that!" She then protested by commenting "How embarrassing!" several times. The parents reported that this was one of the first appointments during which Kalika followed along and participated throughout.

Furthermore, the parents reported that Kalika used the eye-tracker extensively during interactions with her pediatric neurologist/Rett specialist. Previously we noted Kalika's description and discussion of symptoms and asking for help. Once during discussions with her doctor about the use of a novel device to treat her hyperventilation, Kalika repeatedly asked him, "Please explain." During the setup of a cylinder for this purpose, further, she repeatedly said, "I am totally lost," and asked him to "Slow down a little." In this manner, Kalika asked questions, made comments, and advocated for herself in the context of medical appointments.

6. Discussion

The data presented above elucidates the powerful and empowering ways in which Kalika, who is medically classified as a "nonverbal" individual, offered valuable medical information using an eye-tracking AAC device and compellingly self-advocated for her own care in medical contexts.

The usage reports offered a powerful account of the change in Kalika's language, both quantitatively and qualitatively before, during, and after a medical event. As we saw in Figure 3, the number of lexical items decreased to 231 words on the day her parents took her to the hospital, where she was diagnosed with a concussion. The change in the number of words suggests a desire to communicate more as a result of the concussion, in order to describe her condition and to get attention and help. Further, there was a qualitative change in the language Kalika used after her concussion, demonstrating a greater preoccupation with health-related issues. We assess this from the fact that the range of medical/health-related vocabulary was noticeably more varied on the day of the concussion and thereafter. Among the 20 frequently uttered lexical items during those two critical days, five of them suggested Kalika's feeling of discomfort and a need to convey her feelings, for example, "afraid," "sick," "can I tell you how I feel?," "heavy," and "I am uncomfortable." Figure 3 lays out how Kalika's use of health/medical-related language not only increased significantly after her concussion, but also drew on a wider range of language. The peak in terms of use of this kind of language, as well as in numbers of occurrences, also happened around the time of the concussion. The data from the usage reports thus offered us a useful glimpse of how an AAC device was purposefully and meaningfully used by Kalika to convey health and medical information.

The observational reports offer supportive evidence as well. In the first observational report, for example, we saw how Kalika gave consent for an eye exam. Alderson, Sutcliffe, and Curtis (2006) have pointed out that regrettably, children are rarely asked for consent in medical contexts. This is tied to the fact that in general, children with disabilities are considered even less in discussions around consent, even though multiple studies have shown that "they have far higher levels of knowledge and competence relating to their condition" (Alderson et al., 2006, p. 26). In obtaining consent from individuals with disabilities for whom communication is a profound challenge, AAC can be a useful medium to elicit this (Curran & Hollins, 1994). The fact that Kalika was able to explicitly consent to having her eyes examined was thus an important step. Furthermore, she was able to offer valuable information about the state of her vision, by matching shapes and letters using her AAC device. The ophthalmologist was, because of this, able to triangulate the findings from the physical exam with what Kalika said. In this way, Kalika was able to assist in the assessment of her own health.

Meanwhile, the second observational report highlighted how Kalika used the AAC device to describe how she felt as a result of the experience of her symptoms. Her descriptions of how the seizures felt were not atypical. For example, she often described them as "weird," which is not an uncommon description of a seizure. For example, Lord Tennyson used the word "weird" to describe seizures in the 1851 edition of *The Princess* (see Wright, 1987). Linguistic analyses have suggested that descriptions of seizures may be clinically meaningful (see Plug, Sharrack, & Reuber, 2010, 2011; Schwabe, Reuber, Schondienst, & Gulich, 2008). It is hoped that as Kalika's descriptions get more complex with age and language proficiency, she will be able to offer clinically meaningful descriptions of seizures if and when they occur. It is also powerful that Kalika was

able to express a range of complex emotions related to her state of feeling, such as "sick of pain," as a result of symptoms.

The third observational report highlighted how Kalika consistently asked for help and assistance to prevent or arrest a medical issue. As a result of her doing so, her parents, therapists, and teachers were able to offer assistance in three different settings (at home, at camp, and at school). They were able to anticipate the onset of head drops, ensure timely removal of hazards, and get her into a safe and comfortable position.

The fourth observational report elucidated how Kalika offered information about injuries, pain, or symptoms that may not be easily visible or noticeable. This is not an insignificant problem in Rett syndrome. Symons, Byiers, Tervo, and Beisang (2013), for example, conducted a preliminary study and found that obstacles in communication led to "an increased risk that the problem of pain may be overlooked or discounted in this vulnerable population" (Symons et al., 2013, p. 746). In their study, while a fourth of caregivers noted that their children (who all had Rett syndrome) experienced "over a week of pain per month…Of concern was that almost none of the respondents indicated that their daughters used words to communicate about pain" (Symons et al., 2013, p. 746). Kalika bringing attention to her elbow and nose in different falls offered important information to her parents, who then ensured that these injuries received appropriate medical care. Because most individuals with Rett syndrome have complex communication challenges and lack access to AAC, they "are at risk for living with pain but not having it readily recognized" (Symons et al., 2013, p. 7465). Fortunately, Kalika's proficient use of the AAC device offered her a way to bring attention to issues that caused pain.

The final observational report shows how Kalika advocated for herself in a variety of ways in medical contexts. The interaction with her nutritionist, for example, revealed how closely she followed the discussions and participated in the exchange. The interaction highlighted that she understood the necessity of reviewing the developments since the previous appointment. She also realized the importance of planning future goals. Further, she was able to offer her opinion of being able to swallow gummies (contradicting her parents' assessment of her chewing abilities) and to ask for further clarity on issues that she did not understand. This is something she also did with her neurologist. In this manner, she was able to advocate for herself and contribute to her treatment in a number of ways.

It is remarkable of course, that Kalika, notwithstanding her medical classification as "nonverbal," was able to participate actively and meaningfully in high-stakes medical encounters. Previous research has never captured this type of complex communication. We want to be clear, however, that shedding light on this previously unexamined area is not the sole purpose of this paper. This communicative portrait of Kalika also offers valuable lessons for applied linguists and language educators, which we outline below. Our suggestions are as follows:

1) *Broadening notions of speaking:* Part of what this study elucidates is the complexity of speech. Spoken language continues to be in focus within the field of applied linguistics in largely *normative* ways (Cruz-Ferreira, 2018; Phuong, 2019). Kalika's speech production, melding gaze, technology, and synthetic voice, demonstrates how this could be a generative area for deeper inquiry (see also Chung & Douglas, 2014). Importantly, this study supports the expansion of the notion of "speaker," since Kalika's speech goes beyond the typical research realms of mouth words. Kusters, Spotti, Swanwick, and Tapio (2017) have previously outlined the importance of the concept of *repertoires* instead, which encompasses "all the 'means of speaking' that users of a language know, know how to use, and use with a specific reasoning in mind, while they are engaged in a communicative encounter" (p. 222). Kalika's communication is better captured within this idea, since her speech includes (many times simultaneously) diverse resources such as verbalizations, vocalizations, gaze, gaze-triggered speech, and body movements, among others. Further, this investigation revealed that, not only did Kalika offer medical information in important ways through the device, but also that caregivers and medical professionals *legitimized* her speech. It was fortunate that Kalika's words were not dismissed *because* they were mediated by a device. In the same way, we hope applied linguists and educators recognize and legitimize different forms of speech, whatever the means or modalities of expression.

2) *Increasing consideration of AAC*: As Chung and Douglas (2014) put it, "AAC is essential in enabling expressions of needs and emotions, establishing relationships, and promoting full participation for many students with significant disabilities" (p. 56). Despite being central to modes of self-expression for many individuals with disabilities, AAC remains largely marginalized in applied linguistics research. In fact, much of the scholarship in this area falls within communication disorders sciences.

This is not a small area of neglect. Beukelman and Light (2020) state that some 5 million individuals use AAC in the US context alone. As Kalika's speech showed in this study, AAC language use has important real-world applications and should be considered a meaningful area of study for applied linguistics scholars. Among other aspects, AAC also offers a path to more inclusive research involving individuals with disabilities, which has traditionally been excluded in research (see Feldman, Battin, Shaw, & Luckasson, 2013; Coons & Watson, 2013). Language educators would also benefit from learning about AACs given their growing popularity in use (especially in educational contexts).

3) *Exploring device-mediated language use*: Similarly, there remains a dearth of applied linguistics research examining device-mediated interactions (Higginbotham & Engelke, 2013). Without AAC and without her device, Kalika would not have been able to navigate medical (or any other) encounters in such extraordinary ways. The AAC device made language possible for her far beyond the few words she could speak by mouth. While digital language spaces have been generative and popular areas of study for applied linguists, technologically mediated language, as used by those with disabilities, remains sidelined. There are fascinating aspects to uncover, such as the fact that grammatical structures of language enabled by such devices are not exactly aligned with common speech practices (as can be seen with Kalika's language use here). Given the growing population of AAC device users (Beukelman & Light, 2020), this again needs to receive more attention within our field.

4) *Extending multimodal considerations:* Multimodality is not just a critical area for research in our field because of how it *adds* to our understanding of what is languaged, but in significant disability contexts, it can stand for the most powerful expressions of language itself (see, e.g., Al Zidjaly, 2012; Al Zidjaly, 2016; Jewitt, Bezemer, & O'Halloran, 2016; Kusters et al., 2017). This study shows us how multimodal expression–the eye activating speech–can be far more complex than is typically constructed within applied linguistics. Continuing the expansion of our understanding of what multimodality means is a necessary and critical part of our move toward more inclusive and richer analysis within applied linguistics (Kusters et al., 2017).

5) *Further complicating notions about communicative competence*: There is some emerging research examining communicative competence within AAC use in education and communication disorders (DeThorne, Hengst, Fisher, & King, 2014; Light & McNaughton, 2014; Radici, Heboyan, Mantovani, & De Leo, 2020), but there is relative silence within applied linguistics. Communicative competence is complex; it "invokes authenticity, plurality, and mobility, and links people's ability to communicate with others with their moral valuation, rights to citizenship and belonging, and position in the hierarchies and structure of inequality, both local and non-local" (Kataoka, Ikeda, & Besnier, 2013, p. 349). Individuals with disabilities are often mired in structures of inequality and have to wrestle with constraints on access when it relates to these aspects. How multimodal, device-mediated language is used to navigate medical encounters across disciplines, within the interplay of potent (and often oppressive) social, cultural, and historical forces, is a powerful question to explore using the lens of communicative competence. There needs to be more focused analysis within high-stakes encounters, such as those Kalika navigates, where using language appropriately could be a matter of life or death. In Kalika's case, communicative competence necessitates physical assistance; for example, within some of the contexts, Kalika needed to be taken to a specific page so that she could offer important medical information (e.g., the HOTV test). Context-specific language is found in different pages, which she located by herself and was also often guided to by her caregivers. One possible question for us to consider as applied linguists, then, is how communicative competence is interactionally achieved when there is disability.

6) *Presuming cognitive competence*: Kalika's use of language pushes against still prevailing attitudes regarding Rett syndrome, that individuals are unable to communicate and have severe cognitive deficits (see Fabio, Castelli, Marchetti, & Antonietti, 2013). In this study, she offers a glimpse of communicative and cognitive life in Rett syndrome that has mostly remained hidden until now. This paper offers evidence that such perspectives may be misleading and inaccurate; not only in Rett syndrome but within other significant disability contexts as well, possibly, where communication functions as a major barrier in assessment. In Rett syndrome, deficit perspectives have derived from

inappropriate assessment measures centering on speech and hand use that invariably fail when applied to individuals with the disorder. In the field of applied linguistics, it is accepted that *appropriate* assessment measures are key to the analysis of a learner's language level. This study shows how critical it is to keep this in mind within the significant disability context as well, particularly because of how language use is used to frame and assess individuals' cognitive abilities.

7) *Espousing linguistic justice*: As Henner and Robinson (2021) pointed out, neglect of "disabled ways of languaging" (p. 2) is a process by which the larger field of "[l]inguistics reproduces and refracts structures of power" (p. 2). The authors assert that for linguistic justice, *all* inquiry within the entire field of linguistics must engage with disability. Similarly, Kusters et al. (2017) noted: "it [is] extremely important to pay attention to…asymmetries: people have differential access to languages, literacies, objects and other resources, and different uses of the senses" (p. 227). Attending to these issues is an *imperative*, rather than a peripheral charge for applied linguists, if we are to aspire for linguistic justice in our field.

Ultimately, we call for applied linguists and language educators to broaden and *humanize* their understanding of how language circulates in the real world. It is our hope that this study can help offer a gentle but compelling nudge in that direction.

7. Conclusion

There are some caveats to keep in mind within this study. Given that this study focused on a medical case report of a single participant, it is not possible to make claims about generalizability across the entire population of individuals with Rett syndrome. The intent of this study is to show how one child with Rett syndrome used an AAC device purposefully for medical communication and advocacy, and to draw out lessons for the field of applied linguistics. Individuals with Rett syndrome are a heterogeneous group; for that reason, broad generalizations may be inappropriate. What we have, instead, is a picture of a new world of possibilities in terms of how individuals with significant communication challenges can language their world. We hope that future research will involve a more diverse population, extending the limited knowledge in this area.

Another important note to attend to is that Kalika's communication was facilitated but also limited by her device. The device imposed constraints in terms of how the language was pre-designed and structured; while the parents had made interventions and changes, those were minor overall. Kalika's talk and advocacy had to occur within mostly a pre-configured set of software cells, and therefore, communicative possibilities. As noted earlier, her first language was unavailable on TD Snap, and the small Bengali section her mother devised was rudimentary. Despite these constraints, the data reveals intriguing language use that merits further study.

Ultimately, this study offers a tantalizing glimpse of future possibilities where individuals with serious communication challenges can provide medical information in ways that were previously unimaginable. This is no small matter in a complex disease like Rett syndrome, where accurate pain assessment is especially crucial (Solodiuk & Curley, 2003); the consequences of neglecting or misunderstanding medical issues can severely impact quality of life. Understanding the patient experience is also critical for suitable drug development (Morel & Cano, 2017). At the cusp of gene therapy trials and other ground-breaking treatments being developed for Rett syndrome (Neul & Chang, 2020), it is hoped that this exciting possibility is recognized and valued as a result of this study within the broader medical community. Language will be central to these advancements; and there is room for applied linguists to break new ground in this high-stakes space.

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Teaching Italian as a second language through digital storytelling: Students' perceptions towards *izi.TRAVEL*

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ABSTRACT

EN The use of technology-enhanced language learning, representing an urgent issue due to the Covid-19 pandemic, has also been promoted by many studies in second language acquisition. Nevertheless, research in this field is only partially developed for the teaching of Italian as a second language (L2) within the university context and for investigating students' perceptions. This article presents an action research project on the use of *izi.TRAVEL,* a website housing more than 15,000 audio guides for touring various sites in cities around the world. The aim of the study is to contribute to developing didactic practices relative to Italian as an L2 through digital storytelling, in order to raise and foster students' linguistic and digital skills. Participants were a small group of students studying Italian as an L2 as part of a master's program at an Italian university. Data were collected through a questionnaire, a focus group, and students' multimodal artifacts. Results show the positive impact of project participation on students' attitudes and perceived learning outcomes, as well as improvements in linguistic, cultural, environmental, and digital competences.

Key words: TEACHING ITALIAN AS AN L2, DIGITAL STORYTELLING, IZI.TRAVEL, STUDENTS' PERCEPTIONS, ACTION RESEARCH

ES El uso de la tecnología para la adquisición lingüística es promovido por varios estudios, y constituye una cuestión urgente en el contexto de la pandemia del Covid-19. Sin embargo, este tema de investigación se ha desarrollado solo parcialmente respecto a la enseñanza del italiano como L2 en la universidad y a las percepciones del alumnado. En este artículo se presenta un proyecto de investigación-acción sobre el uso de *izi.TRAVEL,* un sitio web que tiene más de 15,000 audioguías para recorrer varios sitios de ciudades de todo el mundo. *Izi.TRAVEL* se implementó con un pequeño grupo de estudiantes de italiano como L2 matriculados en un Máster internacional de una universidad italiana. El objetivo del estudio es desarrollar prácticas didácticas del italiano como L2 a través de la narrativa digital para fomentar las habilidades lingüísticas y digitales del alumnado. Los datos se recogieron a través de un cuestionario, un grupo focal y los productos multimodales del alumnado. Los resultados muestran el impacto positivo de la participación en el proyecto en las actitudes del alumnado y en sus resultados de aprendizaje percibidos, así como mejoras en sus competencias lingüística, cultural, ambiental y digital.

Palabras clave: ENSEÑAR ITALIANO L2, NARRATIVA DIGITAL, IZI.TRAVEL, PERCEPCIONES DE LOS ESTUDIANTES, INVESTIGACIÓN-ACCIÓN

IT L'uso delle tecnologie per l'apprendimento linguistico è promosso da diversi studi e si è andato imponendo come questione urgente ne contesto della pandemia Covid-19. Tuttavia, in quest'ambito risultano ancora scarsi gli studi sulla didattica dell'italiano L2 nel contesto universitario e dalla prospettiva degli studenti. Su queste basi, nell'articolo si presenta un progetto di ricerca-azione riguardante l'uso di *izi.TRAVEL*, un sito web che contiene più di 15,000 audioguide per visitare le città di tutto il mondo. Il progetto è stato pilotato con un piccolo gruppo di apprendenti di italiano L2 iscritti in un Master internazionale di un'università italiana. L'obiettivo dello studio è quello di contribuire allo sviluppo di pratiche didattiche sull'italiano L2 attraverso il *Digital Storytelling* per promuovere le competenze linguistiche e digitali degli apprendenti. I dati sono stati raccolti attraverso un questionario, un *focus group* e i prodotti multimodali degli studenti. I risultati rivelano che l'impatto della partecipazione nel progetto sugli atteggiamenti degli/delle apprendenti e sui risultati dell'apprendimento percepiti è stato positivo poiché migliorano le competenze linguistiche, culturali, ambientali e digitali.

Parole chiave: INSEGNARE ITALIANO L2, DIGITAL STORYTELLING, IZI.TRAVEL, PERCEZIONI DEGLI STUDENTI, RICERCA-AZIONE

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1. Introduction

The development of the younger generation's linguistic, digital, and intercultural skills is one of the priorities of the European Union (EU). According to the Policies of Multilingualism [1] and Innovation in Education[2], the EU supports initiatives regarding language learning and digital media aimed at fostering the development of linguistic diversity, digital literacy, and innovative pedagogical practices in the educational system. In particular, the Council *Conclusions on Multilingualism and the Development of Language Competences* promote plurilingualism and intercultural dialogue (Council of Europe, 2014); the *Digital Education Action Plan* (2021-2027) defines guidelines for a high-performing digital ecosystem in education (European Commission, 2020); and the *2030 Agenda for Sustainable Development Goals* includes the achievement of quality education (United Nations, 2015). Moreover, the use of technology-enhanced language learning represents an urgent issue, since the Covid-19 pandemic compels us to rethink education from a digital perspective. Therefore, it is essential to develop epistemological reflections and methodological proposals that encourage the use of information and communication technologies (ICT) for the teaching of Foreign and Second Languages (FL/L2).

Within this framework, several studies proved the linguistic, technological, and intercultural benefits of using Digital Storytelling (DST) for second language acquisition (SLA) (Jamissen, Hardy, Nordkvelle, & Pleasants, 2017; Lambert & Hessler, 2018). DST is an effective learning tool, since it enhances students' communicative skills by inviting them to design, create, and present digital stories. It further develops their information, visual, and technology literacy by asking them to incorporate data, communicate through images, and digitise media content (Robin, 2006). Moreover, DST reinforces students' interpersonal abilities through group work involving different ethnic backgrounds, with students sharing and negotiating ideas (Benick, 2012; Trimboli, 2020).

