

From linguistic innovation to language change

A corpus-based investigation of the response marker *non c'è problema*

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This study investigates the diachrony of the Italian expression *non c'è problema* 'no problem' when used as a response marker (e.g., Tottie 1991; Ward 2006) to establish if it represents a case of language change (Milroy, 1992: 171). If on the one hand, the expression was indeed reported to be a neologism by Radtke in 1990, a careful exploration of the relevant literature on the other has revealed that a diachronic, quantitative and pragmatic investigation of its distribution has not been conducted yet. Methodologically, the study conducts lexicographic, quantitative and qualitative analyses over a range of historical and contemporary dictionaries and corpora and it performs statistical significance tests, such as the Log Likelihood and the Fisher's exact test. The results will reveal not only that this marker started to be used in 1977, but also that today, it is the response marker preferred by language users, thus qualifying as a case of language change. Furthermore, by analysing the diachronic distribution of *no problem* in English, the article will also explore the possibility that English may have been the source language for such change.

Keywords: corpus linguistics, language change, pragmatics, discourse markers, Italian

1. Introduction

In 1990, Radtke (ibid.: 68–69) published an analysis of the linguistic expression *non c'è problema* 'no problem' which, he argued, was a neologism. To support his claim, the scholar conducted a lexicographic search which resulted in only one record of *non c'è problema* retrieved from the dictionary *Il Grande Dizionario Garzanti della lingua italiana* (1987:1489); the expression was described as

belonging exclusively to colloquial spoken Italian. Due to the scarcity of findings, the scholar concluded that *non c'è problema* was indeed an Italian neologism which appeared to be used mostly by young speakers. To date, Radtke's investigation is the only study which has attempted to map the diachrony of *non c'è problema* using empirical evidence. His analysis, though significant for Italian lexicography, lacks a pragmatic focus and the expression is still mainly considered to be an innovative phrasal collocation.

Other scholars such as Alfieri et al. (2008) and Rossi (2010), have, at least marginally, touched on the pragmatic functions conveyed by *non c'è problema*, acknowledging that its expressed communicative function would be close to other Italian devices such as *va bene* 'that's fine', *volentieri* 'with pleasure' and similar. The main focus of their studies, however, was more on an alleged influence from (American) English onto Italian rather than on language change as such. Overall, then, it appears that, although *non c'è problema* has indeed been identified as being a linguistic innovation in Italian, an exhaustive account of its conveyed pragmatic functions and/or a diachronic quantitative investigation of its distribution using real world language data has not been carried out yet.

This article aims to expand on existing work; drawing particularly from Radtke's findings, this article investigates the diachronic distribution of the Italian expression *non c'è problema* with specific reference to its use as a response marker, i.e., to signal the listener's positive involvement and negotiation of agreement (e.g., Tottie 1991; Ward 2006). It is argued here that not only is the use of *non c'è problema* as a response marker a case of linguistic innovation (Milroy 1992:171), but that it also represents a case of language change (ibid.). More specifically, the aim is to demonstrate that over time, the use of this marker has not been restricted exclusively to young speakers – as it was found by Radtke – but that it has become the preferred marker, at least over equivalent expressions such as *con piacere*, *volentieri* 'with pleasure' and similar, which will be proven to be the historically preferred forms used in similar communicative situations. The distinction between linguistic innovation and language change follows the classic definition of Milroy and Milroy (1985), according to which an innovation is the act of a speaker, whereas a change is such only when it has been adopted by more than one speaker. In other words, speakers' innovations are defined in terms of their success in subsequent diffusion which occurs through a series of endorsements by other speakers (Coşeriu, 1997:70). An innovation, however, becomes a change only when it further diffuses to communities outside the innovator's (i.e., young speakers).

The study will also explore the hypothesis that the influence from the English *no problem* could be accounted for the appearance of *non c'è problema* in Italian; therefore, the diachronic distribution of *no problem* will also be analysed

in historical English resources, i.e., the *Oxford English Dictionary* (henceforth OED), the *Archer Corpus* (Biber, Finegan & Atkinson 1994), and the *Corpus of Historical American English* (henceforth COHA).

First, however, I will start with describing the pragmatic functions expressed by *non c'è problema* as a response marker in Section 2; I will then outline the methodology adopted in the study and provide a brief overview of the resources used for the investigation (Section 3). In Section 4, I will present the data showing the distribution of *non c'è problema* through the history of Italian and English; a pragmatic perspective will also be adopted to qualitatively analyse the collocations and excerpts retrieved from the corpora will be shown and commented. Conclusions are finally drawn in Section 5.