To date, DST research has centered on the experimentation of digital tools for SLA connected to urban spaces, the use of literary texts, university students' perceptions, and the analysis of their multimodal artifacts. DST can be integrated with the didactic use of Linguistic Landscape, which represent the urban signs of a territory. They can be integrated since it enhances language acquisition, reflections on the interactions between the messages and the context, and the knowledge of a given geographic area (Malinowski, 2015; Shohamy & Gorter, 2009). In addition, the combination of DST and literature in the FL/L2 classroom promotes students' linguistic, digital, and intercultural skills by using ICT as literary multimodal devices for teamwork (Maddin, 2014), especially within outdoor lesson plans based on literary texts (Bataller, 2013). Finally, investigations into students' digital stories and perceptions on the use of DST for SLA have revealed stronger motivation, improved vocabulary, grammar, and oral proficiency, an increased autonomy in the writing process, and a stronger sense of community (Chiang, 2020; Herrera Ramírez, 2013; Pascual Lence, 2013; Kallinikou & Nicolaidou, 2019; Lee, 2014; Raffone & Monti, 2019; Towndrow & Kogut, 2020).

Studies on the use of DST for SLA carried out in Italy have dealt primarily with nursery and primary school students (Bertolini, 2017; Corio & Pacifico, 2019; Zini, Contini, Bertolini, & Manera, 2020), as well as with university students of English and Italian as a FL (Raffone & Monti, 2019; Sottilotta & Cannamela, 2019). However, research on students' perceptions and multimodal artifacts of DST in the university context is still underexplored. Moreover, studies on linguistic landscape have investigated the relationship between Italian and the other languages of the urban scene involving international university students (Bagna, Gallina, & Machetti, 2018), but did not involve digital media. Finally, research combining Italian as an L2, literature, and DST is limited, and research on *izi.TRAVEL*, a website housing more than 15,000 audio guides for touring various sites in cities around the world, have focused on its potentialities for cultural heritage promotion (Bonacini, 2018) while ignoring the benefits for SLA.

Against this backdrop, the article illustrates a project aimed at fostering the linguistic and digital skills of students aged 20-30 by developing didactic practices in the teaching of Italian as an L2 through DST. Due to the Covid-19 pandemic, it was not possible to organise outdoor lesson plans either connected to the urban signs of a territory or based on literary texts. Thus, in line with the EU priorities and in order to contribute to the above-mentioned gaps, I developed a classroom-based research project that combined the experimentation of *izi.TRAVEL*, the reading of a literary text set in an Italian city, and inquiry into students' perceptions. On this basis, the article will first consider the conceptual underpinnings of using DST for SLA, and explore the linguistic and technological benefits of using *izi.TRAVEL*. Second, it will present an action research project dealing with the teaching of Italian as an L2 through *izi.TRAVEL* that has been piloted with a small group of international

[1] https://education.ec.europa.eu/focus-topics/improving-quality-equity/multilingualism
[2] https://education.ec.europa.eu/education-levels/higher-education/innovation-in-education

university students. Third, it will analyse and discuss the data collected through a questionnaire, a focus group, and students' multimodal artifacts in order to understand the impact of project participation on students' attitudes and perceived learning outcomes. Although the reduced sample size and the single-class study limit the broader applicability of the conclusions, the findings confirm the innovative aspects of the pedagogical approach, and they suggest lines of research to be investigated in the future.

2. The conceptual underpinnings

The conceptual underpinnings of DST for SLA include the evolution of the concepts of literacy and multimodality, together with the task-based approach. On the one hand, the gradual advancement of ICT, which has been further stimulated by the current pandemic situation, has progressively welded daily communication to the digital environment. Within the educational system, this has led to the evolution of the concept of literacy (from a single to a plural definition), and to the reconsideration of digital literacies and multimodality in L2 instruction in the context of Covid-19 (Borro, Conti, & Fiorenza, 2021; Conti, 2021). On the other hand, DST adheres completely to both the objectives and the structure of the task-based approach to FL/L2 learning.

2.1. Digital literacies and multimodality in second language instruction

In the last decades, literacy has broadened from its traditional and single definition, corresponding to the ability to read and write, to the new, plural terms of "multiliteracies" and "new literacies," involving a wider set of practices (Chiang, 2020; Lam, 2004). In an increasingly globalised and digitised world, the notion of 'multiliteracies' include both linguistic and other semiotic resources (such as films, posters, and paintings) to represent visual, audial, gestural, spatial, and tactile elements of communication (Lotherington & Jenson, 2011). The term 'new literacies' includes the use of multiple modes of communication and digital media (such as social platforms, fan fiction, and videogames) through the development of technology-mediated literacy practices (Warner & Dupuy, 2018). In this respect, the use of literary texts in the FL/L2 classroom adds an important poetic and sensory element, since it fosters the improvement not just of linguistic and literary skills, but also of environmental awareness and digital competence. For example, literature can deal with ecological issues, interact with the social and cultural context, and raise environmental consciousness (Iovino, Cesaretti, & Past, 2018). Moreover, ICT not only serves as literary tools, reproducing and disseminating the written texts and its adaptations (such as movies and songs), but, above all, works as literary multimodal devices (Hetland, 2016).To sum up, in contemporary times, a comprehensive notion of literacies corresponds to the "ability to read and write at a level whereby individuals can effectively understand and use written communication in all media (print or electronic), including digital literacy" (Valtin et al., 2016, p. 3). Within this context, digital literacies represent 21st century literacy (Brown, Bryan, & Brown, 2005) which is defined as "the ability to understand media (as most mediums are digitalized), to search and think critically about retrievable information (with the widespread use of the Internet) and be able to communicate with others through a variety of digital tools and applications" (Ferrari, 2012, p. 16). As a result, becoming literate in an L2 means developing linguistic, cognitive, and technical competences to find, understand, select, create, and share information using ICT.

According to recent research, digital literacies, multimodality, and DST are closely connected (Chiang, 2020; Robin, 2016; Thang et al., 2014). DST is a multi-literacy approach that renewed the traditional storytelling process by introducing the use of digital tools and resources to combine text, images, and sound with the aim of supporting the educational process (Lambert & Hessler, 2018). First of all, DST fosters the teaching of media literacies. In fact, it strengthens various aspects of literacies, such as writing, organization, and interpersonal skills in defining and presenting a personal point of view in a script, managing the overall aspects of the project (materials, time, tasks), and cooperating with classmates (Ohler, 2008; Robin, 2006). Moreover, international studies promote the use of DST as an effective learning tool for SLA, since it encourages students' motivation, the achievement of linguistic and rhetorical gains in listening, written and oral production, cultural debate development, and multimodal creativity (Castañeda, 2013; Oskoz & Elola, 2016; Sadik, 2008; Vinogradova, Linville, & Bickel, 2011). With respect to this, Oskoz and Elola (2016) stated that "the development of new digital literacies is at the heart of many current Digital Storytelling studies" (p. 165). Lotherington and Jenson (2011) affirmed:

> Literate engagement in the interactive, multimodal genres created in digital space engages the participant in dynamic, multidimensional communication, (potentially) involving social interaction, haptic activation, physical coordination, visual design, modal complexity (e.g.,

> multiple language engagement, musical accompaniment, and animation), dynamic, collaborative text construction, and alphabetic literacy (pp. 227-228).

Finally, Ohler (2008) wrote that DST is the perfect vehicle to integrate traditional and emerging literacies:

> With DST, good old-fashioned, clear, expository writing is the key. (…) DST also involves, whenever possible, other literacies such as art and speaking, as well as writing and digital production. The actual digital story is the tip of the iceberg, below which are a number of artifacts that can be used to assess traditional literacy, including planning documents, scripted narratives, treatments, story tables, storyboards, and self-assessments, as well as music, art, recorded oral presentations, and other prized examples of student work (p. 12).

2.2. The task-based approach for digital storytelling

A task involves a series of different problem-posing activities that require students to use various cognitive and communicative procedures (oral and written comprehension, production, manipulation, and interaction) in the FL/L2 in order to express meaning, as they would do in the real world (Ellis, 2003; Nunan, 2004). According to Ellis (2009), a FL/L2 task should include the following features:

- The primary focus should be on 'meaning' (by which it is meant that learners should be mainly concerned with processing the semantic and pragmatic meaning of utterances).
- There should be some kind of 'gap' (i.e., a need to convey information, to express an option or to infer meaning).
- Learners should largely rely on their own resources (linguistic and non-linguistic) in order to complete the activity.
- There is a clearly defined outcome other than the use of language (i.e., the language serves as the means to achieving the outcome, not as an end in its own right) (p. 223).

In line with this, the final product of DST are digital stories (DS) that combine text, images, and sound to convey different meanings, dealing with personal, historical, and socio-political issues, that engage students in both traditional and innovative ways (researching, writing, interviewing, as well as using graphics, animation, and music) (Oskoz & Elola, 2016).

As for the structure, the task-based approach is divided into the main sequential phases of:

1) Pre-Task: presenting the topic, the objectives, the expected results, the work methods, and the linguistic and non-linguistic processes required to complete the task.
2) Task: developing the task by working individually, in pairs, and in groups, and by presenting it to the classroom.
3) Post-Task: focusing on FL/L2 specific forms that emerged in the previous phases (Willis, 1996).

In accordance with this, DST projects are generally structured into the consecutive stages of:

1) Content development: collecting information (interviews, journals, websites).
2) Written text: focusing on grammar, vocabulary, coherence, cohesion.
3) Images: gathering and analysis of images.
4) Oral text: rehearsing the pronunciation.
5) Technology training: learning to use the DS software, audio, and images softwares, analysis of DS.
6) In-class presentation: presenting the final DS (Oskoz & Elola, 2016, p. 161).

3. Using *izi.TRAVEL* for second language acquisition through digital storytelling

izi.TRAVEL is a free DST platform to create both indoor and outdoor audio guides, for a museum and a city tour respectively. It does not require specialised technical knowledge or hardware, except for a personal

computer, a smart phone, and an internet connection. The procedures for using this platform are explained in a simple and intuitive manner in the *izi.TRAVEL* official website[3] and YouTube account[4].

3.1. izi.TRAVEL, digital literacies, and multimodality

Using *izi.TRAVEL* in DST projects for SLA contributes to developing the wide variety of skills included in the current multi-faceted notion of literacies (Lee, 2014; Oskoz & Elola, 2016). The connection between the need to support digital literacies and multimodality in L2 instruction and the learning objectives of using *izi.TRAVEL* in DST projects for SLA is shown in Table 1.

Table 1
izi.TRAVEL: Literacies and learning objectives

Literacies	Learning objectives of *izi.TRAVEL*
Research skills	- Identifying the aims and the content of the audio guide
Organisation skills	- Managing the time to create the audio guide - Selecting and synthesising information - Producing the materials
Presentation skills	- Finding the best way to present the digital story
Language skills	- Writing the scripts - Reading the scripts aloud - Reading or listening to peers' short stories - Speaking about one's own multimodal artifact: presenting it or sharing it as a group work
Technology skills	- Using the digital tool to digitise content - Using other digital recording audio programs and cameras to digitise content - Using editing applications - Communicating with the digital community
Creativity skills	- Developing critical thinking skills - Training problem-solving abilities - Integrating personal elements in the multimodal artifacts
Assessment skills	- Gaining experience in self-evaluation - Gaining experience in peer-evaluation
Interpersonal skills	- Working individually, in pairs, and in groups - Enhancing interaction abilities: respecting roles, asking questions, listening to each other, expressing ideas, constructing common narratives - Increasing the sense of community

To train interpersonal skills, students can work either individually or collectively according to the personal or cultural purposes of their multimodal artifacts. Nevertheless, the two approaches can also be integrated by alternating plenary discussions and individual work aimed to reach a shared objective, the final digital product.

3.2. izi.TRAVEL and the task-based approach

Creating an audio guide with *izi.TRAVEL* requires implementing a process-oriented approach to guide students through their training in multimodal skills. The correspondence between the task-based approach in L2 instruction and the steps to create an audio guide with *izi.TRAVEL* are presented in Table 2.

Table 2

[3] https://izi.travel/en
[4] https://www.youtube.com/channel/UCvidztWMbxuJ3hArkZIaIhg

izi.TRAVEL: Stages and tasks

Stage	Tasks to create an audio guide with *izi.TRAVEL*
1) Planning	- Choosing the type of audio guide to produce - Selecting the exhibits in a museum or the points of interest of a city
2) Writing stories	- Writing short, colloquial, and easily readable scripts - Associating the scripts with the selected items or places
3) Recording audio	- Recording the scripts by using a default recording program on a smart phone - Reading the scripts aloud in a place without echo or background noise - Transferring the files to a computer - Editing the file by using free digital programs (such as *Audacity*)
4) Making images	- Taking original photographs to associate with the selected objects or places - Transferring the photographs to a computer - Using the photographs for every item or location
5) Registration	- Registering on the *izi.TRAVEL* platform: indicating personal details, accepting license terms and conditions, and setting the password
6) Audio guide creation	- Choosing between a museum and a city tour - Entering general information (the museum or city tour name, country, the guide language etc.) - Including a short description of the audio guide, the audio recording of the script, and one or more photographs - Uploading the whole set of data (scripts, audio, images) to the platform

When creating an audio guide with *izi.TRAVEL*, it is essential that the written stories are short (maximum length: half a page), written in a colloquial language, and easy to read to gain users' attention and keep them involved. Moreover, the pictures should be original photographs to avoid any copyright issues. Finally, the visibility of the audio guides can be either accessible to everyone or reserved for the authorised users. Users can enter the tour through a password that automatically generates when choosing this option.

4. The project, "Venice is..."

Following the conceptual underpinnings of using DST for SLA and the teaching potentialities of *izi.TRAVEL*, I designed and implemented a project to enhance students' multiliteracy skills in Italian as an L2 by creating a digital city tour of Venice. The project, entitled "Venice is…", followed the structure of the task-based approach. It was divided into the sequential stages of a traditional DST project, and required the use of *izi.TRAVEL* in most of its phases. The purpose was to train students in the whole set of skills defining the current notion of literacies through the design, the creation, and the presentation of their multimodal artifacts referred to the city they were living in.

4.1. The context

I carried out the project with a small group of international university students of intermediate level in Italian enrolled in the master's in Management of Cultural Assets and Activities (MaBAC) at Ca' Foscari University of Venice. During the 1st semester of the A. Y. 2020-2021, the students attended a 44-hour course of Italian as an L2 with me as the teacher, organised in collaboration with the Dante Alighieri Society of Venice. In total, 20 hours have been dedicated to implementing the project.

In normal circumstances, this course fosters language and culture acquisition within formal and informal contexts, such as visiting the Venetian museums. Due to the Covid-19 pandemic, it has not been possible to organise either Italian as an L2 activities to be taken part in combination with the museum visits (Sederberg, 2013), or language and cultural itineraries through Venice by exploiting the didactic potentialities of the Linguistic Landscape approach (Bagna, Gallina, & Machetti, 2018; Malinowski, 2015;), and of the literary texts associated with the territory (Bataller, 2013).

I, therefore, decided to design and implement a project aimed at SLA through DST. The project was called "Venice is..." because it dealt with both the reading of some extracts of *Venice is a Fish: A Cultural Guide*[5] by Tiziano Scarpa (2000) and the use of *izi.TRAVEL* to re-interpret the literary text from students' perspectives. Students created a digital tour of Venice, which promotes student-centered learning. After reading about Venice in a literary text, students uploaded their multimodal artifacts associated with the Venetian places they visited and experienced. The purpose was to develop their narrative skills, improve awareness of multimedia content and resources, and train digital competences.

In line with the potentialities of using literature in the L2 classroom, the choice of *Venice is a Fish: A Cultural Guide* as a starting point aimed at motivating students to discover the tangible and intangible heritage of Venice and to connect with the surrounding landscape. Considering the didactic context, among the several books on the city (such as *Watermark* by Iosif Brodskij, 1989; *A Sentimental Guide to Venice* by Diego Valeri, 1997; and *Venice: The Lion, the City and the Water* by Cees Nooteboom, 2020), I selected Tiziano Scarpa's book because it describes the city through a series of physical and emotional experiences associated with different parts of the body (feet, legs, heart, hands, etc.), using an ironic tone, and from a local point of view.

4.2. Project design and implementation

The project developed throughout 10 lessons, 2 hours each (plus extra-lesson time for homework and the outreach event). It was divided into 9 sequential stages connected with multiple tasks and it pursued various learning objectives, in accordance with the above-mentioned conceptual and pedagogical frames. The connections between these central aspects of the project design and implementation are shown in Table 3.

Table 3
The project "Venice is…"

Lessons	Stages	Tasks	Learning objectives
1	1) Introduction	- Identifying the characteristics of *Venice is a Fish: A Cultural Guide* - Identifying the features of the descriptive genre - Becoming familiar with *izi.TRAVEL*	- Understanding the aims and the content of the project - Working in groups
2-7 (also as homework)	2) Content development	- Reading a selection of excerpts of *Venice is a Fish: A Cultural Guide*	- Reading and understanding a literary text - Developing critical thinking skills - Working in groups
	3) Written text	- Choosing Venetian places or elements connected to the five senses - Writing the scripts by describing the Venetian places or elements - Uploading the scripts within the *Moodle* platform of the course to be corrected	- Selecting and synthetising information - Developing critical thinking skills - Writing the scripts - Integrating personal elements in the multimodal artifacts - Working individually
	4) Images	- Taking original photographs of the Venetian places or elements - Transferring the photographs to a computer - Associating the photographs with the Venetian places or elements	- Producing the materials: photographs - Using digital cameras to digitise content - Using editing applications - Integrating personal elements in the multimodal artifacts - Working individually
	5) Oral text	- Reading the scripts on sight, taste, touch, and smell senses aloud - Recording four audios on sight, taste, touch, and smell with the smartphone audio recording program	- Producing the materials: audio files - Reading the scripts aloud - Using digital recording audio programs to digitise content - Integrating personal elements in the multimodal artifacts

[5] Italian original title: Scarpa, Tiziano (2000). *Venezia è un pesce: Una guida*. Milano: Feltrinelli.

		- Recording original sounds of the Venetian places or elements on the hearing sense - Recording one audio on hearing with the smartphone audio recording program - Transferring the audios to a computer - Associating the audios with the Venetian places or elements	- Working individually
8	6) Technology training	- Registering on the *izi.TRAVEL* platform - Choosing a city tour - Entering general information - Including a short description of the digital tour - Uploading the multimodal artifacts to the *izi.TRAVEL* platform	- Using the digital tool to digitise content - Managing the time to create the audio guide - Finding the best way to present the digital story - Developing critical thinking skills - Training problem-solving abilities - Working in groups
9	7) In-class presentation	- Presenting the digital tour on *izi.TRAVEL* - Discussing the digital tour on *izi.TRAVEL*	- Finding the best way to present the digital story - Reading or listening to peers' short stories - Speaking about one's own multimodal artifact by presenting it - Developing critical thinking skills - Gaining experience in self-evaluation - Gaining experience in peer-evaluation - Working in groups - Enhancing interaction abilities - Increasing the sense of community
Extra-lesson time	8) Outreach event	- Participating in an online public seminar - Presenting the digital tour on *izi.TRAVEL* - Interviewing Tiziano Scarpa	- Finding the best way to present the digital tour - Speaking about the digital tour by sharing it as a group work - Working in groups - Enhancing interaction abilities - Increasing the sense of community
10	9) Conclusion	- Discussing the outreach event - Discussing the whole project	- Developing critical thinking skills - Working in groups - Enhancing interaction abilities - Increasing the sense of community

At the beginning (stage 1, lesson 1), I introduced the project's themes and objectives to the students. I presented Tiziano Scarpa's book and the features of the descriptive genre. Moreover, I introduced *izi.TRAVEL* platform and some audio guides from its free and vast audio guide collection in order for students to become familiar with the tool, understand its purposes, and explore its potentialities.

Regarding content development (stage 2, lessons 2-7), students' read some extracts of *Venice is a Fish: A Cultural Guide* focusing on the description of the city through the five senses. The readings corresponded to the introduction of the book and some excerpts of the chapters "Hands," "Ears," "Mouth," "Nose," and "Eyes." Every lesson was dedicated to exploring one of the five senses at a time. Thus, the title of the project was adapted according to the different focus (lesson 2: "Venice is touch," lesson 3: "Venice is hearing," and so on). The activities were divided into pre-during-after reading phases (Balboni, 2018), aimed at: exploring students' previous knowledge and impressions about Venice; verifying their global reading comprehension; verifying their analytical comprehension, focused especially on vocabulary; stimulating their personal interpretation of the five senses associated with the city.

Concerning the written text (stage 3, lesson 2-7 plus homework), after reading a selected extract of the book, students were asked to choose and describe a Venetian place or element that they personally

experienced, that particularly stimulated their senses under analysis. The criteria for creating short stories were the following:

- around 250–300-word length
- written in the first-person narrative
- specify the Venetian place and element
- express personal points of view and emotional content
- include good Italian grammar, vocabulary, and language use.

The writing of each short story started in the classroom and continued as homework. Besides respecting the features of the descriptive genre, students followed the main phases of the creative writing process. In the first phase, conceptualization, students identified the whole set of ideas connected to a topic. For the organisation phase, they selected the ideas that have emerged and defined an outline. In the completion stage, students wrote the short story (Guerriero, 2021).

With respect to images (stage 4, homework of lessons 2-7), during the weeks they had been producing the written texts, students were asked to walk around Venice, be inspired by observing the city, and take at least one photograph to represent every sense.

Concerning the oral text (stage 5, homework of lessons 2-7), after correcting the written texts and adding more images to illustrate them better, students practiced performing the audio recordings of their short stories, paying attention to the clarity of their voices. I directly assessed the quality of their recordings as the teacher. Students recorded four audios of themselves reading the scripts on the four senses of sight, taste, touch, and smell. For the hearing sense, students recorded the original sounds of the elements they described to achieve a more realistic rendering.

Regarding the technology training (stage 6, lesson 8), students received basic instructions regarding how to use the tools to upload their multimodal artifacts (combining text, images, and audios/sounds) on the *izi.TRAVEL* platform and create a communal digital tour.

During the in-class presentation (stage 7, lesson 9) students collaboratively presented their digital tours, sharing their five multimodal artifacts following the path within the city map.

With respect to the outreach event (stage 8, extra-lesson time), students had the opportunity to share their digital tour with an outside audience of specialists in the Italian language, including Tiziano Scarpa. Concurrently with the design and the implementation of the project "Venice is...", the latest edition of the Venetian author's book was published[6]. After receiving Tiziano Scarpa's positive response to participating as a special guest, I designed and organised an online public seminar that took place on 15th January 2021 within the *Zoom* platform, in collaboration with the Dante Alighieri Societies of Venice and Miami as well as with Ca' Foscari University of Venice and the Florida Atlantic University. The outreach event aimed to present both the latest edition of Tiziano Scarpa's book and the students' digital tour, of which some significant examples associated with the five senses were shown. In the last part of the seminar, students interviewed the writer regarding, for example, his sources of inspiration, his relationship with the city, and life in Venice during the Covid-19 pandemic. The video of the event is available at the YouTube account of the Dante Alighieri Society of Venice[7].

To conclude the project (stage 9, lesson 10) students discussed the event and their overall experience.

5. The research

The aim of the study was to understand the impact of project participation on students' attitudes and perceived learning outcomes in order to develop didactic practices for the teaching of Italian as an L2 through DST aimed at raising and fostering students' linguistic and digital skills. The two research questions (RQ) were:

RQ1: What impact does project participation have on students' attitudes towards both SLA and DST?
RQ2: What impact does project participation have on students' perceived learning outcomes?

The purpose of RQ1 was to explore students' attitudes towards the project. In particular, it aimed at understanding how they considered the reading, writing, and digital tasks. The objective of RQ2 was to

[6] Italian original title: Scarpa, Tiziano (2020). *Venezia è un pesce: Una guida nuova.* Feltrinelli.
[7] https://www.youtube.com/watch?v=1NTdibNlt9A

investigate what students thought they had learned from the project. It especially aimed at understanding whether and to what extent they would identify learning gains regarding their knowledge and competencies in both Italian as an L2, and the use of digital tools.

5.1. Participants

The project involved 12 university students (n=11 female, n=1 male), aged 20-30 (n=9 aged 20-25, n=3 aged 26-30), and speaking French as a mother tongue (n=10) or as an L2 (n=2, for whom Russian was the mother tongue). Students had a heterogeneous educational background regarding the study of Italian since they had studied it for less than 1 year (n=5), 2-3 years (n=4), 4-5 years (n=1), and more than 5 years (n=2). Nevertheless, the results of the entry test attested their intermediate level (B1-B2 of the CEFR). On the one hand, students were highly motivated to improve their Italian to enhance their performances in the other Master courses. They all knew other Romance languages besides French. Students who had studied Italian for a shorter period attended intensive Italian courses before moving to Venice, while those who had studied it for a longer period did not practise it at length before starting the Masters program.

5.2. Methods

The study followed the constructivist paradigm, since it focused on local, specific, and experientially based co-constructed realities (Creswell, 2014; Hatch, 2002). The methodology used for this research was an action research project because I was actively involved as the teacher. One of the main features of this methodology is the link between research and teaching aimed at improving practice (Dörnyei, 2007). The study also reflected other essential principles of action research, such as: the problem-solving function; the development within a small-scale and localised context; the impossibility of generalising results, although they could be useful for those who teach and learn in similar contexts; the understanding of the processes of change; the contribution of the practical experience to theoretical reflections (Coonan, 2000). The action research process was based on a spiral circle divided into the following stages: identifying the problem; reflecting on solutions; choosing a type of intervention; planning, implementing, monitoring, and recording; reviewing and evaluating; understanding how the intervention solved the problem (Cohen, Manion & Morrison, 2011). Shortly after the start of the course, the museums applied restrictions to group visits due to the worsening of the Covid-19 emergency. Therefore, I immediately devised new activities aimed at promoting the study of both the Italian language and the Venetian cultural heritage through digital resources. I planned the stages of the project – except for the outreach event, which was added in a later stage – and I implemented it. I monitored students' reactions and involvement during the reading of the literary text and the creation of their multimodal artifacts. Thus, I gradually refined the linguistic and digital activities according to students' interests and time management.

5.2.1. Data collection

To achieve a comprehensive picture of the research context, a mixed methodology design was chosen (Mertens, 2007). Both quantitative and qualitative data were collected through multiple data collection strategies, i.e., questionnaires, focus groups, and students' multimodal artifacts, and according to a sequential process (Dörnyei, 2007). A questionnaire was followed by a focus group and the analysis of students' digital stories in order to complete the quantitative results through the qualitative ones (Baldry, 2013). The quantitative data were collected through the closed-ended questionnaire items, while the qualitative data came from the open-ended questionnaire items, the focus group, and students' materials.

Both the questionnaire and the focus group data were collected at the end of the project (lesson 10), while students' multimodal artifacts were saved throughout its development (lessons 2-8).

5.2.1.1. Questionnaire

The questionnaire (see Appendix A) was anonymous and paper based. It included 17 items and was divided into three sections. The first section aimed at answering RQ1. It corresponded to items 1-6, and it explored the impact of project participation on students' attitudes. It focused on students' rating of the overall project, the outdoor activities, the comprehension of the literary text, the production of the writing activities, and the use of *izi.TRAVEL*. The second section aimed at answering RQ2. The questions coincided with items 7-14, and it investigated the impact of project participation on students' perceived learning outcomes. It examined the enhancement of students' linguistic, cultural, environmental, and digital skills. The third section aimed at collecting students' general information, and it included items 15-17. The responses are presented

above in Section 5.1. The majority of the items of sections 1-2 was closed-ended. The item types included Likert scales (items 1-2a, 3a, 4-6, 8, 12-14a), numerical rating scales (item 7), and yes-no items (item 11). Conversely, the remaining items were open-ended. The item types included clarification questions (items 2b, 4b, 14b), and specific open questions (items 9-10) (Dörnyei, 2010). The questionnaire was administered to 11 students on 14th December 2020, and to 1 student on 16th December 2020. The average time for completing the questionnaire was 15 minutes.

5.2.1.2. Focus group

The focus group included 6 questions (See Appendix B), and it aimed at examining the impact of project participation on students' attitudes and perceived learning outcomes. The purpose was to better interpret the previously collected quantitative data. In fact, items 1-3 aimed at answering RQ2, whereas items 4-6 aimed at answering RQ1. The focus group structure included an introductory question regarding previous similar experiences (item 1); a transition question dealing with the expectations of the project (item 2); central questions concerning the usefulness of the project, what interested the students and what they did not like (items 3-4); and concluding questions regarding future applications and possible additions (items 5-6) (Baldry, 2013). The focus group was conducted with 9 students on 13th January 2021 (3 students were absent). It was recorded with an audio recorder, and it lasted almost 40 minutes.

5.2.1.3. Students' multimodal artifacts

Students' multimodal artifacts referred to five different topics corresponding to their perceptions of the five senses in Venice. Each student wrote 5 scripts, to which they related one audio file and at least one photograph. In total, students' multimodal artifacts consisted of 60 written texts, together with at least 60 oral texts and 60 images. The multimodal artifacts were produced and refined during the development of the project. They were presented in the communal digital tour of Venice both within the classroom dimension and in the outreach event.

5.2.2. Data analysis

To analyse the qualitative data of the open-ended questionnaire items, the focus group, and students' multimodal artifacts, I followed the content analysis procedure (Creswell, 2014) and I used the *NVivo* software (Bazeley & Jackson, 2013). First, I transcribed data as an *Excel* spreadsheet (open-ended questionnaire items) and as a *Word* document (focus group and multimodal artifacts). Second, I transferred the documents to *NVivo* to organise and prepare data for analysis. Third, I read through all data several times and divided them into separate codes. Finally, I merged and reduced the codes into broader and relevant topics.

To analyse quantitative data of the closed-ended questionnaire items, I used descriptive statistic techniques (Dörnyei, 2010). After assigning identification codes to each questionnaire, I coded data, transcribed it in an *Excel* spreadsheet, and represented the most interesting findings through tables and graphs.

6. Results

Findings will be presented according to the research questions, dealing with the impact on students' attitudes (RQ1) and perceived learning outcomes (RQ2).

6.1. Impact on students' attitudes

To answer RQ1 (*What impact does project participation have on students' attitudes towards both SLA and DST?*), data from the questionnaire (items 1-6), and the focus group (items 4-6) were used.

6.1.1. Questionnaire

Students' overall perceptions of the project "Venice is..." were positive, since they found it very interesting (60%), and quite interesting (40%) (item 1: *How do you rate the overall project?*). This initial data confirmed the function of DST as an effective learning tool regarding the increased motivation for SLA.

In particular, the outdoor activities were judged favourably, as students considered them very interesting (75%), and quite interesting (17%) (item 2a: *How do you rate the outdoor activities aimed at the direct observation of the city?*). To justify their answers, students referred equally to the link between the Italian language and the city (25%), the diversity of the experience (25%), and the entertainment generating inspiration (25%) (item 2b: *Why?*, Fig. 1).

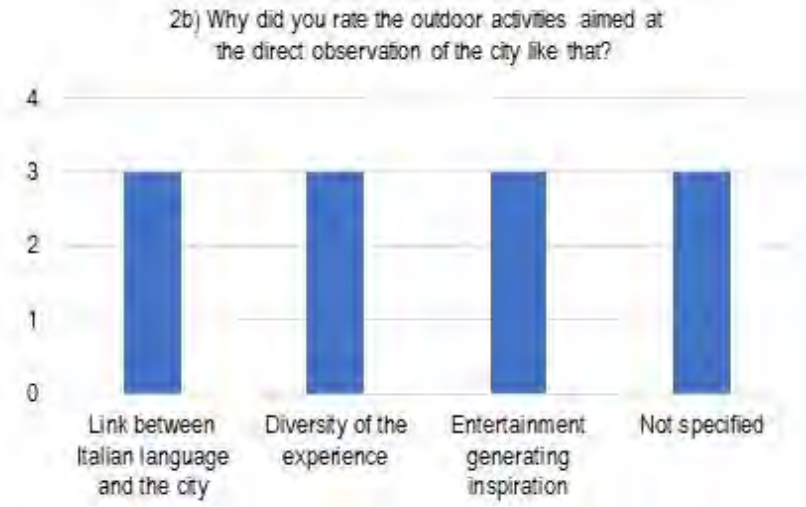


Figure 1. Students' answers to item 2b

First, the outdoor activities represented a strategy to learn Italian while reinforcing the relationship with Venice. Students reported: "The outdoor activities were a way to link the Italian language and the city, as well as to think about our relationship with Venice since the beginning of our discovery of this city" (S4); "I liked reading Tiziano Scarpa's texts. It was hard but interesting" (S5); "The outdoor activities were very poetic and useful" (S9)[8]. Second, the outdoor activities stimulated students to observe Venice from a fresh perspective in order to achieve a broad view of the city while walking. Students wrote: "It was an amazing way to look differently at the city" (S1); "It was an interesting manner in which to observe a beautiful city, we felt encouraged to look everywhere" (S2); "We discovered Venice in a pleasant way, through walking" (S12). Third, the outdoor activities actively involved students in searching for original ideas and aroused their curiosity to discover Venice through a literary text (starting point) and their personal productions (arrival point). Students stated: "It was fun to look around for ideas to write the scripts" (S3); "The outdoor activities were very participatory" (S6); "I was full of curiosity" (S11).

These reflections proved a useful connection between DST and Linguistic Landscape to promote both SLA and the development of ecological awareness. Although it was not possible to organise didactic itineraries through the lagoon area to completely exploit the teaching benefits of Linguistic Landscape, students' independent exploration of the territory contributed to motivating them to carry out the project. As a result, the majority of students revealed that the outdoor activities allowed them to observe Venice with greater attention (75%). A few students did not perceive any change (25%) (item 3a: *How did the outdoor activities allow you to directly observe the city?*). To support their ideas, they referred to the search for the place or the element to describe (58%), and to the possibility of reflecting on themselves (25%) (item 3b: *Why?*, Fig. 2).

[8] In the transcriptions of the questionnaire, the focus group, and the multimodal artifacts, students' names were reported through the corresponding identification codes.

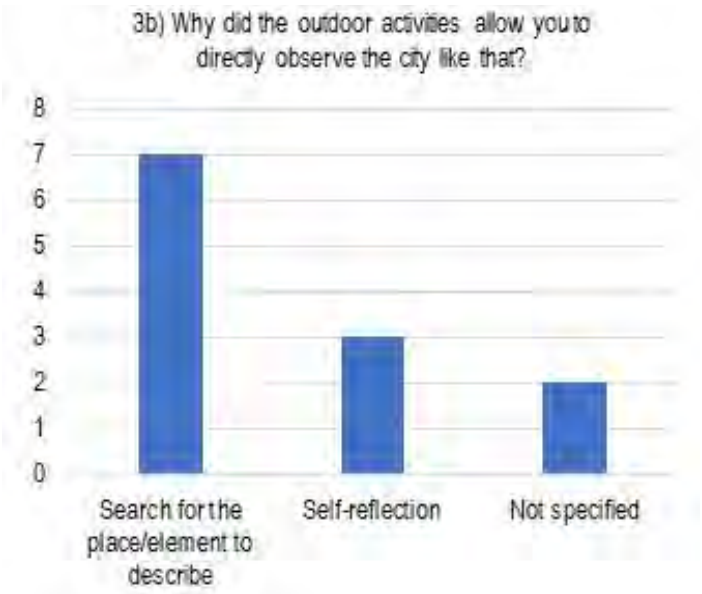


Figure 2. Students' Answers to Item 3b

The outdoor activities stimulated students to pay more attention to the objectively beautiful elements of Venice and all the nuances to capture more details and develop original ideas. As a result, they improved their knowledge of the city. Students wrote: "I did not only think of the beautiful things to see, because I was interested in every aspect of the city" (S1); "When I was walking, I thought about the photographs I could take and the descriptions I could write for the tour" (S9); "I wanted to find the perfect example" (S2). The outdoor activities also allowed students to reflect on both themselves and the relationship they were building with Venice thanks to the experience they were living. S4 reported: "I asked myself which were the most representative visual, taste, olfactory etc. experiences of my stay here. It was an introspective task for me."

Regarding the stages of content development, students confirmed their appreciation of the reading *Venice is a Fish: A Cultural Guide* as a starting point of the project. Students responded that they enjoyed it a lot (65%), and quite a lot (25%) (item 4: *Did you enjoy reading* Venice is a Fish: A Cultural Guide*?*). In addition, the majority appreciated describing the city through the five senses and enjoyed the creative writing activities a lot (75%), and quite a lot (17%). Just a few students liked them not so much (8%) (item 5: *Did you enjoy describing Venice through the five senses?*). This data reinforced the successful relationship between the use of literature in the L2 classroom, the discovery of the socio-cultural features of a territory, and the reflection on ecological issues.

Concerning the stage of technology training, most students highly valued using *izi.TRAVEL* to create the digital city tour, since they enjoyed employing this platform a lot (67%), and quite a lot (17%). Just small percentages liked it not so much (8%), and not at all (8%) (item 6: *Did you enjoy using* izi.TRAVEL *to create a digital tour of Venice?*). These evaluations supported students' holistic involvement in DST projects for SLA, including the use of literature and the development of a strong connection with the environment.

6.1.2. Focus group

During the focus group students were asked to reflect on the strengths and the weaknesses of the project (item 4: *In your opinion, which were the positive and negative aspects of the project?*). For the strengths, students said the project allowed them to discover places that they did not know, both by themselves while walking through the city in search of inspiration, and through their classmates while reading and listening to their multimodal artifacts. Moreover, the use of *izi.TRAVEL* allowed them to keep the digital tour for themselves, in order to remember the Venetian experience, and for others, by sharing it with families and friends. In addition, the possibility of reading the written scripts and listening to the oral texts every time they want and even at a distance of time will allow them to monitor their own progress in Italian. S3 said the following comment:

> Discovering the places that we did not know was a positive aspect of the project. Moreover, uploading our multimodal artifacts online is an opportunity to conserve them all. Maybe in ten

> years it will be useful to remember what we did so as not to forget this experience. I think that it would be interesting to do it for every city that we will visit, and also for our French hometown. For me it will be important to share the monuments, bars, and squares that I liked with my friends and family.

S7 mentioned: "It would also be positive to read the scripts and listen to the oral texts in – shall we say – three years' time, that is when we know better Italian, in order to assess how our learning process has evolved."