2. *Non c'è problema* as a response marker

Among discourse markers, response tokens have best demonstrated the crucial role of the listener's contribution to the conversational exchange as they express the cooperative functions of signalling to the speaker understanding, agreement, support, evaluation and other attitudinal messages (Gardner 2001). Though there is general agreement among scholars on the fundamental importance of these pragmatic items, numerous are the proposed terminologies, classifications, and definitions (among others, Jefferson 1984; Drummond and Hopper 1993b; Gardner 1997, 2001). For example, listener responses have been referred to as 'acknowledgment tokens' (Drummond and Hopper 1993a) or 'back-channels' (Yngve 1970). When they signal agreement or comprehension of the prior turn or even mark a movement towards a new topic or action in a conversation, other scholars prefer to talk about 'response tokens' (Gardner 2001). When they are of minimal intrusion in the flow of the conversation, they have also been referred to as 'minimal responses' (Fellego 1995); when marking the prior turn as newsworthy, Young and Lee (2004), on the contrary, prefer to call them 'reactive tokens', whereas Zimmerman (1993) defines them as 'continuers' when they give the floor immediately back to the speaker. In terms of differentiating between response markers and back-channels, White (1989) proposes to use the term 'back-channel' only when the listener interacts with the speaker without holding the floor, as the speaker is seen as the main channel and the listener as the back-channel.

Regarding the form, research includes verbal or non-verbal expressions (White 1989; Fellego 1995; Young and Lee 2004), mono- or pluri-syllabic items (Gardner 2001), lexical and non-lexical utterances; more recent studies have also comprised sentence completions, requests for clarification, and brief statements (Lambertz 2011). According to Ward (2006), their main function would be to

“control turn-taking, the negotiation of agreement, the signalling of recognition and comprehension, management of interpersonal relations such as control and affiliation, and the expression of emotion, attitude, and affect”. Following White’s (1989) and Gardner’s (2001) suggestion, in this study, the term ‘response marker’ is preferred over ‘back-channel’ to describe the pragmatic function conveyed by *non c’è problema* as it may be used by the recipient not only to express understanding and agreement, but also to take the conversational floor.

3. Methodology and resources

This article investigates the research hypothesis that the linguistic expression *non c’è problema* when used as a response marker is a case of pragmatic language change in Italian and that it has increasingly been used over equivalent alternative heritage expressions, such as *con piacere* and *volentieri* which perform similar communicative functions. The analysis in this way needs to account not only for the pragmatic function that *non c’è problema* performs, but crucially also for the time of its first recorded appearance in Italian. This is paramount to corroborate the hypothesis that *non c’è problema* is indeed a case of linguistic innovation as previously reported by Radtke (op. cit.) and equally, to gather new relevant information which will clarify aspects of frequency, diachronic trends, and contexts of use that would not be possible by relying solely on lexicographic resources. In addition to lexicographic analyses, then diachronic quantitative and qualitative investigations across dictionaries and corpora are conducted to further support the arguments.

The detailed account of the pragmatic functions of *non c’è problema* and the communicative situations in which the marker is used allows us to derive plausible equivalent alternative expressions. Such identification of alternative expressions is instrumental to exclude the possibility that *non c’è problema* as a response marker may not be found in the consulted resources not because of lack of real use but rather because the relevant communicative situation is not represented. This means that, if records or occurrences of *non c’è problema* are not found, contrastive queries for plausible historical alternatives will be launched; the procedure is also useful to confirm that the alternative forms were indeed the historical devices used to perform the communicative situation in question. This will ultimately provide us with crucial information on their diachronic frequency of use which will be relevant to this study’s second research hypothesis. In this regard, it is important to clarify that the variants proposed here are not to be understood as the only competing forms available to speakers, especially in present-day Italian, mainly because the choice between the investigated items

and the provided historical alternative(s) is not absolutely binary. On the contrary, far from aiming to prove the full interchangeability between heritage and innovative forms, retrieved records of the historical variants will be valued as proof that the communicative situation under study is represented in the consulted resources. At the same time, it will also allow us to establish if today *non c'è problema* is the preferred response marker, at least over the heritage forms analysed here. Future studies could for instance analyse the use of *non c'è problema* in contrast with other heritage forms, or synchronically in comparison with other equivalent expressions (e.g., *figurati*, *ma certo*, and similar). The pragmatic functions of the alternatives investigated here will be discussed in Section 4.

The article also explores the hypothesis that an influence from the English *no problem* may have triggered the appearance of *non c'è problema* in Italian. To this purpose, the diachrony of *no problem* will also be investigated in historical sources (i.e., *Oxford English Dictionary* – OED, the *Archer Corpus*¹ and the *Corpus of Historical American English* – COHA). A pragmatic focus is adopted when counting the instances of occurrence of the investigated items; this pragmatic perspective will allow us to select only those forms used as response markers thus providing more authentic and reliable findings of the real use of these markers over time. Following the quantitative results, excerpts retrieved from the corpora will be discussed. This combination of quantitative and qualitative methods offers a much richer and detailed picture of the use of the linguistic items under investigation and will considerably expand Radtke's findings.