Concerning the weaknesses, students questioned the availability of the digital tool, *izi.TRAVEL*. There were also comments that students would have liked to write about other current themes such as politics. Regarding the project's structure, they said that perhaps it would have been better to upload the multimodal artifacts at the end of each activity related to a specific sense instead of uploading it all at once. By doing so, students would have been able to see the evolution of the digital tour, reflect on each sense at a time, and avoid focusing on the creation and the presentation of the tour during the last lessons. Students said: "We do not know if *izi.TRAVEL* will always be accessible, and this could be a negative aspect connected with the use of a digital tool" (S4); "Sometimes it was too focused on the same theme, that is, beauty and poetry. I would have liked to write about political topics, but I did not know how to connect them with the five senses" (S11); "Maybe every time that we conclude the activities on a specific sense, we should upload our multimodal artifacts in order to see the evolution of the digital tour, and to discuss in depth about every script and oral text. We did see all the points of interest and multimodal artifacts, but maybe it was too fast for a single lesson" (S9).

Nevertheless, all the students said they would like to use *izi.TRAVEL* for their future study and work projects, even if they did not know precisely how at the moment (item 5: *Will you use* izi.TRAVEL *for your study and work projects?*). Although *izi.TRAVEL* was not originally created for didactic purposes, students' opinions demonstrated the potential of both this platform and the task-based approach for SLA through DST, despite some critical aspects of the project dealing with a single thematic area and task distribution.

Finally, students reflected on the links between language, culture, literature, and digital tools (item 6: *Is there something that you want to add about the project?*). On the one hand, they affirmed that literary texts could represent a useful resource for improving language skills. S8 said the following comment:

> The strong relationship between Italian language and literature was confirmed. By reading literature we can learn the language, and conversely the language exists thanks to the literary texts. When I want to improve my Italian I read newspaper articles, for example. But literature represents language to the utmost degree, and culture as well. It is fundamental to know the most representative literary works of a country to learn its language and culture.

On the other hand, students attributed greater importance to the first-hand experience of both language acquisition and cultural heritage than to the use of digital tools for the same purposes. Students mentioned: "For me it is necessary to know the language before using digital tools. In addition, culture is much more than the digital media. They are a medium to introduce one to the cultural dimension, but it is better to experience the cultural heritage directly, for example of a city. I think that it is difficult to feel real emotions through a digital tool" (S12); "I think that culture must remain a first-hand experience. Digital media represent an effective instrument to communicate the cultural heritage through the language, but they cannot substitute a direct experience with them" (S9); "For me a digital experience cannot cover the enormous diversity inherent to every culture. Digital media can be a useful resource but not the objective as regards the cultural heritage. They can be an effective medium, but not an end, to transforming either culture, or our mindsets" (S7).

Students' ideas confirmed the important contribution of literature in the L2 classroom at a poetic and sensory level. Moreover, their opinions supported the integration of digital tools in a wider variety of methodologies and strategies aimed at SLA within both formal and non-formal contexts.

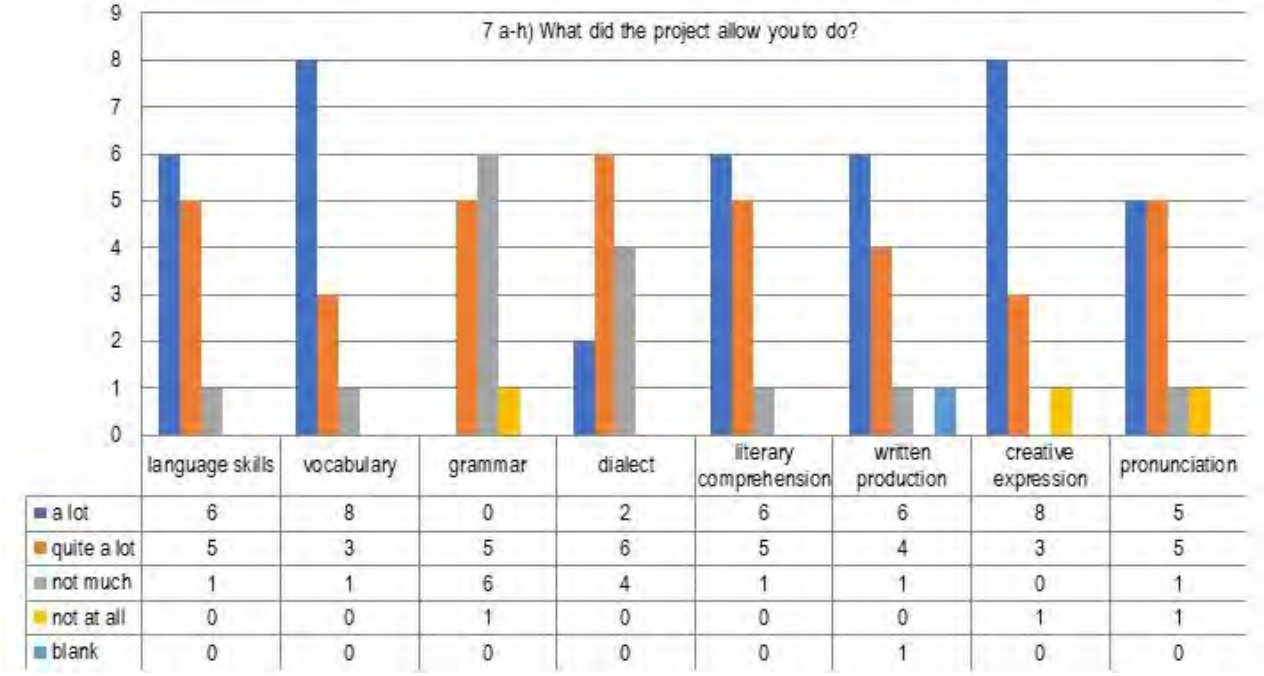
6.2. Impact on students' perceived learning outcomes

To answer RQ2 (*What impact does project participation have on students' perceived learning outcomes?*), data from the questionnaire (items 7-14), the focus group (items 1-3), and students' multimodal artifacts were considered.

6.2.1. Questionnaire

Students' perceived learning outcomes included the study of Italian language and culture, the knowledge of the territory, and the development of digital competences (item 7: *What did the project allow you*

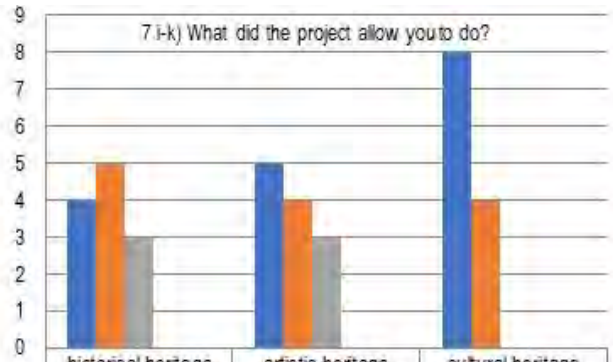
to do?). To facilitate the reading of the data, items were divided into four groups: Italian language (items a.-h., Fig. 3); Italian culture (items i.-k., Fig. 4); the Venetian territory (items l.-n., Fig. 5); digital competences (items o.-p., Fig. 6).



	language skills	vocabulary	grammar	dialect	literary comprehension	written production	creative expression	pronunciation
a lot	6	8	0	2	6	6	8	5
quite a lot	5	3	5	6	5	4	3	5
not much	1	1	6	4	1	1	0	1
not at all	0	0	1	0	0	0	1	1
blank	0	0	0	0	0	1	0	0

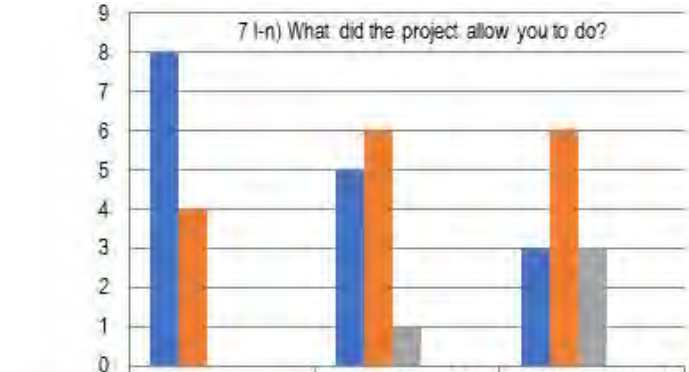
Figure 3. Students' answers to item 7 (a.-h.) on Italian Language

In terms of Italian language development (Fig. 3), students answered that their vocabulary and creative expression improved the most. Moreover, they enhanced their language skills in Italian and increased their literary comprehension. Students also refined their written production and improved pronunciation while recording themselves reading their descriptions aloud. Finally, they learnt quite a lot about the Venetian dialect, but they felt they had not studied much grammar.



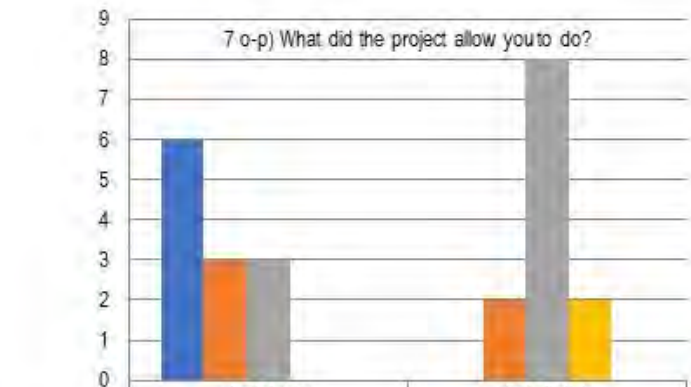
	historical heritage	artistic heritage	cultural heritage
a lot	4	5	8
quite a lot	5	4	4
not much	3	3	0
not at all	0	0	0
blank	0	0	0

Figure 4. Students' answers to item 7 (i.-k.)



	environment	advantages of the city	disadvantages of the city
a lot	8	5	3
quite a lot	4	6	6
not much	0	1	3
not at all	0	0	0
blank	0	0	0

Figure 5. Students' answers to item 7 (l.-n.)



	digital tour	digital skills
a lot	6	0
quite a lot	3	2
not much	3	8
not at all	0	2
blank	0	0

Figure 6. Students' answers to item 7 (o.-p.)

Concerning Italian culture (Fig. 4), students delved into many aspects of the Venetian cultural heritage (i.e., festivities, traditions, recipes, etc.). They also deepened their knowledge about the artistic heritage of the city (i.e., museums, palaces, monuments, etc.). Finally, they extended their knowledge of Venetian history. With respect to the Venetian territory (Fig. 5), students acquired a better knowledge above all of the environment in which they had been living, since they were encouraged to walk around the city and to observe the surrounding landscape. They also increased their understanding of both the advantages and the disadvantages of living in Venice during the pandemic. Regarding the development of digital competences (Fig. 6), students discovered how to create a digital tour of a city, but realised they had not greatly improved their digital skills.

Overall data proved the enhancement of students' linguistic, intercultural, ecological, and digital skills by combining SLA, DST, and literature within the same project. However, students' opinions on the digital dimension revealed the importance of dedicating an adequate amount of time to technology training before starting the audio guide creation.

Students' perceived learning outcomes were also associated with the reading and writing activities. Regarding the connection between comprehension and production tasks, half of the students (50%) considered that the outdoor and writing activities did not influence their reading, while a smaller number (42%) thought that their literary comprehension was facilitated (item 8: *How was the comprehension of* Venice is a Fish: A Cultural Guide *aided by the outdoor and the writing activities?*). The new information that students learnt through the reading activities on Tiziano Scarpa's book dealt equally with vocabulary (33%), cultural heritage (33%), and social dynamics (33%) (item 9: *What did you discover about Venice thanks to the reading activities?*, Fig. 7).

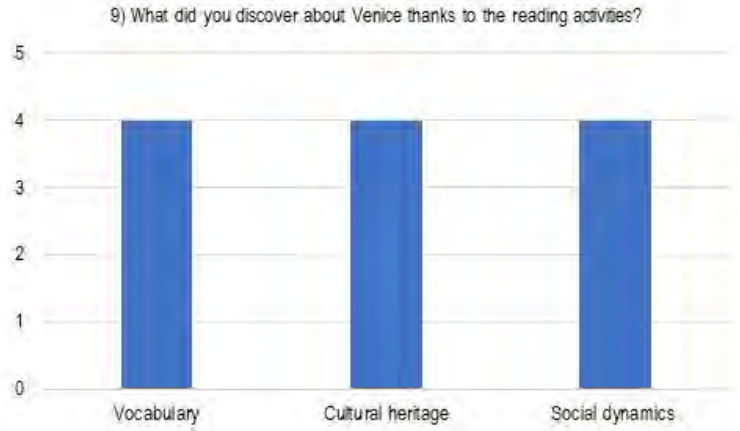


Figure 7. Students' answers to item 9

First, students expanded their lexical competences by learning new Italian words as well as dialect terms and expressions to describe Venice. S1 wrote: "I discovered a different way to speak about the city, such as *calle*, *fondamenta*... [street, footpath]." Second, students widened their knowledge of the history of Venice and the meanings of the city symbols. They also visited new places and tasted gourmet recipes. S10 reported: "I explored the history, the culture, and some areas of Venice." Third, students learnt about the Venetians' social habits and traditions through the descriptions in Tiziano Scarpa's book. S12 stated: "The vision of a native of his own city." Moreover, through the writing activities, students were able to have further appreciation of the city (42%), improvement of the writing ability (33%), and improved observation (25%) (item 10: *What did you discover about your relationship with Venice thanks to the writing activities?*, Fig. 8).

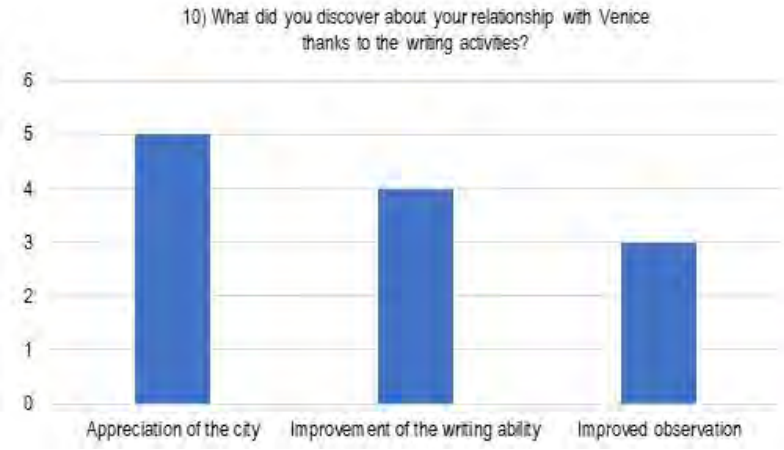


Figure 8. Students' answers to item 10

Students strengthened especially their link with Venice to the point of identifying with it. Students wrote: "I discovered that I am very attached to this city, where I would like to stay longer" (S3); "Venice is a city without too much frenzy. It is relaxing, like me" (S11). They also increased their productive skills in describing a place by doing the five tasks, revising the errors, and correcting the scripts in order to record themselves

reading them aloud. S4 reported: "I discovered that I am better than I expected at writing in Italian." Some students enhanced their powers of observation by paying more attention to the environment, focusing on details, and selecting the most important ones to describe and to remember. S2 affirmed: "I discovered that I am always staying with my nose in the air, looking at the city and at its details." Students' opinions confirmed the potential of proposing creative writing activities on literary texts related to specific territories. Students had higher motivation, improved linguistic competence, expanded socio-cultural knowledge, and increased environmental consciousness.

Finally, students' perceived learning outcomes dealt with the use of *izi.TRAVEL*, the production of multimodal artifacts, and the creation of the digital city tour. All students had already been introduced to this platform (item 11: *Did you already know* izi.TRAVEL*?*), and they found the possibility of combining images and oral texts with the written descriptions of a city very interesting (67%), and quite interesting (33%) (item 12: *How do you rate the possibility of combining images and oral texts with the written descriptions of the city?*). For this reason, they considered the use of *izi.TRAVEL* to create the digital tour of Venice very useful (42%), and quite useful (42%). Just a few of them found it slightly useful (17%) (item 13: *How do you rate using* izi.TRAVEL *to create a digital tour of Venice?*). In addition, the majority of the students felt very satisfied with the final product of the project (75%), while a few of them were moderately happy with it (25%) (item 14a: *Are you satisfied with the digital tour of Venice?*). The reasons why students were satisfied with the digital tour of Venice was because it was considered an 'innovative, original, and creative product' (33%), a 'useful product' (33%), a 'collective product' (25%), and a 'comprehensive product' (8%) (item 14b: *Why?*, Fig. 9).

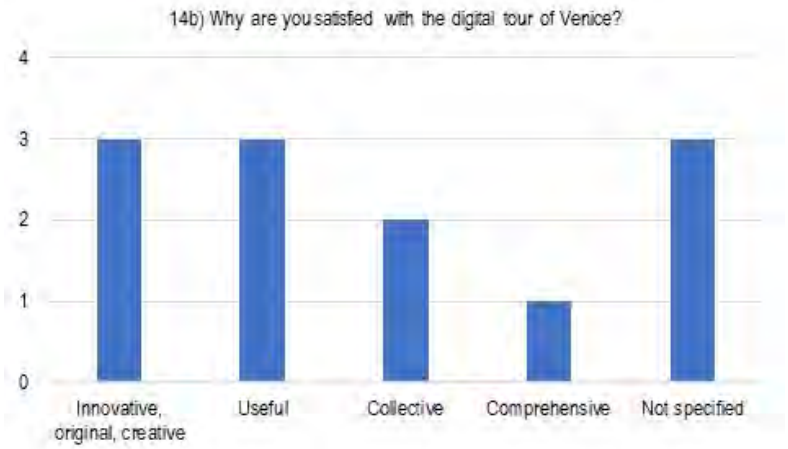


Figure 9. Students' answers to item 14b

The digital tour was considered as an *original product* since its creation was, above all, a fresh way to discover the city while learning Italian. Students wrote: "It represented a very innovative, modern, and poetic way to learn" (S9); "I managed to creatively use different skills (pronunciation, writing, taking photos...)" (S4). In addition, the digital tour was perceived as a *useful product* because it stimulated students to improve their linguistic, digital, and cultural skills, and to exploit their imagination in order to create a record of their experience. Students stated: "I learnt vocabulary and I discovered an app" (S4); "The digital tour is an honest summary of our stay in this city" (S12); "The digital tour will be a good instrument by which to remember my experience in Venice during the Master" (S6). The digital tour was also defined as a *collective product* since students enjoyed producing a shared final product through which they also learnt from each other. Students explained: "I liked discovering Venice through my friends' eyes" (S3); "It was interesting to have something in common at the end of the project" (S9). Finally, the digital tour was perceived as a *comprehensive product* because students judged *izi.TRAVEL* as a very complete digital tool. S10 affirmed: "I find the app really complete (text + location + photo + audio), and I want to show it to my close relatives and friends." This data demonstrated the successful use of *izi.TRAVEL* to develop students' digital literacies, multimodal competences, and interpersonal abilities aimed at both increasing their autonomy in the stages of content development, written text, images, and oral text, and at reinforcing their sense of community in the stages of audio guide creation and presentation.

6.2.2. Focus group

Students were asked to recall previous experiences regarding the creation of digital city tours (item 1: *Have you already created digital tours of cities?*). No one had already worked on similar products, but some of them were familiar with *Mapstr*, an application that allows one to keep track of people's favourite places by tagging them and including them in one's own map, as well as sharing them with friends. Students discussed the main differences between *izi.TRAVEL* and *Mapstr* in terms of different functions. In their opinion, *Mapstr* can be used before visiting a city whereas *izi.TRAVEL* can be used both before and after travelling, in order to know where to go and to preserve memories of the visits. As regards their expectations of the project at the beginning of the creative process on the digital tour, students who were familiar with *Mapstr* thought about a digital product without a route or audio files, while others envisioned a digital tour including both images and oral texts (item 2: *When I told you that you were going to create a digital tour of Venice starting from your written productions, what did you expect?*).