A number of historical dictionaries are used for the lexicographic investigations: for English, the OED; for Italian, the *Tommaseo-Bellini* (henceforth TB 1861–1879), the *Vocabolario degli Accademici della Crusca* (henceforth Crusca 1729–1738 and Crusca 1863–1923), the *Dizionario Moderno* (Panzini 1905–1935), the *Appendice al Dizionario Moderno* (Migliorini 1950) and the *Grande Dizionario della Lingua Italiana* (Battaglia 1961–2002, henceforth GDLI). The modern and contemporary dictionaries are: *Dizionario Garzanti della lingua italiana* (Cusatelli 1965, henceforth, Garzanti 1965), *Vocabolario della Lingua Italiana di Nicola Zingarelli* (Cannella 2007, henceforth, Zing. 2008), *Dizionario della Lingua Italiana De Mauro* (henceforth, DM 2000), *Il Sabatini Coletti* (henceforth, DISC 2008), *Il Devoto-Oli 2009* (Devoto & Oli 2008, henceforth, Devoto-Oli 2009), *Il Devoto-Oli 2014* (Devoto & Oli, 2013 henceforth, Devoto-Oli 2014), *Grande Dizionario Italiano – Speciale 150 anni* (Gabrielli 2011, henceforth, Hoepli 2011), *Grande dizionario di Italiano* (henceforth, GDI 2013), *Vocabolario Treccani* (henceforth, Treccani).

1. Biber, Finegan & Atkinson 1994.

The language corpora used for these investigations are: for written English, I will use the *Archer Corpus* (Biber, Finegan & Atkinson 1994) and the *Corpus of Historical American English* (COHA). *Archer* is a multi-genre corpus of British and American English covering the period 1600–1999 and which contains 3.3 million words. This corpus has been designed as a resource for the study of language change and variation in a range of written and speech-based registers of English and for this reason samples genres from advertising, drama, fiction, sermons, journals, legal, medicine, news, early prose, science, letters, diaries. The COHA is the largest structured corpus of historical English and contains more than 400 million words of text from the 1810s–2000s balanced by genre (fiction, magazine, newspaper, other non-fiction) decade by decade. For written Italian, I will use the MIDIA corpus (Gaeta et al. 2013), which collects texts from the 13th century to the early 20th century (about 7.5 million words) and the DiaCORIS corpus and the CORIS corpus (Rossini Favretti, Tamburini & De Santis 2002), which gather authentic Italian texts from 1861 to 2017 (about 175 million words altogether). For spoken Italian, I will use the *Stammerjohann* corpus (Stammer, Tucci & Signorini 2004), the LIP corpus (De Mauro et al. 1993), and the C-ORAL-ROM (Cresti and Moneglia 2005) which collect oral dialogues from 1965 to 2003 (about 1 million words altogether).

The MIDIA corpus includes texts from seven genres: press (i.e., essays, newspapers, advertisement); administrative and legal texts (i.e., decrees, laws); subjective writings (i.e., letters, diaries); literature and fiction (i.e., poetry, novels); scientific texts; theatre (i.e., dialogues). Because the resource includes texts with a focus on dialogues (theatre, fiction), the corpus provides the researcher with a powerful tool for the diachronic analysis of linguistic phenomena which are separate from, yet representative of oral dialogues of the time. Another important aspect of the MIDIA corpus is the inclusion of subjective writing texts (diaries, letters) which were not published, thus offering valuable insights into the Italian language in use in a familiar and private context. Each text contains about 8,000 entries, thus making the corpus a well-balanced resource.

The CORIS corpus, made up of 150 million words, is a collection of authentic written texts chosen by virtue of their representativeness of modern Italian covering the period 1980–2017. The DiaCORIS, made up of 25 million words, is a sub-corpus of the CORIS, comprising texts from 1861 to 2001. The corpus is divided into five time slots: 1861–1900, 1901–1922, 1923–1945, 1946–1967, and 1968–2001; each time slot contains five million words. Both corpora gather texts taken from the following genres: press (daily newspapers, magazines, periodicals), fiction (novels, short stories), academic writing (essays), administrative/legal writing (laws, decrees, judgments), miscellaneous (web – CORIS only), ephemera (other). As the DiaCORIS was conceived as a supplement of the

CORIS, its structure mirrors the CORIS' division into macro- and micro-varieties thus making these resources highly comparable (Onelli et al. 2006:1212).

The *Stammerjohann* corpus is the oldest corpus of spoken Italian; it includes thirty recordings of speech which add up to about 100,000 words (Scarano and Signorini 2005:198). The recording sessions include monologues and dialogues from broadcasting, telephone, public and private conversations recorded in Florence in 1965. The LIP corpus contains 469 texts for approximately 490,000 words; the recording sessions took place in four Italian cities (Milan, Florence, Rome, and Naples) from 1990 to 1992 and the number of words is adequately balanced within both the cities and contexts of communication (about 25,000 words). The contexts of communication include but are not limited to: radio and television broadcasting, telephone conversations, assemblies and meetings, lectures, court interrogations. The C-ORAL-ROM corpus (Cresti and Moneglia 2005) totals up to about 300,000 words and offers a significant representation of the spoken language, with different types of contexts and spontaneous speech events such as radio and television broadcasting, telephone conversations, assemblies and meetings, lectures, private and public dialogues recorded from 2000 to 2003. It is acknowledged that there is an imbalance between the English and the Italian resources; however, the contrastive analysis is carried out purely to investigate earlier records of this specific use of *no problem* in English which would support the hypothesis that English may be the source language for originating *non c'è problema*.

Because these resources have been sampled to be maximally representative of the population, the results may be considered as representative of the respective languages in different times so that direct comparisons may be made between different corpora. This ultimately means that the findings will contribute new empirical evidence to this study's main research questions thus establishing whether the use of *non c'è problema* is no longer limited to a certain demographics of speakers, but it has indeed become a case of language change in Italian, likely triggered from English.

As the corpora used are different in size, the results of the quantitative investigations are presented in tables which show the number of occurrences in each corpus (raw frequency) and the corresponding proportions in parts per million (p.p.m.) for the whole corpus. There will always be the possibility that some constructions may occur due to pure chance, but such limitations – which apply to any sampling analysis – can at least be partially addressed by maximising representativeness (McEnery & Wilson 2001) and by performing statistical significance tests. In this study, in particular, the Log likelihood test (LL) and the Fisher's exact test will be adopted, the former to compare corpora different in size and the latter used if the results are small numbers (Levshina 2015:213–14).

It has been recommended in literature (i.e., Sheskin, 2011: 646) that the Fisher's exact test should always be preferred when dealing with small figures, particularly when the total number of observations is a number lower than 40, or above 40 if one of the obtained or expected frequencies is smaller than 1. Finally, the chi-square test will not be preferred in this study.²

4. The analysis

4.1 The lexicographic analysis

The expression *non c'è problema* can function as a response marker when for instance it is used to reassure the interlocutor of the absence of any difficulty in reference to a given situation (Treccani) or when satisfying a request (GDI 2013). In Italian, the GDLI (vol. XIV: 422) dates the first appearance of *non c'è problema* fulfilling this use to 1977; moreover, contemporary Italian dictionaries (Treccani; DM 2000; DISC 2008; Zing. 2008; Devoto-Oli 2009; GDI 2013) report that this function expressed can be fulfilled by other phrases such as *con piacere* 'with pleasure', *non preoccuparti* 'no worries', *volentieri* 'with pleasure', *figurati* 'no worries/you're welcome'. The phrase *con piacere*, in particular, has been found in the TB 1861–1879 (vol. III: 975) as conveying the communicative situation under analysis. This finding confirms both that *con piacere* was in use in earlier stages of Italian and that the studied speech act is represented in the resource. At the same time – and consistently with the GDLI record – *non c'è problema* was not found, thus supporting Radtke's findings.

Finally, Treccani reports that both *volentieri* and *con piacere* are used as an open and polite affirmative response to a request or an invitation since the 14th century; at the same time, no historical record has been retrieved for *non preoccuparti* and *figurati*. Such historical records of *volentieri* and *con piacere* confirm that these are the Italian heritage forms similar to *non c'è problema* used in communicative situations their contrastive investigation will be therefore crucial to compare the use of *non c'è problema* diachronically. This, in turn, will rule out the possibility that occurrences of *non c'è problema* in the corpora may not be found because of a limitation of resource (i.e., lack of representation of the communicative situation) rather than for lack of real use. Although it is acknowledged that *volentieri* and *con piacere* may not be situated in the same diastatic dimension as

2. Because the chi-square test assumes that the data are normally distributed – unlike the log-likelihood test and the Fisher's exact test – it will not be an accurate measurement for this investigation, and therefore it will not be used.

non c'è problema, the nature of the analysis imposes that priority must be given to the diachronic and pragmatic levels. As mentioned before, future studies could contrastively and quantitatively analyse the frequency of use of *non c'è problema* with other competing variants (e.g., *va bene*, *figurati*).

I will now move on to investigating the distribution of the three markers through the history of Italian from 1200 to 2017 for written Italian (MIDIA, DiaCORIS, CORIS) and from 1965 to 2003 for spoken Italian (Stammerjohann, LIP and C-ORAL-ROM) to further verify the findings gathered from the lexicographic sources. Section 4.2 investigates the distribution and communicative contexts of *non c'è problema*, *con piacere*, and *volentieri* from the 13th century to the 20th century, while Section 4.3 analyses them from 1861 to 2017. Section 4.4 analyses the distribution in spoken Italian from 1965 to 2003, and, Section 4.5 discusses the results of the Fisher's exact test and the Likelihood test (LL). Finally, Section 4.6 investigates the diachrony of *no problem* in English.

4.2 The corpus analysis: Distribution from 1200 to 1947

In this section, I present the results of the quantitative and qualitative investigations for the distribution of *non c'è problema*, *con piacere*, and *volentieri* in the MIDIA corpus. Table 1 shows both raw and relative frequencies; the relative frequencies are calculated over the whole corpus as each time slot contains approximately the same amount of words (1.5 million words).