Concerning the utility of the project, students reported that project participation allowed them to improve their linguistic skills, discover Venice, and express themselves (item 3: *Was it useful to participate in the project? If so, why?*). They considered that the tasks were motivating, useful, and emotional by saying: "We discovered Venice in a different manner because we had to find interesting places, choose what to write about, and describe it creatively" (S6); "It was useful also because it allowed us to appropriate the city in a creative way, since we had to put something of ourselves into it to practise Italian" (S9); "I think that it was a motivating exercise to work on grammar and pronunciation... It was a very complete linguistic activity, and a very personal task too" (S5).

Students' limited previous experiences and expectations emphasized the project's innovative aspects. Their perceptions regarding its utility highlighted their global involvement. At the cognitive level, they recognised the improvement of their communicative skills in Italian as an L2. At the emotional level, they referred to their contribution to the project and their personal appropriation of the city that they had managed to discover despite the increasing restrictions of that period.

6.2.3. Students' multimodal artifacts

The project's final product "Venice is..." corresponded to the homonymous digital tour uploaded on the *izi.TRAVEL* platform. Having entered the tour, it is possible either to follow every stage by reading the scripts, listening to the audio files, and looking at the images, or to select a particular stage directly. Students decided to reserve access to viewing the audio guide to the users who had the password, since their multimodal artifacts included personal stories, impressions, and feelings, and private photographs of their families, friends, and themselves in Venice. Nevertheless, simply looking at the overall view of the digital tour (Fig. 10) it is easy to appreciate the numerous points of interest that students included, and how they are distributed as stages along the path, starting from the bus station at *Piazzale Roma* and finishing at the *Lido* beach[9].

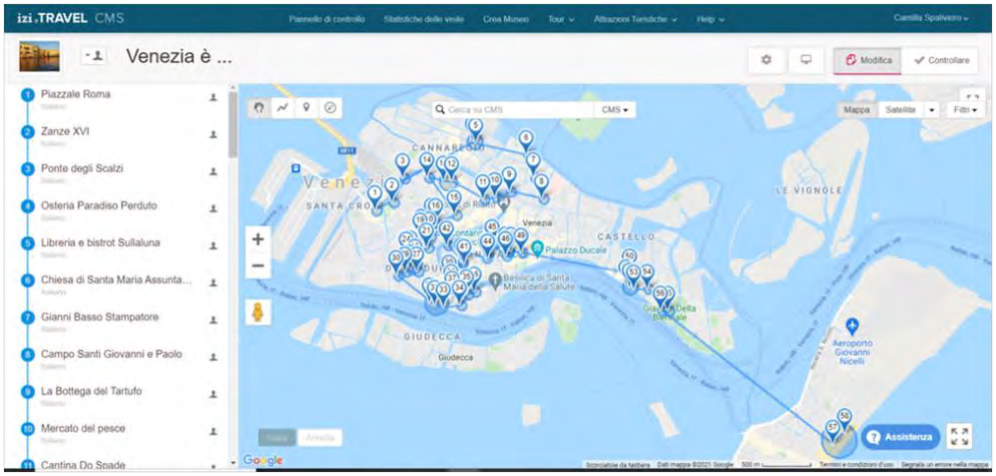


Figure 10. Students' digital tour "Venice is..." on *izi.TRAVEL*

[9] Although students' multimodal artifacts were 60, two of them were not included in the digital tour because the reviewed versions were not delivered in time for the outreach event.

The table below outlines the content of students' multimodal artifacts in order to show the relationship between the five senses and the Venetian points of interest that they evoked, according to the scripts, the photographs, and the audios produced by the students. In some cases, the same point of interest was chosen by two or more students, who analysed it from different perspectives. For example, three students chose the ringing of the church bells to describe the sense of hearing, but each with a different motivation. The first student pointed out how the sound filled the emptiness of the streets during the lockdown. The second underlined the different functions compared to the Orthodox church bells in Russia. The third associated the religious sense the bells emitted with her childhood memories of the French countryside, in contrast to her later experience of the widespread atheism of French big cities.

Table 4
The Content of Students' Multimodal Artifacts

Sense	Point of interest	Written text	Image	Oral text
Touch	- Bars in *Santa Margherita* square - Bars in *Santo Stefano* square - *La Fenice* theatre - *Franchetti* palace - *Mocenigo* palace - *San Barnaba* street - *Lido* beaches	- The joining of students' hands as a symbol of friendship - The warmth of a *cappuccino* - A half full bottle of Italian wine due to the early closing of bars - The velvet armchairs of the theatre - An art exhibition made of wax - The velvet costumes of the XIII Century - An old metal doorknocker - The sand and the sea water	- Joining of hands - A bottle of wine - Hands holding a coffee cup - The furniture of the theatre - A work of art made of wax - Venetian costumes - A doorknocker - Students walking barefoot on the beach	Students' audios of themselves reading the scripts
Hearing	- A private garden in *Dorsoduro* neighbourhood - Churches and bars in *Santa Margherita* square - Churches and bars near the *Squero* (boatyard) - The *Zattere* footpath - The bus station - A student's house during a quarantine period	- The tweeting of the birds in the morning - The ringing of the church bells in the night - The sounds of the coffee machine and of the waiters' voices - The singing of the seagulls - The sirens warning before high tide - The noise of the marine traffic	- Trees outside students' balcony - Bell towers - A seagull - An *espresso* on the bar counter - Local newspaper headlines about high tide - Ferry boats in a Venetian canal	Original recordings of: - birds - church bells - seagulls - high tide sirens - ferry boats
Taste	A selection of: - typical Venetian bars - typical Venetian restaurants - ethnic restaurants	The history, the ingredients, and the sensations regarding: - Venetian drinks - Venetian dishes (such as the discovery of the *carbonara* without cream) - ethnic dishes	- Bar interiors - Restaurant interiors - Drinks - Dishes	Students' audios of themselves reading the scripts

Smell	- Bars and restaurants near *Santa Margherita* square - Bars and restaurants near *La Salute* church - Food shops - Dinners at students' houses	- The aroma of coffee - Flavour of parmesan cheese - Aromas of pizza along the street - Smell of home cooking	- *Espresso* on the bar counter - *Macchiato* coffee on the bar counter - A dish of pasta with parmesan cheese - A dinner table laden with plates
Sight	- The *San Marco* footpath - *San Marco* square - The Arsenal - Bridges near *Santa Margherita* square	- The emptiness of *San Marco* square - The magic of sunsets on the lagoon - The magic of sunsets on the canals	- Students' looking at the *San Marco Basilica* across an empty square - Sunsets on the lagoon - Sunsets on the canals

Besides corresponding to the final product of the project, the digital tour bore witness to students' experiences and reflections on themselves living in Venice at a very particular time. On the one hand, the topics covered the typical Venetian aspects, such as the 'happy hour' in *Santa Margherita* square, the high tide experience, and the visits to the representative city monuments. For example, to describe the sense of taste S6 wrote:

> My favourite Venetian place to eat in is a family restaurant called *Osteria Alba Nova dalla Maria*, where the mother cooks, the father keeps the accounts, and the sons wait at table. Food and drinks are fantastic and typical of the region. I suggest ordering both squid-ink pasta and *polenta* with *porcini* mushrooms. The mother is so relaxed that she is often dressed in pyjamas, which I love.

As regards the sense of smell, S7 reported:

> There is nothing better in the morning than waking up with the smell of coffee, especially if you drink it in the best Venetian bakery, that is *Tonolo*. In France you drink coffee for hours, on the terrace, chatting and watching the people walking down the street. In Italy you drink coffee fast, preferably at the counter. I usually go past this bakery, and I am always attracted by the delicious aroma. So, one day, standing at the counter between two regular customers, I ordered a *macchiato* and a pastry too. Like everybody there, I drank and ate everything very fast, but the whole time I was smelling that incredible aroma of coffee. Now I understand why so many people queue to enter!

On the other hand, the issues reflected a particular historical moment, like the quarantine experience, the preventive isolation, and the closing of bars, theatres, and cinemas. For example, to describe the hearing sense S3 and S4 wrote:

> I associate the sound of bells ringing with the empty Venetian streets where I meet nobody. It is such a privileged and cinematographic walk, but it is also so anguished! The deserted city is a consequence of the current situation, and I will remember it as a very special and difficult period.
>
> The noise of marine traffic is peculiar, but it seems even pleasant to me due to my melancholy mood. – She is crazy! – you may be thinking. But I am not! I just cannot go out [due to the quarantine], and this noise coming from outside reminds me of the time when I could walk near the sea, listen to the ferry boats leaving for the islands, and eat fried fish on Sundays in Burano.

As regards the touch sense, S8 and S9 explained:

> Human contact is even more necessary in this difficult moment. The bond with new friends is an essential component of this experience and this photograph [the joining of students' hands] symbolises one of the most significant elements of Venice for me: friendship.

> To me touching Venice means also stroking the red velvet of *La Fenice* theatre with my hand, and feeling the voices, gestures, costumes, interactions, opera arias, and humour through that touch. Discovering a city means entering into its living art as well... but this is going to be closed soon.

To describe the sight sense S2 affirmed:

> We go back to *San Marco* square. It is empty, the street lamps turn on even if the sky is still bright. We stop talking, we look at the *Basilica*, and we feel astonished by the absurd beauty of this out-of-time moment, while the entire world is paralysed owing to the pandemic.

The digital tour on *izi.TRAVEL*, students' multimodal artifacts, and the citations of their contributions lead to an appreciation of the numerous points of interest that the students included. This includes the original associations with the five senses, and the profound reflections on the role of Venice as crossroads of cultures even at such a difficult time. These pieces of information demonstrate students' involvement in project implementation and its relevant impact on their perceived outcomes.

7. Discussion

The data collected from this action research project focused on *izi.TRAVEL* and allowed us to understand the impact of project participation on students' attitudes and perceived learning outcomes regarding their linguistic and digital skills. Despite the limited group, the analysis of data has revealed some interesting outcomes that are worth considering in detail.

Regarding the impact of project participation on students' attitudes (RQ1), student favorably evaluated the whole didactic proposal. The great majority of students appreciated the different stages of the project, such as reading the literary text, developing the multimodal activities, and using *izi.TRAVEL*. Due to the impossibility of organising didactic itineraries outside the classroom for the content development stage, other solutions had to be made. The reading of a famous, representative, and recently updated book on the city where students were living proved to be a winning strategy to overcome restrictions for group visits in closed places and motivate students to compare the literary content with their impressions of the lagoon area. Most students enjoyed the literary comprehension activities since they felt motivated to discover Venice from a famous writer's perspective and creatively add their personal experiences. By relating these findings to the conceptual framework, results confirm the function of literature as a valuable teaching resource in the L2 classroom, especially when it is included in DST projects (Hetland, 2016). It refers to the territorial, social, and cultural contexts that students are experiencing (Iovino, Cesaretti, & Past, 2018). Concerning the multimodal production stage, the writing activities were judged positively despite the limited variety of themes due to the focus on Venetian culture, art, and territory. The majority of students felt motivated to train their productive skills while ideally continuing Tiziano Scarpa's literary text from their current perspectives. As for the outdoor activities, students appreciated the direct observation of Venice since they found this an original, engaging, and useful exercise to enhance language acquisition and reinforce their connection with the city. Students paid increased attention to identifying a symbolic and unconventional place or element to describe. Students also become aware of the changes they were going through while living that experience. The first positive aspect of the project that students identified was the enhancing of their environmental awareness of Venetian territory off the tourist routes. During the in-class presentation stage, reading and listening to their classmates' multimodal artifacts represented an opportunity to discover the surrounding area. Since students only discussed the content development stage together, they were curious to discover their classmates' digital stories. Students were well satisfied at seeing how their multimodal artifacts had been gathered into a single common product. These findings are consistent with the potentialities of the Linguistic Landscape approach (Malinowski, 2015; Shohamy & Gorter, 2009). In fact, the outdoor activities aimed at describing, photographing, and recording the known and hidden sides of the city managed to successfully exploit the link between the formal activities in Italian as an L2 and students' independent exploration of the cultural, artistic, and literary traditions of the lagoon area during the extra-lesson time.

Regarding the technology training stage, students appreciated creating the digital tour with *izi.TRAVEL*. Students had never created a similar product before but were familiar with this platform. Moreover, they judged its multimodal features and functions positively and found it motivating to carry out the writing activities alongside the images and oral text production. Despite depending on the future functioning of the platform, students valued the digital tour on *izi.TRAVEL* highly since it allowed them to perceive the concrete result of their efforts. It represented the tangible product of both the Italian as an L2 course and of their

Venetian stay, with the bonus of showing it to Tiziano Scarpa. In particular, students recognised the importance of the digital tour as a record of their Italian acquisition process, to be compared with future developments. In addition, they did not exclude the possibility of using *izi.TRAVEL* in their future jobs. They also underlined their appreciation of employing digital media for SLA and cultural heritage promotion as long as they are used as an instrument to integrate – instead of to replace – language learning and cultural experiences. These findings prove the effectiveness of the combination between *izi.TRAVEL*, focused on delimited territories (museums or cities), and the task-based approach for SLA through DST (Oskoz & Elola, 2016). The project managed to involve students at both cognitive and emotional levels by tracing the gradual stages of their understanding of the project aims, interpreting the city starting from Tiziano Scarpa's model, exploiting students' linguistic and non-linguistic resources, and creating the digital city tour as the final result (Ellis, 2009).

With respect to the impact of project participation on students' perceived learning outcomes (RQ2), students improved linguistic, cultural, and digital competences, and raised their environmental consciousness. As for students' progress in acquiring Italian as an L2, they succeeded in widening their vocabulary and reinforcing language skills thanks to literary comprehension, pronunciation, and creative writing activities. Students were also exposed to the local dialect during the reading of *Venice is a Fish: A Cultural Guide* and the exploration of the city (typical dishes on the menus, natives' speech, street signs, etc.). When considering the content of students' multimodal artefacts, students' points of interest associated with the sense of taste referred mainly to typical Venetian bars and restaurants (Table 4). However, most students perceived that they did not examine grammatical issues in depth. In fact, the activities of the content development stage mainly dealt with bringing out students' previous knowledge regarding the lagoon area and verifying the comprehension of the literary text – especially of the lexical items. The stages of written text, images, and oral text aimed at promoting the creative representation of Venice through the five senses from students' current perspectives. Students achieved this by respecting the characteristics of the descriptive genre and associating representative photographs and audio recordings. As regards the enhancement of the students' knowledge of Italian culture, they managed to study and experience several features that define the city's cultural, artistic, and historical heritage. By looking at the content of students' multimodal artifacts, the points of interest regarding the sense of touch included the visits to important Venetian theatres and palaces (Table 4). In addition, students reported that the reading activities on Tiziano Scarpa's book fostered the acquisition of new Italian words and dialect terms and promoted an in-depth analysis of the local cultural heritage and of social dynamics. Finally, students revealed that the outdoor and writing activities improved observational and productive skills, and made them empathise both with Venice and with their classmates. As a result, students felt that they became gradually familiar with the surrounding environment and developed an increased ecological awareness about the city's rather obvious strengths and its critical state and weaknesses. This awareness is represented effectively in the content variety of students' multimodal artifacts, including both the typical Venetian elements and the consequences of the Covid-19 emergency.

Regarding the development of students' digital competences, they became experts in creating city tours with *izi.TRAVEL*, but they felt that they did not consistently expand their digital abilities. On the one hand, students reported that creating the audio guide enhanced their digital skills. During the stages of technology training and in-class presentation, they received intensive instruction on the functions of *izi.TRAVEL* to enable them to create, refine, and present the digital tour. Initially, these tasks should have been completed in several lessons. However, the outreach event with Tiziano Scarpa, which was arranged after the start of the course, curtailed them. For these reasons, it was not possible to extend the training in the use of the digital tool, spread the creation of the audio guide over more lessons, or foster students' collaborative evaluation before uploading their multimodal artifacts. On the other hand, at the beginning of the project, students had little experience and made modest predictions as to producing an audio guide with *izi.TRAVEL*. However, once they were introduced to this platform, they discovered a new digital tool, learnt how to use it, and produced multimodal artifacts thanks to their training in various literacies. Moreover, the high quality of students' multimodal artifacts demonstrated their widespread commitment to the project (Fig. 10, Table 4). In particular, by observing the content of their digital products, it is possible to appreciate the variety of the points of interest, the creativeness of the subjects, and the insertion of all multimodal components.

To sum up, by combining different multimodal elements (text, images, audios) within a communal digital product, the project "Venice is…" managed to develop students' multiliteracies in Italian as an L2 (Lotherington & Jenson, 2011; Ohler, 2008). Students' opinions regarding the overall utility of the project proved their holistic participation, since they considered the digital city tour both an opportunity to learn Italian as an L2, and a personal and collaborative experience. These findings are consistent with the linguistic,

intercultural, and technological benefits of developing DST projects aimed at SLA (Lambert & Hessler, 2018; Lee, 2014; Oskoz & Elola, 2016; Robin, 2016). Within this context, literary texts are confirmed as a valuable tool to promote language and culture acquisition, while exploring local areas and training teamwork competences (Maddin, 2014).

Besides the above-mentioned promising findings, rather important limits in data analysis and discussion emerged regarding the development of the technology training stage. Due to inevitable ongoing changes in the project's structure, a reduced amount of time was dedicated to the technology training before the audio guide creation, and the uploading of the multimodal artifacts was concentrated at the end of the project. Moreover, although students' multimodal artifacts were included in the data set, the students themselves limited access to the audio guide in order to protect the personal additions and the private photographs they had included in the digital city tour; this effectively prevented a complete showing of their voices and contributions.

Therefore, if a similar project were to be repeated, the timetable should be better distributed in order to: organise a more extensive training in the use of the digital tool; spread the creation of the digital tour over more lessons; and encourage students' collaborative evaluation before uploading their multimodal artifacts. Students could be involved both in the self-evaluation of their own stories, and in giving supportive feedback to their peers' scripts during story circles (Oskoz & Elola, 2016; Robin & McNeil 2012). Finally, at the beginning of the project, students should be informed of the open access publication of their audio guide in order to circumvent the problem of privacy arising.

8. Conclusion

With respect to the worldwide necessity of increasing the use of technologies-enhanced language learning, especially during the Covid-19 pandemic, *izi.TRAVEL* appears to be an effective tool for facilitating SLA through DST. Since digital devices are constantly evolving, the experimentation of pedagogical approaches that exploit students' teaching potentialities contributes significantly to innovating the existing didactic practices. Due to time constraints and technical barriers, the efficacy of these tools is often reduced, thus it is useful to share how they can be positively applied according to user response data.

An action research project regarding the use of *izi.TRAVEL* for SLA was designed and piloted with a small group of university students of Italian as an L2. Although conclusions are limited in their broader applicability due to the small sample size, the findings revealed that students' attitudes and perceived learning outcomes rated the project positively and confirmed the linguistic and technological benefits of using DST for SLA. Despite the study's limitations, the innovative aspects that characterise this pedagogical approach have the potential to encourage the implementation of further projects combining SLA and DST. It would be interesting to develop a more comprehensive study regarding the teaching of Italian as an L2 through a set of free digital resources, such as *izi.TRAVEL* and other geo-location enabled tools (*Mapstr*, *Echoes*, *Fulcrum* etc.) within other university settings, to develop new reflections on integrating applied linguistics and digital education.