Table 1. MIDIA results *non c'è problema*, *con piacere*, *volentieri*

MIDIA	Non c'è problema	Con piacere	Volentieri	p.p.m.
1200-1375	0	0	3	0.4
1376-1532	0	0	5	0.6
1533-1691	0	0	12	1.6
1692-1840	0	0	7	0.93
1841-1947	0	0	4	0.53
TOT.	0	0	31	4.11

The results are consistent with the lexicographic searches; as expected, no occurrences of *non c'è problema* have been found while *volentieri* is consistently found in the corpus, with its oldest record of appearance dating back to 1212. The findings crucially prove that the communicative situation is represented in each time slot, thus considerably reducing the possibility that occurrences of the other two markers may not be found for a limitation of the corpus and strengthening the reliability of the results. Finally, the results suggest that *volentieri* was the

response marker preferred by speakers in earlier stages of Italian, at least over the two expressions investigated here.

Here below, (1), (2), (3), and (4) are examples retrieved from the corpus which give a better picture of the contexts of use of the form under analysis (bold mine).

- (1) Ed ella disse: – Molto **volentieri**, da che me ne prieghi (...)
And she said: – With pleasure, since you are praising me³ (...)
 (LET1_GIA_VIZVIR 1212)
- (2) Li dui fratelli risposono: « **Volentieri** »
The two brothers replied: “Certainly” (LET1_POLO_MILIO XIV century)
- (3) « Io voglio sposare una mia donna; piacciavi di farmi onore ». E quegli
 rispuose: **Volentieri**
“I want to marry one of my women; I hope you will honour me. And he replied: Gladly
 (LET1_SETTE_SAVI XIV century)
- (4) TRUFFALDINO: Un soldetto al zorno per el tabacco.
 FLORINDO: Sì, **volentieri**; ve lo darò.
 TRUFFALDINO: *A penny every day for the tobacco.*
 FLORINDO: “Yes, **certainly**” (TEA4_GOL_SERVoo 1745)

The examples above show the use of *volentieri* as a response marker; in particular, in Excerpts (1) and (2), it is used to express the cooperative function of signalling to the speaker agreement, while in (3) it signals understanding and expressions of positive attitude, and finally in (4), it is used to negotiate agreement and to take the conversational floor. In the next section, I investigate the frequency of occurrence of both forms in the DiaCORIS and CORIS Corpora, which collect data from the 1861 to 2017.

4.3 The corpus analysis: Distribution from 1861 to 2001

I will now move on to analyse the distribution of *non c'è problema*, *con piacere*, and *volentieri* in the DiaCORIS and the CORIS Corpora; Table 2 shows once again raw and relative frequencies. The results will be particularly relevant at this point of the analysis as previous lexicographic findings collocated the first record of use of *non c'è problema* as a response marker in 1977.

3. Unless otherwise stated, in this article, all the translations are mine.

Table 2. DiaCORIS results – *non c'è problema, con piacere, volentieri*

DiaCORIS	Non c'è problema	p.p.m.	Con piacere	p.p.m.	Volentieri	p.p.m.
1861–1900	0	0	0	0	4	0.16
1901–1922	0	0	1	0.04	2	0.08
1923–1945	0	0	0	0	2	0.08
1946–1967	0	0	4	0.16	2	0.08
1968–2001	1	0.04	1	0.04	0	0.08
TOT.	1	0.04	6	0.24	10	0.4

The findings are consistent with the lexicographic results and collocate the first use of *non c'è problema* as a response marker in the time slot 1968–2001 (specifically, in 1993). At the same time, occurrences of *volentieri* and *con piacere* have been steadily found throughout the corpus from earlier stages of Italian. The relevance of this key finding lies in the fact that the presence in the corpus of *volentieri* and *con piacere* performing the pragmatic function in question confirms that the researched communicative situation is represented in the DiaCORIS, thus being an important comment on the prior frequency of use of *non c'è problema* before 1968. Excerpts (5)–(8) show the contexts of use of the three variants (bold mine).

- (5) (...) Un affare pressante non mi permetterà di tornare prima delle undici » « S'immagini, **volentieri**: sarò lieto di essere il suo cavaliere »
 (...) *A pressing business will prevent me from being home before 11* "No worries, **with pleasure**: I will happily accompany her" (Narrativa 1890)
- (6) Domani avrei bisogno da lei di una gentilezza che m'ha fatto un'altra volta. – Se posso, **volentieri**
*I will need a favour from you tomorrow, like the one you did me last time. – If I can, **gladly*** (Narrativa 1920)
- (7) Dovrai portarle sul Garda, mostrar loro San Zeno e il Castello (...) ». « **Con piacere** », fece Meneghini
You will take them to the Lake Garda, show them Saint Zeno and the Castle, (...) "With pleasure", Meneghini said (StampaPeriodica 1956)
- (8) Signora, avete qualche cosa di molto bello che si possa adattare a questa signorina?/Certo. Secondo quello che volete spendere/**Non c'è problema**
*Do you sell something really beautiful for this young lady?/Certainly. It depends on how much you are willing to spend/**No problem*** (DiaCORIS 1993, Narrativa)

The Excerpts (5)–(7) show *volentieri* and *con piacere* expressing the pragmatic function of signalling evaluation and agreement while (8) shows how such func-

tions are performed by *non c'è problema*. These findings, alongside the previous lexicographic evidence, confirm that the use of *non c'è problema* as a response marker is a case of linguistic innovation. The following quantitative investigations will establish if the marker also represents a case of language change.

4.4 The corpus analysis: Distribution from 1980 to 2017

This section presents the distribution of the three markers in the CORIS corpus, which contains texts from 1980 to 2017. This stage of the analysis aims at finding out if an increase in the use of *non c'è problema* as a response marker has occurred in contemporary Italian, which would confirm the hypothesis of a language change in Italian. Table 3 shows the results of the quantitative investigations.

The data show that the use of *non c'è problema* as a response marker has considerably increased in the most recent history of Italian while, interestingly, at the same time the use of the traditional devices *con piacere* and *volentieri* has decreased. This is evidenced by comparing the total number of occurrences in p.p.m. from 1861 to 2001 for *con piacere* and *volentieri* (0.64) with the number of occurrences of the two forms from 1980 to 2017 (0.24). Even more remarkable is the substantial increase of occurrences of *non c'è problema* across the two corpora, 0.04 p.p.m. from 1861 to 2001 versus 1.82 p.p.m. from 1980 to 2017. The findings crucially establish that a language change has occurred in the last forty years as far as the analysed use of *non c'è problema* in written Italian is concerned. The following are excerpts of *non c'è problema* retrieved from the corpus (bolding added).

Table 3. CORIS results – *non c'è problema*, *con piacere*, *volentieri*

CORIS	Non c'è problema	p.p.m.	Con piacere	p.p.m.	Volentieri	p.p.m.
1980–2017	237	1.82	23	0.18	10	0.06

- (9) “Ascolta” gli disse Neal “questa faccenda rimane tra noi, d’ accordo? Lisa, voglio dire, non firmerà queste carte” “**Non c’è problema**” rispose l’ amico
 “Listen” Neil said to him “this stays between us, all right? I mean, Lisa will not sign these papers” “No problem” his friend answered (MON2005_07)
- (10) “Stavo badando al negozio, papà te lo giuro” dice immediatamente. “Sono salita un attimo a prendere la rivista” “**Non c’è problema**, tesoro.
 “I was looking after the shop, dad, I swear” she says immediately. “I went one second upstairs to fetch the magazine” “No problem, honey” (MON2005_07)

- (11) (...) Ce la fa ? » Guardai l' orologio. Avrei dovuto partire per l' aeroporto due ore dopo. « **Non c'è problema** » gli assicurai
 (...) *Can you make it?* "I looked at my watch. I should have had to go to the airport two hours later. **"No problem"** I reassured him (MON2011_13)
- (12) L' uomo poi gli chiese qualcosa in tedesco e Marco tentò con l' italiano. « Mi serve un piccolo albergo, ma non ho prenotato ». « **Non c'è problema** »
Then the man asked him something in German and Marco tried in Italian. "I need a small hotel, but I didn't book anywhere". "No problem". (MON2005_07)

Excerpts (9)–(12) evidence the use of confirm once more the use of *non c'è problema* as a response marker; more specifically, in (9), it is used to signal understanding and to negotiate agreement; in (10) and (11), it conveys the cooperative function of showing comprehension and positive attitude. Finally, in (12), it is used to manage the interpersonal relation through support. In the following section, I will analyse the distribution of the three markers in three corpora of spoken Italian.

4.5 The corpus analysis: Distribution in spoken Italian (1965–2003)

I will now analyse the distribution of the three forms in the corpora of spoken Italian, comprising spoken dialogues from 1965 to 2003. This phase of the investigation aims to find out if and to what extent *non c'è problema* is used in spoken Italian as a response marker. The results will be particularly insightful to provide a more comprehensive picture of the degree of pragmatic change in Italian overall. The results are presented in Table 4.

Table 4. Spoken corpora results – *non c'è problema*, *con piacere*, *volentieri*

	Non c'è problema	p.p.m.	Con piacere	p.p.m.	Volentieri	p.p.m.
STAMM. (1965)	0	0	0	0	1	0.009
LIP (1990–1992)	18	36.80	2	4.08	2	0.004
C-ORAL-ROM (2000–2003)	5	16.05	0	0	0	0

The quantitative investigations are overall consistent with previous findings; no occurrences of *non c'è problema* have been retrieved in the oldest corpus (Stammerjohann), while 1 occurrence of *volentieri* confirms the representativeness of the communicative situation in the corpus. In the LIP, occurrences of *non c'è problema* considerably outnumber those of *con piacere* and *volentieri*, thus showing a clear preference of the speakers to use the innovation form over the

heritage alternatives investigated here. While *con piacere* and *volentieri* are still found in the LIP – though in considerable smaller frequency – the findings in the C-ORAL-ROM are perhaps even more relevant to the research hypothesis of this study in that only occurrences of *non c'è problema* are found. This overall further strengthens the research question if this study and proves that *non c'è problema* has evolved from being a linguistic innovation to a case of language change, both in written and spoken Italian. Excerpts (13)–(18) show the contexts of occurrence of *non c'è problema* retrieved from the corpora (bold mine).