Moreover, once the general circumstances fully allow it, it would be possible to integrate such teaching practices with didactic itineraries beyond the classroom, aimed at combining language and digital development with the improvement of students' ecological awareness. These proposals are consistent with the notion of "communicative competence" (Hymes, 1972), where knowing a language means developing different clusters of competences and mastering a broad set of abilities to communicate effectively. By referring to the three general objectives of language education, self-actualization, culturalization, and socialization, Balboni (2018) stated that "language is the main instrument both of *thought* and of *relation* among people" (p. 68). Thanks to the design and the implementation of didactic itineraries within non-formal contexts, students would be even more stimulated to create digital tours in which to upload historical, literary, and artistic content associated with the places they visited, in order not just to train linguistic and digital competences, but also to develop strategies of environmental communication.

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Appendix A

QUESTIONNAIRE

Dear students, I am investigating the teaching of Italian through digital resources, and I need your help. The questionnaire aims at understanding how you rate the project "Venice is…" and what you think you have learnt. This is not a test and there are no right or wrong answers. The questionnaire is anonymous and will take only 15 minutes of your time. Thank you for your cooperation!

1) How do you rate the overall project?
- very interesting
- quite interesting
- slightly interesting
- not at all interesting

2a) How do you rate the outdoor activities aimed at the direct observation of the city?
- very interesting
- quite interesting
- slightly interesting
- not at all interesting

2b) Why?

3a) How did the outdoor activities allow you to directly observe the city?
- with greater attention
- with less attention
- as usual

3b) Why?

4) Did you enjoy reading *Venice is a Fish: A Cultural Guide*?
- a lot
- quite a lot
- not much
- not at all

5) Did you enjoy describing Venice through the five senses?
- a lot
- quite a lot
- not much
- not at all

6) Did you enjoy using *izi.TRAVEL* to create a digital tour of Venice?
- a lot
- quite a lot
- not much
- not at all

7) What did the project allow you to do? (1=not at all, 2=not much, 3=quite a lot, 4=a lot)

	1	2	3	4
a. train language skills	○	○	○	○
b. expand vocabulary	○	○	○	○
c. study grammar	○	○	○	○
d. learn the Venetian dialect	○	○	○	○
e. enhance literary comprehension	○	○	○	○
f. enhance written production	○	○	○	○
g. develop creative expression	○	○	○	○
h. improve pronunciation	○	○	○	○
i. delve into the Venetian history	○	○	○	○
j. delve into the Venetian artistic heritage (i.e., the monuments)	○	○	○	○
k. delve into the Venetian cultural heritage (i.e., the festivities)	○	○	○	○
l. acquire a better knowledge of the environment	○	○	○	○
m. acquire a better knowledge of the advantages of living in Venice during the pandemic	○	○	○	○
n. acquire a better knowledge of the disadvantages of living in Venice during the pandemic	○	○	○	○
o. discover how to create a digital city tour	○	○	○	○
p. improve digital skills	○	○	○	○

8) How was the comprehension of *Venice is a Fish: A Cultural Guide* aided by the outdoor and the writing activities?

- ○ easier
- ○ harder
- ○ similar

9) What did you discover about Venice thanks to the reading activities?

10) What did you discover about your relationship with Venice thanks to the writing activities?

11) Did you already know *izi.TRAVEL*?

- ○ yes
- ○ no

12) How do you rate the possibility of combining images and oral texts with the written descriptions of the city?

- ○ very interesting
- ○ quite interesting
- ○ slightly interesting
- ○ not at all interesting

13) How do you rate using *izi.TRAVEL* to create a digital tour of Venice?

- ○ very useful
- ○ quite useful
- ○ slightly useful
- ○ not very useful

14a) Are you satisfied with the digital tour of Venice?

- ○ a lot
- ○ quite a lot
- ○ not much
- ○ not at all

14b) Why?

15) Gender:
- male
- female
- other

16) Age:
- 20-25 years old
- 26-30 years old
- more than 31 years old

17) I have been studying Italian for:
- less than 1 year
- 2-3 years
- 4-5 years
- more than 5 years

Appendix B

FOCUS GROUP QUESTIONS

1) Have you already created digital tours of cities?

2) When I told you that you were going to create a digital tour of Venice starting from your written productions, what did you expect?

3) Was it useful to participate in the project? If so, why?

4) In your opinion, which were the positive and negative aspects of the project?

5) Will you use *izi.TRAVEL* for your study and work projects?

6) Is there something that you want to add about the project?

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Interprofessional learning to enhance Spanish communication skills in Latinx pharmacy students

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ABSTRACT

EN This case study focuses on an interdisciplinary educational experience in which university Pharmacy and Humanities early and late Spanish-English bilinguals were paired to translate questions related to sociobehavioral aspects of medication use. This work describes the personal and professional benefits reported by the translators and the prevailing themes from verbal negotiations. The participants were an undergraduate in Spanish, seven pharmacy professional doctorate students, and five Hispanic studies graduate students. After completing individual translations, students were paired and met virtually to create a final, collaborative version of their translation. Participants were subsequently invited to answer open-ended questions about their experience. Translators' transcribed interactions and questionnaire responses became the basis for this article. Results show that the main reported perceived benefit was the participants' improved language skills. The findings also suggest that length, quality, and richness of interactions depended on whether the members of the pairings exhibited mutual respect, curiosity, and empathy.

Key words: INTERDISCIPLINARY INSTRUCTION, L2 SPANISH FOR PHARMACY STUDENTS, COMMUNITY-ORIENTED LEARNING, COLLABORATIVE TRANSLATION

ES Este estudio de caso investiga una experiencia educativa interdisciplinaria en la que participaron 13 estudiantes universitarios, bilingües tempranos y tardíos en inglés y español, pertenecientes a las áreas de farmacia y humanidades. La investigación se centra en el proceso que siguieron los participantes, en parejas interdisciplinarias, para traducir un cuestionario sobre aspectos sociales y comportamentales concernientes al uso de medicamentos. Los participantes incluían una estudiante de licenciatura con especialización en español, siete estudiantes en un programa doctoral de farmacia y cinco estudiantes de posgrado en estudios hispánicos. Luego de realizar sus traducciones individuales, cada pareja de estudiantes se reunió virtualmente para crear una versión colaborativa final de la traducción. Al finalizar la tarea, se invitó a los participantes a responder una encuesta sobre su experiencia. Este artículo utilizó como datos las respuestas a la encuesta y las transcripciones de las interacciones de cada pareja. Los resultados indican que el beneficio principal fue la mejora de sus habilidades lingüísticas, y que la extensión, calidad y riqueza de las interacciones colaborativas dependía de si las parejas mostraban respeto mutuo, curiosidad y empatía.

Palabras clave: INSTRUCCIÓN INTERDISCIPLINARIA, ESPAÑOL COMO SEGUNDA LENGUA PARA ESTUDIANTES DE FARMACIA, APRENDIZAJE ORIENTADO A LA COMUNIDAD, TRADUCCIÓN COLABORATIVA

IT Questo studio si basa su un'esperienza formativa interdisciplinare in cui 13 studenti universitari bilingui precoci e tardivi di spagnolo-inglese sono stati accoppiati per tradurre domande relative ad aspetti socio-comportamentali sull'uso dei farmaci. Questo lavoro descrive i vantaggi personali e professionali riportati dai traduttori e i temi prevalenti delle loro negoziazioni verbali. I partecipanti erano uno studente universitario di spagnolo, sette dottorandi in farmacia e cinque studenti laureati in studi ispanici. Dopo aver completato le traduzioni individuali, i discenti si sono incontrati a coppie online per creare una versione finale e collaborativa delle loro traduzioni. In seguito gli stessi hanno risposto a domande a risposta aperta riguardo alla loro esperienza. Le trascrizioni delle interazioni e le loro risposte al questionario costituiscono i dati di questo articolo. I risultati mostrano che il beneficio principale riconosciuto dai partecipanti è stato il miglioramento delle competenze linguistiche; inoltre la lunghezza, la qualità e la ricchezza delle interazioni è dipesa anche dal fatto che i partecipanti abbiano mostrato rispetto, curiosità ed empatia reciproci.

Parole chiave: ISTRUZIONE INTERDISCIPLINARE, SPAGNOLO COME LINGUA SECONDA PER STUDENTI DI FARMACIA, APPRENDIMENTO ORIENTATO ALLA COMUNITÀ, TRADUZIONE COLLABORATIVA

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1. Introduction

Hispanics/Latinx make up the second-largest ethnic group in the United States (US), having surpassed 60 million in 2019 to constitute 18.5% of the population (United States Census Bureau, n.d.). While their proportional growth has slowed in recent years, they still represent 52% of the demographic increase over the last decade (Noe-Bustamante, Lopez, & Krogstad, 2020). As the share of US-born Hispanics/Latinx has increased, their English proficiency has grown concomitantly. Even so, it is estimated that about one-third of them lack proficiency in the majority language (Magaña, 2020), and this percentage jumps to 60% for those who are foreign-born (Krogstad, Stepler, & Lopez, 2015).

For Spanish monolinguals, lack of services in their language constitutes an important barrier to access, and nowhere is this clearer or the stakes higher than in healthcare (Flores, 2006; Martínez, 2010). The disparities in outcomes for this population are well documented, and include less frequent doctor's visits (Yu et al., 2006), lower patient satisfaction (Carrasquillo, Orav, Brennan, & Burstin, 1999), longer hospitalizations and higher rates of readmission (Karliner, Kim, Meltzer, & Auerbach, 2010; Lindholm et al., 2012), lack of comprehension of treatment (Crane, 1997), and suboptimal adherence (Manson, 1988). While structural and financial constraints are some reasons for this constellation of disparities (Olenik, Gonzalvo, Snyder, Nash, & Smith, 2015), language barriers are also an important hurdle. For example, in a qualitative study of Spanish-speaking patients from California (Magaña, 2020), the interviewees emphasized the importance of Spanish language services to build trust and establish personal connections before and during the professional encounter.

When it comes to medication use, the gap in Spanish services is comparable. For example, in their study on pharmacists' communication with Spanish-speaking patients, Gonzalvo, Schmelz, and Hudmon (2012) found that only about one third of the 923 US participating pharmacies had personnel that could assist customers in Spanish, leading to a considerable unmet need. Nevertheless, over 70% of the pharmacists surveyed in Gonzalvo et al.'s work agreed that communicating in Spanish with clients was important. A more recent qualitative study of Spanish-speaking pharmacy patients (Olenik et al., 2015) confirmed the negative consequences of the gap in language-concordant services, including patients' dissatisfaction with communication in Spanish, and their inability to take advantage of the full range of services provided. Predictably, many patients reported negative interactions with pharmacy personnel, which they attributed to language barriers and discriminatory attitudes.

These results are important if we consider that for many Spanish-speaking patients, the pharmacist is often a substitute for prohibitive and time-consuming doctor's visits (Olenik et al., 2015). In fact, there is empirical evidence that offering language-concordant pharmacy services improves care. For example, in a cardiovascular risk reduction clinic managed by a bilingual pharmacist (Gonzalvo & Sharaya, 2016), the outcomes were comparable for Spanish- and English-speaking patients.

The issues identified in the aforementioned studies reinforce findings from an earlier systematic review of the literature carried out by Dilworth, Mott, and Young (2009) that acknowledged a dearth of research on pharmacist training for and communication practices with Spanish-speaking patients. Suggestions for future research included, among others, investigation of interventions that can enhance pharmacists' self-efficacy in providing care for such patients.

Recognizing the importance of Spanish instruction for medical personnel, many institutions of higher learning have increased such course offerings both in language departments and as electives in the curriculum of medical schools. For pharmacists, this need is recognized, but the process seems to be more incipient. For example, over 70% of the participants in Gonzalvo et al.'s (2012) study expressed interest in Spanish courses and suggested such courses should be offered in pharmacy schools. However, only 21.9% of respondents thought they should be required. Unsurprisingly, in another recent survey conducted by Mospan and Griffiths (2016), only 22 of 61 responding colleges of pharmacy reported teaching medical Spanish. These findings suggest that medical Spanish for pharmacy students is offered in a minority of programs, given that 138 colleges were initially surveyed.

The two most common barriers reported for offering Spanish courses appear to be a lack of personnel and room in the curriculum. In pharmacy programs that did report offering medical Spanish, the most common forms of delivery appeared to be elective courses and/or introductory and advanced experiential opportunities (Mospan & Griffiths, 2016). Short of a wholesale commitment to curricular revision, additional innovative pedagogical approaches are needed to facilitate both formal and informal medical Spanish integration into pharmacy curricula.

The purpose of this work is to present such a pedagogical intervention, based on a collaborative translation initiative. In this work, we propose that the type of activity we will present could facilitate the teaching of Spanish in Pharmacy programs, as well as interdisciplinary collaboration between the sciences and humanities. In the first section of this paper, we review existing literature on medical training in pharmacy programs and collaborative translation. The sections that follow provide information about the study's design, methodology, and participants. This is followed by the presentation and discussion of results and pedagogical implications. In the final two sections, we describe the limitations of the study and we conclude the article.

2. Curricular and pedagogical approaches in medical training for pharmacy students

A variety of curricular approaches to providing medical Spanish training have been described in the pharmacy literature since 2011. Reports have detailed comprehensive Spanish language and culture courses, service learning initiatives, Spanish language and cultural immersion trips, and advanced pharmacy practice experiences (VanTyle, Kennedy, Vance, & Hancock, 2011); stand-alone courses (Griffiths & Mospan; 2016; Mueller, 2017); the incorporation of a medical Spanish module in an introductory pharmaceutical care lab (Dinkins & Scolaro, 2012); and advanced pharmacy practice experiences (Werremeyer & Skoy, 2012). More recently, a co-curricular approach to learning medical Spanish has been described (Garavalia, Chan, Ortiz, Muniz-Delgado, & Martinez, 2017). Collectively, these approaches demonstrate the flexibility needed, given the varied institutional and/or programmatic capacities for providing medical Spanish education.

Studies that focus on the teaching of medical Spanish such as the ones discussed in the previous paragraph generally do not report the specific learning activities that students engage with in those courses, making them difficult to replicate. This gap in information poses challenges for other programs that wish to implement similar pedagogical practices, but lack the resources to develop their own, and would benefit from detailed examples that can be readily deployed. From the limited information available, one strategy common in medical Spanish training programs for pharmacists appears to involve the translation of medical terminology into Spanish, whether verbally or in writing (Dinkins & Scolaro, 2012; Mueller, 2017; VanTyle et al., 2011). Other examples include group activities focused on medication labeling and administration, patient information, counseling and side effects, and scenarios that involved filling and counseling on a prescription in Spanish. Evidence shows (e.g., Dinkins & Scolaro, 2012) that these types of activities can significantly increase learner confidence and competence in Spanish communication, and they can develop students' ability to translate common pharmacy label instructions.

3. Collaborative pedagogies and translation

Existing studies (e.g., Goodwin & Jiménez, 2016; Puzio, Keyes, Cole, & Jiménez, 2013) have focused on the role of in-class and out-of-class pair and group translation activities as a means to a pedagogical end. For example, translation has been proposed as an instructional approach for English learners in elementary and middle school. According to these researchers, creating opportunities for English language learners to translate texts collaboratively into their first language (L1) develops metalinguistic awareness and improves reading comprehension in the second language (L2), English. Rather than starting from a deficiency perspective, this strategy recognizes the students' many linguistic resources, which can be deployed to co-construct meaning with peers in their L2.

Collaborative translation has also been used as a methodology to study decision-making processes in pre-professional translators. For example, Pavlović (2009, 2010) employed a collaborative translation protocol to investigate how translators choose the optimal rendering of a text. By comparing students' negotiations as they translated from their L2 into their L1 and vice versa, these works showed that there were no great differences in the justifications the participants gave for selecting a specific translation option.

Another strand of pedagogical research pertinent to the current study is the literature on the role of collaborative service-learning in the development of translation skills. For both individual courses (Ebacher, 2013) and entire curricular sequences organized as certificates (Rueda-Acedo, 2021), adding a service-learning component engages students with their community and develops their linguistic skills, intercultural appreciation, civic engagement, and empathy (Rueda-Acedo, 2021). In addition, when service-learning includes peer editing and group work, students come to appreciate the diversity of skills they bring to the table, thus honing their professional ability to work collaboratively (Ebacher, 2013).

Some studies have focused more specifically on translation collaboration as a professional skill. Huertas Barros (2011) measured the development of translator competencies in a study that explored

students' experiences with collaboration (preferences, levels of motivation, perceived benefits, and challenges). In Olvera-Lobo et al. (2009), students collaborated in remote teams throughout the semester, as each participant took different professional roles (e.g., documentalist, terminologist, etc.). These two works showed that students believed collaboration to be a useful skill, although one of the most important findings was that most students had not received specific training on how to conduct successful collaborations.

Explicitly or implicitly, the implementation of collaboration as a pedagogical practice in the translation classroom is based on a constructivist approach to learning (Kiraly, 1997, 2005, 2012, 2013). In this approach to translator education, skill development is not reducible to the transmission of a set of pre-established strategies, but rather involves the dynamic development of a "holistic bundle" of competencies (Kiraly, 2013, p. 201) dependent on unpredictable individual experiences. In other words, the model is not static, nor does it conceive of learning as the acquisition of static or isolated skills, i.e., translation competencies (e.g., linguistic, cultural, strategic), personal competencies (e.g., autonomy, responsibility), and social competencies (e.g., teamwork). Instead, the approach acknowledges that authentic translation tasks are exponentially more complex, infinitely variable, and context-dependent than artificial tasks. Knowledge about translation is thus not a stored product, but rather, a process that needs to be actuated. Because real professional translation is riddled with unpredictability and unforeseen circumstances, the only way the classroom can prepare translators effectively is to allow students to face new problems. Central to this pedagogy is the authentic group translation project, a context that allows students to develop an array of personal, social, and translation-specific competencies through their interactions (knowledge co-emergence), to reach not merely competence, but also self-confidence.

Given this background, we describe and report the results of an interprofessional activity that was deployed to reinforce technical translation ability among pharmacy students using interdisciplinary collaborative translation teams.

4. Methods

4.1. Design and research questions

A case study design was used to describe the translation experiences and linguistic negotiations of Texas A&M University Irma Lerma Rangel College of Pharmacy (PHAR) and Department of Hispanic Studies (HISP) undergraduate, professional doctorate, and graduate students who participated in a collaborative translation activity during the summer of 2018. This project specifically investigated the following research questions:

(1) What personal and professional benefits do PHAR and HISP students report after participating in a collaborative translation project?
(2) What themes prevail in the interaction between student translators belonging to different scholarly fields when negotiating their linguistic choices?

The participants, collaborative translation project activity, measurements, and analysis are described below. The project was approved by the participating university's Institutional Review Board and the 13 student participants provided written consent for participation.

4.2. Participants

Thirteen students enrolled in the College of Pharmacy or Hispanic Studies courses or program, and who had a minimum of an intermediate-mid level of proficiency in both English and Spanish, were invited to participate in the project.[1] One student was an undergraduate Spanish major, and seven were Pharmacy majors in a professional doctorate program. The remaining five students were graduate students in Hispanic Linguistics (n=2) and Literature (n=3), who also worked as graduate teaching assistants in the Spanish Basic Language Program in their department. All participating students were provided with a stipend based on university rates for student payment for their translation work. None of the participants had previous experience with translation projects like the one reported in this study. Because the final tally of chosen translators was uneven (seven students from PHAR and six from HISP—five graduate students and one

[1] A possible list of participants was identified by the researchers, who had either had the students in their classes or had supervised their work as graduate teaching assistants. Therefore, the investigators had knowledge of the students' proficiency level in both English and Spanish, and considered them ideal to undertake the translation work that the project would involve.

undergraduate), one HISP student was assigned to work with two PHAR participants in a triad. This resulted in six interdisciplinary teams: five dyads and one triad—each with representation from both PHAR and HISP programs.