- (13) Un'altra cosa eh io vado a Livorno, io quei quattro fogli/Ah/Glielo porto qui/
Non c'è problema
Another thing eh I am going to Livorno, those four sheets/Ah/I'll bring it here/No problem (LIP 1990–1992, F A 9 51 A)
- (14) R: allora vengo nel pomeriggio va bene
 M: prego prego **non c'è problema**
 R: *so I'm coming in the afternoon is that ok?*
 M: *sure you're welcome no problem* (LIP M A 29 90 M)
- (15) B: sì ma si possono o vendere oppure verniciare utilizzare sulla linea a quel punto le (...)
 A: certo e **non c'è problema** però (...)
 B: *right but you can either sell them or paint them use them on the line then the (...)*
 A: *sure no problem but (...)* (LIP F A 12 240 A)
- (16) B: venerdì anche all' una posso venire
 G: all' una e mezza qui chiudiamo
 B: **non c'è problema**
 B: *Friday I could make it at 1*
 G: *we shut at 1.30*
 B: **no problem** (LIP N A 9 117 B)
- (17) MAR: (...) ti fo un esempio lo consumi in tre anni lo paghi in tre anni, lo consumi in due anni in due anni lo vuoi pagare prima lo paghi prima
 FRA: Sì, **non c'è problema**
 MAR: (...) *I'll give you an example if you use it in three years you'll pay it in three years, if you use it in two, in two, if you want to pay before, before*
 FRA: *Yes, no problem* (C-ORAL-ROM ifamcv07)
- (18) ELA: Faccio fare una fotocopia e poi te lo rispedisco
 MIC: Sì, sì **non c'è problema**
 ELA: *I'll have a copy made and then I'll send it to you*
 MIC: *Sure, no problem* (C-ORAL-ROM itelpvo6)

The excerpts show that *non c'è problema* is also established as a response marker in spoken Italian; in particular, (13) and (14) evidence *non c'è problema* used to signal the cooperative function of understanding and support; in (15), the marker is also used to take the conversational floor; in (16) and (17), it signals understanding and finally, in (18), it is used to negotiate agreement. In the following section, I will discuss the results of the Fisher's exact test and the LL test in order to verify the significance of the observed results.

4.6 Fisher's exact test and Log likelihood test

The Fisher's exact test has been performed to assess if the difference in the frequency occurrence rates of the three markers is over time statistically significant within the same corpus, while the Log Likelihood test (LL) has been used to compare the difference in the occurrences' rates across different corpora. As stated in Section 3, the Fisher's exact test has been preferred over other tests of statistical significance (e.g., Chi square test) because it performs better with low occurrences (Sheskin 2011: 646).

The p-value for the Fisher's exact test calculated for the difference between the number of occurrences of *non c'è problema*, *con piacere* and *volentieri* when used as response markers in the DiaCORIS is 0.02178704 which is significant (i.e., there is a statistically significant difference between the use of these three markers over time). The difference is not significant when comparing the occurrences of *non c'è problema* in the MIDIA and the DiaCORIS (LL=1.05) thus showing that, in the period covered by the two corpora, the difference in the use of the response markers is not statistically significant. The finding is not surprising as occurrences of *non c'è problema* are only found in the latest time slot, while an unfluctuating difference has been found in the distribution of the two other markers.

When comparing the difference in the occurrence rates of *non c'è problema* between the DiaCORIS and the CORIS, the LL test scores 57.73 which is extremely significant as it means that there is less than a 0.001% possibility that such a difference may be due to chance. This also proves that a statistical significant change has occurred in the last thirty years in the use of *non c'è problema* in written Italian. The difference is also significant when comparing the last period only of the DiaCORIS with the CORIS as the LL scores 6.16. Finally, the results are also significant in spoken Italian; the LL value between the difference of occurrences in the Stammerjohann and in the LIP is also significant (LL=6.75), which confirms that, in the period covered by the two corpora, a statistically significant change has happened in spoken Italian with regard to the use of *non c'è problema*. Thus, the results provide evidence that, the use of *non c'è problema* as a response marker

is strongly preferred in contemporary Italian, at least over the two other heritage forms analysed here.

4.7 Use and distribution of *no problem* in English

About the use of *no problem* as a response marker, the OED reports:

No problem = Used to express one's agreement or acquiescence, or to acknowledge an expression of thanks (1955)

In its specific pragmatic use of response marker, *no problem* predates the same use of *non c'è problema* in Italian; the following investigations across the two historical corpora of real use English will contribute additional findings to support the research hypothesis that English may be the source language.

Table 5. Archer results – *no problem*

Archer	No problem	p.p.m.
1600–1649	0	0
1650–1699	0	0
1700–1749	0	0
1750–1799	0	0
1800–1849	0	0
1850–1899	0	0
1900–1949	0	0
1950–1999	2	0.6

Table 6. COHA – *no problem*

COHA	No problem	p.p.m.
1810–1850	0	0
1850–1900	0	0
1900–1950	0	0
1950–1960	8	0.33
1960–1970	36	1.5
1970–1980	49	2.06
1980–1990	80	3.18
1990–2000	90	3.23
TOT	263	0.65

- (19) A: “But you forget you’re not the whole show. A lot of money and a lot of jobs are riding on this pilot program. If Gatling buys, we’ve got to be prepared to offer thirteen more solid shows.”
 B: “**No problem**,” Thrasher said. “We have a hundred and sixty million shows.” (COHA, Last Angry Man, 1956)
- (20) [...] Then bring it with. Just leave the case behind.” Krofft made a face, muttered something under his breath. He opened the case and extracted a slim manila folder. “Okay?” Auberson nodded. “**No problem**. Security only says no briefcases.” (COHA, When Harlie Was One, 1972)
- (21) A: “The rubber nozzle in my kitchen sink is all cracked. You know, the kind with the switch for spraying. I want to get a new one.”
 B: “**No problem**. They’re up this way.” (COHA, Pentimento, 1973)
- (22) [...] Could we stop off at my office for just a minute?” she asked. She was breathing hard. “I didn’t have time to put a sign up to cancel my appointments.” “**No problem**,” he said. (COHA, True love, 1982)

Excerpts (19)–(22) show the use of *no problem* as a response marker; in (19), it is used to reassure the interlocutor of the absence of any difficulty in reference to a given situation; in (20), it signals understanding and expressions of positive attitude, and finally in (21) and (22), it is used to signal agreement. In both corpora, the first occurrences are found from the 50s which is in line with the OED findings and confirms that in English *no problem* predates the use of *non c'è problema* in Italian. Moreover, the frequency of *no problem* in the COHA shows a consistent increase over time, thus demonstrating the crystallization of *no problem* as a response marker. Overall, the investigations have shown positive correlations between the use of *no problem* in English and its counterpart *non c'è problema* in Italian. Such positive correlations contribute findings to the possibility that *non c'è problema* may have filled a pragmatic gap in Italian which the heritage forms would not fulfil.⁴

5. Conclusions

This article investigated the diachronic trend in Italian of *non c'è problema* when used as a response marker, i.e., to express one’s agreement and/or understanding, to manage interpersonal relations such as positive attitude, and to take the conver-

4. See for instance two similar linguistic cases already investigated in Italian; the use of *si?* as invariant follow-up (Viola forthcoming) and of *giusto?* as invariant tag in Viola (in press).

sational floor. The study built on a previous work by Radtke (1990) in which the scholar identified this device as a neologism belonging to the colloquial level of Italian and mainly used by young speakers. Here, it was argued that such a use of *non c'è problema* is no longer a case of linguistic innovation – understood as the act of a speaker which doesn't go past their community (Milroy 1992: 171) – but that in fact it represents a case of language change, i.e., it has further diffused to communities outside the innovator's (i.e., young speakers) (ibid.).

I also argued that, over time, *non c'è problema* has increasingly been used over historically preferred variants such as *volentieri* and *con piacere* which, through the use of empirical data such as historical and contemporary dictionaries and language corpora, were proven to be the heritage forms more likely to be used in similar communicative situations. Statistical significance tests have also been performed to further validate the results.

The results established that the use of *non c'è problema* as a response marker is indeed a case of language change as, thanks to the use of representative real world language resources, the quantitative investigations showed that its distribution is no longer restricted to specific groups of speakers. On the contrary, the results in the corpora samples are maximally representative of Italian as a whole and can, therefore, be generalised to the larger population. At the same time, the investigations, evidenced that the pragmatic functions once conveyed by *volentieri* and *con piacere* are, in present-day Italian, almost completely fulfilled by *non c'è problema*.

Although *volentieri*, *con piacere* and *non c'è problema* may not be fully interchangeable, by establishing that *non c'è problema* is no longer a linguistic innovation as it was found by Radtke but in fact a case of language change, this research contributes empirical findings and new insights to this body of knowledge. Future studies could for example analyse the use of *non c'è problema* in contrast with other heritage forms, as well as synchronically in comparison with other close expressions (e.g., *figurati*, *ma certo*, *non si preoccupi* and similar) and use this study's findings to draw comparisons and further enhancing this area of investigation.

Finally, the study explored the hypothesis that positive correlations may exist between the use of *non c'è problema* and the English expression *no problem*. To this purpose, the diachrony of *no problem* was also investigated over historical English resources. The results confirmed that the use of *no problem* as a response marker predates the same use of *non c'è problema* in Italian. Although such positive correlations are not sufficient to establish a causation relationship between this case of pragmatic language change in Italian and an influence from English, the research nonetheless contributes empirical findings and new insights to the study of both language change in Italian and Italian in contact with English. Future studies could focus on investigating other potential languages as sources

of influence, as well as other languages in contact with English to explore similar attested phenomena so as to contribute more findings and further enhance this body of knowledge. Such an investigation would also shed light on the possibility that *non c'è problema* may have filled a pragmatic gap in Italian which the heritage forms would not fulfil.

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