Although all participants were invited and consented to be part of the research project, only five (four professional doctorate Pharmacy students and one graduate student from Hispanic Studies) completed the questionnaire describing their experiences in the project. Of those, four identified as female and one as male, with a mean age of 32.2 years. The four Pharmacy participants were Spanish-English early bilinguals who had grown up in Spanish-speaking households in South Texas: They had started learning both languages before the age of five but had received all their education in English (Bolger & Zapata, 2011). Thus, English was their dominant language, and they characterized their Spanish proficiency as intermediate, with the exception of one, who described it as advanced. The remaining translator, the HISP graduate student, was from a Spanish-speaking country. This student had received all education through college in Spanish, had learned English after the age of 20, and was therefore considered a late bilingual (Baker & Wright, 2017).

Three of the six translator teams submitted the recording of their interaction for analysis. These translations focused on the demographics, locus of control, and self-efficacy about medication use sections of the translated survey. The translator questionnaire was not intentionally linked to the recorded interactions. Therefore, we were only able to connect one of the graduate students in Hispanic Studies and two Pharmacy participants in the translator questionnaire to two of the dyads analyzed based on the content of the recorded interactions.

4.3. The collaborative translation activity

The primary translation learning activity involved the English-to-Spanish translation of a survey's questions that included sociodemographics and sociobehavioral aspects of medication use. Some of the survey content was obtained from pre-existing data collection instruments commonly reported in the literature, while other content was newly created for this instrument. The survey items covered sociodemographics and self-reported health, health literacy (Morris, MacLean, Chew, & Littenberg, 2006), self-efficacy about medication use (Risser, Jacobson, & Kripalani, 2007), locus of control (Wallston & Wallston, 1978), beliefs about medications (Horne, Weinman, & Hankins, 1999), concepts related to reasoned action/planned behavior (Ajzen, 1991) (developed de novo), and self-reported medication adherence (Morisky, Green, & Levine, 1986). With the exception of sociodemographics, health literacy, and locus of control questions, items were specifically related to the sociobehavioral aspects of medication use. In addition to the questions, the translation exercise also included an introduction with instructions, consent information, and appropriate transitions between questionnaire sections. The text to be translated was distributed equitably among interdisciplinary translator teams (PHAR and HISP) by dividing the questionnaire into related chunks of information as follows: (1) sociodemographics, self-reported health, and health literacy (431 words); self-efficacy about medication use (312 words); locus of control (512 words); beliefs about medications (261 words); questionnaire instructions page, reasoned action/planned behavior, and medication adherence (516 words), and consent information (584 words). Consistent with fair use laws (https://www.copyright.gov/title17/92chap1.html#107), a brief sample of student translations is shown in Table 1 to provide a sense for the level and genre of text used.

Table 1
Examples of translation tasks and student translations

Content area	Sample text (original English)	Example of student translation
Sociodemographics/ Background	I am currently prescribed medicine(s) for either high blood pressure, high cholesterol, heart disease, diabetes, or arthritis) 1. Yes 2. No	Me han recetado medicamentos para la presión alta, el colesterol alto, enfermedad del corazón, diabetes, o artritis. 1. Sí 2. No
	In general, would you say that your health is… 1. Poor 2. Fair 3. Good 4. Very Good 5. Excellent	En general, usted diría que su salud es… 1. Mala 2. Regular 3. Buena 4. Muy buena 5. Excelente
	Currently, is your income enough to meet your basic needs for food, housing, clothing, and medical care? 1. Yes 2. No	¿Son suficientes sus ingresos para cubrir sus necesidades básicas de alimentos, vivienda, ropa, y atención médica? 1. Sí 2. No
Health Literacy (Morris et al., 2006)	How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy? 1. Never 2. Rarely 3. Sometimes 4. Often 5. Always	¿ Con qué frecuencia necesita que alguien le ayude cuando lee instrucciones, folletos u otro material escrito por su médico o farmacéutico? 1. Nunca 2. Raramente 3. A veces 4. Seguido 5. Siempre
Locus of Control (Wallston & Wallston, 1978)	If I get sick, it is my own behavior that determines how soon I will get well again. 1. Strongly Disagree 2. Moderately Disagree 3. Slightly Disagree 4. Slightly Agree 5. Moderately Agree 6. Strongly Agree	Si me enfermo, es mi propio comportamiento el que determina cuándo se recupere mi salud. 1. Muy en desacuerdo 2. Moderadamente en desacuerdo 3. Ligeramente en desacuerdo 4. Ligeramente de acuerdo 5. Moderadamente de acuerdo 6. Fuertemente de acuerdo
	My family has a lot to do with my becoming sick or staying healthy. 1. Strongly Disagree 2. Moderately Disagree 3. Slightly Disagree 4. Slightly Agree 5. Moderately Agree 6. Strongly Agree	Mi familia tiene mucho que ver con si me enferme o me mantenga saludable. 1. Muy en desacuerdo 2. Moderadamente en desacuerdo 3. Ligeramente en desacuerdo 4. Ligeramente de acuerdo 5. Moderadamente de acuerdo 6. Fuertemente de acuerdo

Once student translators had received their assignments, they worked individually on their translations. When students had finalized their work, they met virtually via Zoom to compare choices and develop a unified final translation. Participants were asked to record their interactions in Zoom and to submit both their final version and the recordings as part of their task. Translators were given three weeks to complete

these tasks. To ensure that meaning was retained, the final version of the forward translation was followed by a backward translation as recommended in the literature (Swaine-Verdier et al., 2004). The backward translation was performed by a HISP graduate student not involved in the first stage of the translation process. Finally, expert supervision on Pharmacy and Spanish for the Professions was provided by PHAR/HISP faculty, and the final product was verified by a HISP faculty member with certified expertise in translation. Beyond the student learning experience, the resulting translated document was retained for further educational use with students who work with Spanish-speaking communities in South Texas and other parts of the country.

4.4. Measurement of student translators' experience in the project

The student translator experience in this project was measured using: (1) a questionnaire with open-ended questions, administered after the translations had been completed, and (2) recordings of the virtual interactions between the paired translators as they discussed their linguistic choices.

The first part of the translator questionnaire consisted of six questions that focused on the participants' gender, age, field of study, L1 and L2, and self-reported proficiency level in their L2 (i.e., basic, intermediate, or advanced) to describe the sample of participants. The second section of the questionnaire included eight open-ended questions for the student translators to describe their experience. These questions attempted to elicit responses related to the following domains:

1) The reasons why they had decided to be part of the translation project;
2) How they had approached the translation process;
3) The most challenging aspects of the individual translation work;
4) The easiest aspects of the individual translation work;
5) The most challenging aspects of their collaborative work with a partner from another field;
6) The most rewarding aspects of their collaborative work with a partner from another field;
7) How their participation in the project had contributed to their overall training as health care providers; and
8) How their participation in the project had contributed to their L2 knowledge (either Spanish or English).

The recorded Zoom interactions of the student translators were transcribed by a graduate research assistant for analysis and these transcriptions were checked for accuracy by one of the authors.

4.5. Analysis

Descriptive statistics were used to profile student translator characteristics, whereas the data from the open-ended questions and the transcribed translators' interactions were analyzed qualitatively by the first author of this work with the software *MAXQDA 2020 Analytic Pro* (VERBI Software, 2020). The first step of the analysis consisted of categorical aggregation, which involved the researcher's careful reading of the participating translators' responses and interactions to identify themes. The unit of analysis was an interaction between the two translators that centered on the discussion of a specific topic. Each emerging theme in the unit of analysis was coded and a list of categories and exemplifying statements was created for each theme. In the next step, themes, categories, and statements were cross-examined applying Glaser's (1965) constant comparative method to ensure that there were no discrepancies in the initial analysis. In the final stage of analysis, the number of themes was calculated, and connections among them were established. The results for survey questions 1, 3, 6, 7, and 8 and the interactions of dyads 2, 4, and 5 are reported. The questions chosen elicited the most comprehensive answers, and hence the reason they are the focus of this article. All of the interactions submitted by the participants were analyzed.

5. Results

5.1. Student translators' perceptions of their experience in the project

The main reason why the students decided to participate in the project was their desire to help the communities to which many of their families belonged. This reason was provided by three of the five participants. Other reported reasons included their wish to learn more about the research process and the opportunity to improve their Spanish proficiency and interact with students from other disciplines.

The most challenging aspect of the translation reported by both the early- and the late-bilingual participants was vocabulary. That is, while completing their individual translations, all participants appeared to have encountered challenges finding the most accurate Spanish words to convey the concepts in the English version of the patient survey. To solve their difficulties, they resorted to a variety of sources, including bilingual dictionaries, Google translate, and medical documents (e.g., articles in online journals). Early bilinguals also had difficulties with the formal language of the original English questions. These translators only had experience with Spanish use in informal contexts (e.g., the home), and thus felt unsure about the "appropriate way" to translate the stylistic nuances of the text. Their statements revealed a lack of linguistic self-confidence in Spanish, which was also evident in their interactions with their peers during the collaborative translation. To address their difficulties with formal Spanish, three of the four early-bilingual participants said they had asked their Spanish-speaking parents for help.

Interestingly, language was also the main focus in three of the four early-bilingual participants' answers when asked to describe the most rewarding aspects of their collaborative work. For example, they made reference to the fact that they had enjoyed working with someone "who [was] more knowledgeable than [them] in the Spanish grammar, [and could] correct [their] grammar, spelling, use of tenses" (Participant #1). Respondents also mentioned that they had felt more confident in their efforts knowing they were working with someone who could "make sure [the] translations were in patient-friendly language" (Participant #2). Other aspects of the collaboration highlighted were the mutual respect and camaraderie in the teams, the partners' shared views and background, and their similar ways of approaching the task at hand—all of which might have contributed to the reported "agreement and compromise" (Participant #4) that characterized some instances of the collaborative task.

When asked how their participation in the project had contributed to their overall training as health care providers, the four PHAR students' responses were again tied mostly to linguistic aspects. For example, Participant #2 made reference to the opportunity that the project had provided to practically apply the vocabulary previously learned in a Spanish for Pharmacists class, while Participant #4 felt that the experience had been good preparation to work as a translator in an upcoming health fair in South Texas. Participant #1 provided a comprehensive response that both summarized some of the points mentioned by the other three participants, and pointed out the importance of bilingual healthcare providers and research instruments in Texas:

> My participation in this project greatly contributed to my overall training as I was able to bridge the gap between English and Spanish in terms of health care providers. In certain places such as South Texas, people seeking to improve their health may come into contact with providers that either do not speak Spanish or have Spanish extremely limited. Having our translations being used for a greater purpose in terms of breaking language barriers, I find myself more open to speaking Spanish more frequently in my daily life particularly with my community pharmacy internship this summer in South Texas. Having these translations for the healthcare field can hopefully encourage other prospective health care providers to expand their language base to include Spanish or any other language to reach their respective patients.

The role that language might play in the relationship between patients and providers was also the focus of Participant #3, who felt that the project had created awareness of the importance of communication in healthcare. That is, through the translation work, there was a realization that communication "...is not only a transfer of information between two people, but it also entails understanding such information. Thus, very special consideration must be placed on how we, as health care professionals, communicate to teach/counsel a patient on medications."

The final question in the translator questionnaire probed the participants' views on the benefits of the project for the development of their L2. The four PHAR students considered Spanish as their L2, even though all of them were early Spanish-English bilinguals. However, since English was their dominant language, Spanish had been relegated to a secondary role. For these translators, the benefits were clear. They all believed that the project had made them feel more confident about their skills as both Spanish speakers and writers, and had helped them prepare for upcoming summer internships and jobs in Spanish-speaking parts of Texas. Other areas of improvement reported were Spanish grammar and pharmacy- and medicine-related vocabulary. Again, the response offered by Participant #1 summarizes the beneficial effects of the project also highlighted by other participants:

> I am a native English speaker and am completely fluent in English, Spanish was always present in my life as I would hear my grandparents, parents, and people in my community speaking this language as I grew up. However, it was not until this project that I became more comfortable with the idea of practicing my Spanish in both health care and informal settings. As a current summer intern in a community pharmacy setting, I find myself speaking 90% Spanish every day due to the demographics of my specific location in South Texas. I am now more fluent in Spanish than I was before doing this project and I hope the effect this project had on me and my linguistic skills, I hope reached my fellow project translators.

The late bilingual translator also expressed benefits from the project, even though Spanish was their first language. For example, they reported that working with a partner belonging to a different variety of the Spanish language had broadened their knowledge of vocabulary and expressions not used in their own dialect.

5.2. Student translators' interactions

Some of the themes present in the participants' responses to the translator questionnaire were also found in the recorded interactions between the translators in the three dyads analyzed. That is, even though a direct connection between the questionnaire and the interaction was not originally planned, the analysis revealed the existence of a clear relationship between these two sources of data. For example, the PHAR students in the three pair interactions analyzed expressed doubts about their Spanish choices and their overall linguistic ability in the language, an attitude often seen in US-born early bilinguals like them (Carreira & Beeman, 2014). Additionally, it was clear that the three dyads were aware of the audience they were serving, and of the importance of their work. In fact, audience was the aspect that determined linguistic choices when a term or phrase was negotiated between the translators; in other words, the participants would consider the Spanish language variety spoken by the populations in South Texas. Other themes detected in all interactions were the frustration when they could not find the precise term they were looking for, as well as overall negative feelings towards the difficulty of the process itself. In spite of these similarities, there were also differences among the three pairs in the way in which the discussions and negotiations were carried out.

For example, in dyads #4 and #5, the negotiation was much shorter and less balanced than in dyad #2. In the former two pairs, the late HISP bilinguals seemed to have dominated the dialogue and assumed the role of linguistic authorities. In some instances, they not only corrected the options proposed by the PHAR early bilinguals because they were "grammatically incorrect," but they also tried to impose their own choices, even if they were not sociolinguistically appropriate for the target population and/or they did not share their partners' medical knowledge. This prescriptive attitude could perhaps have resulted from the PHAR participants' explicit self-doubts about their linguistic ability as Spanish speakers, and/or it might have been related to the fact that the HISP translators might have felt that, since they were language instructors and Spanish was their mother tongue, they knew more than their partners. The unfortunate outcome of these exchanges were respectful but business-like short discussions, after which most of the time, the PHAR early bilinguals ended up accepting the option proposed by the HISP late bilinguals. A summary of the themes in both interactions is presented in Table 2.

Table 2
Summary of themes in dyads #4 and #5

	Prescriptive comments	Linguistic variety	Difficulties/ frustration with translation	Audience	Vocabulary discussion	Self-doubts about linguistic ability	SUM
Dyad #4	4	1	1	1	3	2	12
Dyad #5	6	1	1	1	4	7	20
SUM	10	2	2	2	7	9	32

Unlike the interactions in dyads #4 and #5, the conversation in dyad #2 was longer and more balanced in terms of negotiation. Even though the PHAR early-bilingual translator expressed the same doubts about Spanish linguistic ability as the PHAR early-bilinguals in the other two dyads, the HISP late bilingual had a completely different attitude. Whenever the PHAR partner expressed doubts, the HISP translator would offer praise and encouragement, both of which appeared to have legitimized their teammate as a Spanish speaker.

The "self-doubts about linguistic ability" theme often intersected with the "empathy towards co-translator" theme. The empathy shown by the late bilingual resulted in a more relaxed attitude towards the early bilingual's language use and overall task, and a friendlier exchange. For example, since both translators spoke different varieties of Spanish and had grown up in different linguistic contexts (South Texas vs. a Spanish-speaking country), they spent a great part of their conversation comparing upbringings, education, and identifying cultural/linguistic similarities and differences. Unlike the two other dyads, this exchange was not just business. These two participants also filled out the study's translator questionnaire, and characterized their experience in these terms: "My partner was very easy to work with" (Participant #4, early bilingual) and "The respect between us. The fact that we were trying to do our best to help. Nobody imposed their ideas. It was a good discussion" (Participant #5, late bilingual). These quotes seem to confirm what was observed in their conversation. The themes in dyad #2 are presented in Table 3.

Table 3
Summary of themes in dyad #2

	Discussion on cultural/ social aspects	Empathy towards co-translator	Linguistic variety	Difficulties/ frustration with translation	Audience	Vocabulary discussion	Self-doubts about linguistic ability	SUM
Dyad #2	17	15	14	6	9	27	10	98

6. Discussion

The results of the written open-ended questionnaire suggest that the main reason for participation in the collaborative translation project was the PHAR and HISP students' desire to help the communities to which most of them belonged. However, the five participants also reported both personal and professional benefits (research question #1). At the personal level, the translators seemed to have enjoyed working with their partners, whom they did not know ahead of time, and praised both the collaborative and practical nature of the project.

At the professional level, the main reported benefits for the four early-bilingual PHAR participants appear to have been related to their overall linguistic ability in Spanish. Not only did they report having a higher level of self-confidence as Spanish speakers after being part of the project, but they also made reference to the development of their medical vocabulary and overall linguistic proficiency. Additionally, their translation work seems to have offered them the opportunity to hone their language skills in preparation for their responsibilities in their summer internship assignments in heavily Spanish-speaking areas. These findings are relevant because they suggest that participation in initiatives that involve the use of Spanish for practical purposes, especially in projects tied to the communities early bilinguals belong to, can not only boost their linguistic self-confidence, but also prepare them for language use in Spanish-speaking settings. The importance of this observation is further supported by the results of a study that identified pharmacists' self-efficacy as a key mediating factor in the provision of medication information when communicating with Spanish-speaking patients (Young et al., 2013). While the late-bilingual HISP participant in the translator questionnaire in the current study did not report any of these benefits, they still felt that by working with their partner they had learned more about Spanish varieties beyond their own.

Also of importance is the heightened awareness of the crucial role of bilingual healthcare in Hispanic/Latinx communities shown by the participants. For example, Participant #1's characterization of the kind of communication needed between healthcare providers and patients mirrors existing research. Martínez (2010) has explored the negative consequences of language barriers in medical settings in Hispanic/Latinx communities in the United States, and he has shown that barriers such as the dearth of Spanish-speaking healthcare providers and/or the lack of cultural/linguistic empathy towards patients can have detrimental effects on the health of these communities. Additionally, this scholar, like Participant #1, has emphasized the need to "creat[e] language training programs for heritage speakers of Spanish [(like the early bilinguals in this study)] in the health professions and… of financial and professional incentives for health workers who use their heritage language [i.e., Spanish] to provide quality treatment" (Martínez, 2010, p. 73). Perhaps projects like the one reported herein, in which students are involved with work that has a direct benefit for linguistically

minoritized communities, can constitute the first steps towards the kind of education proposed by Martínez (2010).

The second research question sought to discover the themes that prevailed in the interaction between the PHAR and HISP co-translators when negotiating their linguistic choices. The conversation transcripts of the three dyads analyzed point to the existence of vocabulary negotiation and an awareness of the importance of audience and linguistic variety in all of them. However, there were differences in the nature of the three collaborations. In dyads #4 and #5, the interaction was not as balanced as in dyad #2. In #4 and #5, the conversation was shorter and dominated by the HISP late-bilingual translators, who often corrected their partners, stating that the choices the PHAR students were proposing were not grammatically correct. Unfortunately, this prescriptivism often intersected with the PHAR translators' linguistic self-doubts. Even though Participant #1, who was part of dyad #4, characterized being corrected as linguistically beneficial, a prescriptive attitude was not what the researchers in this study expected or promoted. This type of behavior on the part of speakers of prestige dialects has been reported in the literature (e.g., Coryell & Clark, 2009; Torres et al., 2017), and has been shown to have detrimental effects on the linguistic self-confidence of early bilinguals. Therefore, though the PHAR students who experienced their HISP counterparts' prescriptivism did not consider it negative, the findings point to the need for more linguistic training. That is, even though both HISP participants in dyads #4 and #5 were Spanish teachers and they had been trained to work with early bilinguals, they appeared not to have been able to transfer their skills and knowledge to the collaborative translations. Thus, if projects like this one are to be more balanced and result in personal and professional growth for both early *and* late bilinguals, a pre-project training component must be an essential part of it. For instance, it would be important to actively establish clear community rules for collaborative tasks, emphasizing the need for an equitable division of labor, where all linguistic varieties are celebrated, respected, and valued.

Indeed, the transcript for dyad #2, clearly shows that, when linguistic self-doubts are met with encouragement and empathy, and contributions from both translators are valued, the result is a longer, more friendly, balanced, and ultimately, more productive interaction. Negotiation in this dyad often intersected with the participants' discussion of aspects related to their social and cultural background and linguistic variety. Both students showed interest in the information shared, and the resulting camaraderie was palpable throughout the conversation. This resulted in translators' growth both linguistically and interculturally.

The results of the translator questionnaire and the collaborative interactions point to the benefits of academic projects that not only have a clear connection to the community and a practical purpose, but also require Pharmacy students to make active use of Spanish. The findings show that the fact that the translation work was going to benefit the Hispanic/Latinx communities to which most PHAR students belonged acted as a motivating factor for their participation in the initiative. Additionally, their active use of Spanish, both in their individual translations and during their negotiations with their partners, appeared to have resulted in linguistic and, in some cases, intercultural growth, and a higher level of self-confidence as Spanish speakers. Also, for the four questionnaire early-bilingual Pharmacy participants, the translations and interactions constituted a safe environment to rehearse their use of Spanish in anticipation of their upcoming pharmacy roles and responsibilities in Spanish-speaking communities in South Texas.

Projects like the one presented in this case study could also incorporate into pharmacy education some of the goals that have been proposed for the linguistic education of early Spanish bilinguals similar to the students in this study (Martínez, 2010). These goals include the "maintenance of the heritage language [i.e., Spanish]; the expansion of [the] bilingual range [e.g., through translation]; the cultivation of positive attitudes toward the heritage language; [and] the acquisition of cultural awareness" (Beaudrie et al., 2014, p. 42). The inclusion of these goals in pharmacy-related tasks could result in practitioners that are more linguistically and culturally prepared to work in bilingual communities and more confident in their own linguistic capital. Additionally, the type of project proposed in the present work reflects the educational approach recommended for students with the same characteristics as the PHAR participants (e.g., see Martínez, 2016). The results of this case study legitimize collaborative, interdisciplinary translations as a possible component of such an instructional path.

7. Pedagogical implications

The interdisciplinary collaboration reported in this study was facilitated by our institution's emphasis on both research and pedagogical initiatives involving different disciplines. The financial support we received allowed us to compensate the participating student translators for their work, and our access to diverse student

populations gave us the opportunity to create interdisciplinary teams. Nevertheless, we believe that projects like ours could be successfully implemented in other institutional settings in Pharmacy and/or L2/heritage language programs through service-learning initiatives that would involve the collaboration of students and community organizations, such as hospital or clinic pharmacies serving minoritized populations. As discussed earlier, instruction that incorporates translation-based, service-learning activities has been shown to be both academically and socially beneficial. Indeed, an ample body of research (e.g., for recent work, see Rueda-Acedo, 2021; Thompson, 2018; Tocamaiza-Hatch, 2018) has revealed that pedagogy that involves community-based translation can not only develop learners' linguistic and intercultural competence, but also result in "radical changes in students' relationships to their instructors, their fellow students, and the professional community, as well as their understanding of […] their own self-concept as developing professionals" (Kiraly, 2005, pp. 1102-1103).

To ensure the success of initiatives like the one presented here and/or in service-learning projects, based on the results of this work and existing literature (e.g., Ebacher, 2013; Zapata, 2011), we believe it is important to account for and establish the following pedagogical interventions before and during implementation:

1) Determine academic and sociocultural outcomes for students' (service-learning) translation work.
2) Provide learners with sociolinguistic/cultural information about the populations (and/or institutions) they will serve (e.g., this could involve classroom visits from community/organization representatives).
3) Prepare students (both linguistically and socially) to interact with the populations to be served.
4) If translation involves learner collaboration in pairs or groups, develop rules for equitable division of labor and team-member interactions, as well as expected outcomes for cooperative work (e.g., for detailed guidance, see Zapata, in press).
5) Check the quality of students' work. This can be achieved in different ways. For example, learners can participate in peer reviews, and revise their work multiple times based on peer and instructor feedback. In addition, community members and/or faculty can be consulted for feedback while the translation work is being completed. Taibi and Ozolins (2016) believe this is an essential step when translated artifacts are expected to be used with target populations. Additionally, these scholars emphasize the need to consider both linguistic (e.g., language variety) and sociocultural aspects pertaining to the community(ies) of focus as crucial elements of the resulting translations.

Enacting these practices could provide instructional support and guidance to students, instructors, and community members, and could address/prevent potential difficulties and misunderstandings like those reported in this study.

8. Limitations of the study

The most important limitation of this study originated in the small number of participants. Even though thirteen students were part of this project, only five submitted answers to the translator questionnaire, and only three dyads out of six shared their interaction recordings with the researchers. Thus, even though the findings seem to be indicative of positive personal and professional benefits for the participants, the study is small in size. Another drawback of this work lies in the limited sources of data and measurements. Therefore, in future projects of a similar nature, it would be important to include a greater number of participants and other sources of data, such as interviews and/or think-aloud protocols, to provide more solid evidence for the kind of educational impact that practices like the one proposed in this work might have on PHAR students' professional preparation.

9. Conclusion

This study demonstrates that interdisciplinary collaborations focused on translation can be fruitful for Spanish-English early-bilingual Pharmacy students. That said, collaborations can be one-sided, if participants share prescriptive views about which Spanish dialects are inherently superior, instead of viewing different language varieties as appropriate for different audiences and settings. Therefore, it is crucial that linguistic training (e.g., on language varieties), community rules for collaboration, and clear expectations for roles, interactions, and results are offered to students before they undertake the translations.

Also, an important consideration for Pharmacy colleges and schools planning to introduce foreign language instruction is that attention must be paid both to the linguistic identity of their students, and to the features of the US Hispanic/Latinx populations they will serve. For example, in schools with high rates of Hispanic/Latinx Pharmacy students, appropriate instruction must start by affirming their heritage knowledge and expanding repertoires from there (Martínez & Schwartz, 2012). By the same token, the features of the specific US Spanish varieties in an area, and contact phenomena such as the use of borrowings from English, must be understood and respected. In those contexts, the use of standard Spanish medical terminology may in fact be a hindrance to communication.

Above all, students must understand that in medical encounters, linguistic normativity must take a back seat to comprehensibility and contextually appropriate use. The ultimate goal of Spanish training in pharmaceutical professional contexts is not linguistic correctness for its own sake, but communicative competence. It is this that will allow pharmacists to offer patients language-congruent care, which, as Lor & Martínez (2020) have shown, has been demonstrated to lead to better patient outcomes.

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ABSTRACT

EN This volume presents a theoretical and practical approach to the teaching of pragmatics in primary and secondary educational contexts. Targeting first language (L1), second language (L2), and foreign language (FL) teachers, the volume starts by introducing key concepts in pragmatics, providing an overview of theoretical notions in communicative competence, and drawing pedagogical implications from these notions. The book then reports findings from a survey conducted among language teachers on their views on and experience with the teaching of linguistic pragmatics. Finally, a 5-step inductive-explicit pedagogical model is put forward for raising metapragmatic awareness and developing receptive and productive pragmatic skills among learners of varied age groups. A rich set of sample activities illustrates how to put the model into practice and to adapt it to learners' specific needs.

Key words: PRAGMATICS TEACHING, METAPRAGMATIC AWARENESS, L1/L2/FL TEACHERS, PRIMARY AND SECONDARY EDUCATION, INDUCTIVE-EXPLICIT PEDAGOGY

ES Este volumen presenta una aproximación teórica y práctica a la enseñanza de la pragmática en contextos educativos de primaria y secundaria. Dirigido a profesores de lengua primera (L1), segunda lengua (L2) y lengua extranjera (LE), el volumen comienza introduciendo conceptos clave en pragmática, brindando una descripción general de las nociones teóricas en competencia comunicativa y extrapolando las implicaciones pedagógicas que surgen de dichas nociones. Asimismo, este libro recoge los resultados obtenidos a partir de una encuesta realizada entre profesores de idiomas sobre sus puntos de vista y experiencias en la enseñanza de la pragmática lingüística. Finalmente, se propone un modelo pedagógico inductivo-explícito que consta de 5 pasos para aumentar la conciencia metapragmática y desarrollar habilidades pragmáticas receptivas y productivas entre estudiantes de diferentes grupos de edad. Un amplio conjunto de actividades de muestra ilustra cómo poner en práctica el modelo y adaptarlo a las necesidades específicas del alumnado.

Palabras clave: ENSEÑANZA DE LA PRAGMÁTICA, CONCIENCIA METAPRAGMÁTICA, DOCENTES L1/L2/LE, EDUCACIÓN PRIMARIA Y SECUNDARIA, PEDAGOGÍA INDUCTIVO-EXPLICITA

IT Questo volume presenta un approccio teorico-pratico all'insegnamento della pragmatica in contesti di istruzione primaria e secondaria. Rivolgendosi a insegnanti delle lingue madre (L1), seconda (L2) e straniera (LS), il volume si apre con una presentazione dei concetti chiave della pragmatica, offrendo una panoramica delle nozioni generali sulla competenza comunicativa e delineando le implicazioni pedagogiche che ne derivano. Il libro riporta poi i risultati di un sondaggio condotto tra insegnanti di lingue sul loro punto di vista e sulla loro esperienza con l'insegnamento della pragmatica. Infine, viene proposto un modello pedagogico induttivo-esplicito composto di cinque fasi per raggiungere una consapevolezza metapragmatica e per sviluppare competenze pragmatiche sia recettive sia produttive tra studenti di età diversa. Un ricco repertorio di attività illustra come mettere in pratica il modello e adattarlo ai bisogni specifici degli studenti.

Parole chiave: DIDATTICA DELLA PRAGMATICA, CONSAPEVOLEZZA METAPRAGMATICA, INSEGNANTI DI L1/L2/LS, ISTRUZIONE PRIMARIA E SECONDARIA, PEDAGOGIA INDUTTIVO-ESPLICITA

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1. Volume overview

Victoriya Trubnikova and Benedetta Garofolin's (2020) *Lingua e Interazione. Insegnare la pragmatica a scuola* ([Language and interaction. Teaching pragmatics at school], Edizioni ETS, addresses the question of the relevance of pragmatics to the teaching and learning of first, second, and foreign languages (L1s, L2s, and FLs) at all proficiency and schooling levels. It does so with the aim of fostering the development of learners' productive and receptive communicative skills in social, cultural, and situational contexts. Indeed, as aptly pointed out in the preface, it fills a long-overdue gap in language pedagogy, namely that of making pragmatics accessible as a theoretical construct to language practitioners, pointing out the crucial bearing it has on language development, and showing how it can be fruitfully implemented in daily classroom activities. Starting from theoretical considerations and taking stock of teachers' own needs, the volume offers general guidelines and practical suggestions on how to make focused reflection on pragmatic aspects of communication a recurrent, motivated, and easy-to-implement educational practice. Its main tenet is that it is possible to foster effective and conventionally appropriate language learning and language use by exploring the interrelatedness of form, function, and context and their effects on interactants. This, the authors argue, can be achieved through a gradual, supervised process of discovery, analysis, and conscious re-use of communicative strategies and phraseologies motivated by an understanding of context.

The book, which targets primary and secondary education teachers, is divided into two sections. The first section, which consists of an introduction and two chapters, has a theoretical slant and introduces key notions both in pragmatics and in educational linguistics, with a special focus on pragmatics, thus setting the context for the second section. The second section consists of two chapters and a conclusion. It explores the relationship between language teaching and pragmatics, and offers detailed pedagogical suggestions on how to include aspects of pragmatics in curricular activities. The book ends with a rich references section and four appendices: one presents a data collection instrument (i.e., the questionnaire administered to teachers to explore their views on pragmatics at school), two are sample concrete illustrations of how to apply in the classroom the pedagogical model put forward by the authors in Chapter 4, and one is an assessment instrument that learners can use to give one another peer feedback on their pragmatically-oriented communicative tasks.

2. Chapter content

The Introduction argues for the importance of including pragmatics in language teaching, since it accounts for how linguistic choices shape and are shaped by context, thus enabling action, interaction and socialisation. It also sets out the goals of the book, and provides an overview of its content.

Chapter 1 defines pragmatics. It outlines fundamental notions, phenomena, and theoretical frameworks (i.e., deixis, speech acts, the cooperative principle of conversation, discourse markers, and politeness) that account for how language is used effectively and appropriately in context so as to achieve communicative, interactional, and transactional goals. It also illustrates how language use varies non-randomly across situations—characterised by flexible configurations of event types, participants' role-relationships, and discursive contributions—as well as across cultures, which may assign different values to given communicative and socialisation practices.

Chapter 2 clarifies what communicative competence is and the role that pragmatic competence plays in it. It also presents theories put forward by leading scholars on how pragmatic competence is acquired or developed. Most importantly, it draws pedagogical implications from these theoretical considerations, tackling thought-provoking questions such as what should be taught and how, how the teacher and the learner should play and orchestrate their complementary roles to foster successful learning, and how pragmatic skills are to be assessed. A strong case is made for the implementation of an inductive-explicit teaching method—which is all too often disregarded in language pedagogy (cf., Glaser, 2013)—meant to raise learners' awareness of pragmatic phenomena, to develop their metapragmatic competence, and to enable them to decide to what extent to approximate the standards of a target language and the (tacit) conventions of the native speakers who use it. This is a method in which overt theoretical information about patterns and conventions is presented at the end of a process of consciousness-raising activities and guided discovery of communicative practices.

Chapter 3 reports on the findings of an investigation into primary and secondary school teachers' awareness of and views on the role of pragmatics in language teaching, and the scope of their experience in its instruction. Through a mainly quantitative survey of 410 participants, the authors found that teachers were interested in the field, but lacked confidence and adequate background preparation. They also expressed a need for suitable pedagogical material for developing and honing students' metapragmatic awareness. The findings

point out similar perspectives on pragmatics among teachers across school levels, but also draw attention to a stronger need for pre-service and on-the-job training, especially for primary school teachers. This type of research is in line with recent investigations in applied pragmatics, which engage in needs analyses of language educators (e.g., Cohen, 2018; Costa & Pladevall-Ballester, 2018; Pavan & Gesuato, 2021).

Chapter 4 presents an innovative five-step pedagogical model which aims to sensitise learners to the sociopragmatic and pragmalinguistic aspects of L1, L2 and FL communication, to raise their metapragmatic awareness, and to gradually develop learner autonomy. The model, which draws on insights from previous works, is the highlight of the book. By applying an inductive-explicit approach, and without requiring teachers to devote much time to extensive preparation, it shows how everyday interactional situations and authentic discourse material can illustrate pragmatic phenomena which can be made part of a standard teaching syllabus. The approach serves to introduce learners to the formal, strategic, and context-relevant features of their own and others' discourse, to raise their awareness of cross-linguistic and cross-cultural differences, and to alert them to the meaning, value and impact of their language use through guided peer assessment practice.

The Conclusion sums up the main point of the volume. First, it stresses the pragmatic dimension of language use—for action, interaction, and socialisation. Second, it emphasises the importance of supervised reflection on effective and appropriate language production and language reception. Finally, it outlines future perspectives in pragmatics-focused research and pedagogy, vouching for joint projects involving materials developers, scholars, and language practitioners.

3. Overall conclusions

This publication has many reasons to be recommended: its clear exposition and balanced content, but especially the authors' mastery of and original insights into the subject matter, and their original scientific contribution to pragmatics research. First, it is reader-friendly. In a lucid prose, it expounds on important and, at times, complex concepts, phenomena, and principles in pragmatics, making them accessible to a wide readership of language educators, without assuming any background knowledge in linguistics. Metadiscursive statements (i.e., introductory, transitional, and concluding sentences or paragraphs) guide the reader throughout the text, highlighting the relatedness and mutual relevance of the issues addressed, and making explicit the thematic connection of the topics covered in neighbouring parts of the text (e.g., on p. 32 [end of Section 1.2.2 and beginning of Section 1.3] and p. 43 [end of Section 1.3.3. and beginning of Section 1.4], among several others).

Second, the book is rigorous and exhaustive. It accurately presents the multi-faceted nature of pragmatic issues, pointing out how researchers' findings led to advancements in their fields. Yet, it does not hide the limitations of the insights thus gained, as a result of which knowledge gaps were identified, which paved the way for new thought-provoking discoveries. The authors not only cover the historical milestones of research in pragmatics and educational linguistics, but also present the state of the art in both fields, reporting on the most up-to-date trends and achievements in current research practices.

Third, it combines a theoretical and a practical approach to the inclusion of pragmatics in language teaching and learning. After providing a contextualising overview of current models for the teaching of pragmatics and examining language practitioners' perspectives on linguistic pragmatics, it convincingly puts forward a practical pedagogical model—clearly presented in its motivation, requirements, and goals—which is exemplified with ample teacher-friendly activities. These are original not only because they cater to the needs of primary and secondary school students and teachers, engaging the former as ethnographers and the latter as guides in the exploration of the many-to-many correlations between form, function, and context, but also because they tackle various pragmatic phenomena (i.e., discourse markers, implicatures, deixis, speech acts).

Overall, this is a top-notch publication. However, I would like to point out a few marginal shortcomings:

1) In reporting the results of their investigation (in Chapter 3), the authors inform us that, in the second part of the questionnaire, they gave respondents a range of options to choose from that would prevent them from providing non-committal responses. This was a wise methodological choice, which, however, does not appear to have been implemented in the first part of the questionnaire too. On the same topic, it appears that, in Appendix 4, multiple choice Questions 3 and 4 on p. 166 are redundantly echoed in the first two open-ended questions on p. 167.
2) Although it is possible to appreciate the similarities and differences in teachers' responses across education levels, one does not know whether or to what extent they vary across other demographic variables like respondents' gender, years in service, or geographic origin.

3) In Chapter 4, the authors repeatedly state that pragmatics can only be subject to continuous assessment; however, they do not suggest how teachers should, or could, implement this form of assessment—e.g., whether it should be conducted along the same lines as peer feedback—so as to present it as valuable (i.e., "worthwhile") to the learners.
4) In outlining future perspectives, it would have been helpful to recommend a few specific publications or other resources (e.g., online video-recorded lectures) that teachers could turn to learn about pragmatics.
5) One instance of linguistic sexism can be found on p. 50, where "l'uomo" [the man] could have been replaced by "l'essere umano" (the human being).
6) Finally, formal oversights are few and far between, such as the occasional typo (e.g., *dwefinisce* instead of *definisce* on p. 79; 64% instead of 65% on p. 91) or mismatch between intra-textual references (e.g., Bianchi (2003) is mentioned on p. 21, while Bianchi (2009) is listed in the references).

The above, however, are very minor and easily forgivable inaccuracies. This articulate, informative, and insightful book fully delivers what it promises, making the reader feel intelligent in the process of discovering what pragmatics is and how to "put it into practice" in daily school activities. It is to be highly recommended as an enriching opportunity for on-the-job training for all teachers.

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