

# A Corpus-Pragmatic Approach to Negation in Electoral Tweets

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# 5. A Corpus-Pragmatic Approach to Negation in Electoral Tweets

Elena Albu and Francesca Capuano

#### 1. Introduction

The extensive use of Twitter to serve political agendas has led to the emergence of a new type of political discourse in the form of political tweets. Characterised by salient textual and discursive features, political tweets have led to a reassessment of the traditional division between spoken and written language, and a re-evaluation of political discourse. The analysis of the constructional strategies and interactional functions of negation may indicate whether the balance is tipped towards the prevalence of oral or written features in political tweets and whether the formal register of political discourse has generally shifted to a more flexible and colloquial form, particularly during electoral campaigns.

This paper aims to discuss the way in which negation is used in the political tweets sent by the UK candidates during the European Parliamentary Elections held in May 2014. Although negation in English is usually represented by *not*-negation and *no*-negation (Biber et al., 1999; Tottie, 1991), we distinguish between *no*-negation, *not*negation and *n't*-negation as separate negative categories (for a similar approach, see Xiao & McEnery, 2010). This tripartite division is ascribed to the textual and discursive properties of tweets, thus better serving the purposes of our investigation. This study will help identify whether the negative constructions in the dataset are illustrative of spoken or written language and will point out how certain features of these constructions contribute to shaping the individuality of political tweets. These research questions are intended to cast light on the on-going debates about the oral vs. written features present in

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tweets, and about the colloquialisation of political discourse in the digital environment<sup>1</sup>.

This paper is an exploratory study and uses the tools and methods provided by corpus pragmatics (Aijmer & Rühlemann, 2015; Jucker, 2018; Romero-Trillo, 2008; Rühlemann & Aijmer, 2015). The first part of the analysis will take a contrastive quantitative approach, complemented in the second part by qualitative analyses of the collocates found in the immediate surrounding context. Particular attention will be paid to the prevalence and distribution of *no*-negation, *not*-negation and *n't*-negation. By means of syntagmatic patterning, we will carry out two types of collocational analyses: we will analyse the top ten token collocations and the top four part of speech collocations for the negators no and not with a span of one word to the right and to the left. These will be complemented by contextual analyses, which are meant to disambiguate between the multiple values of the negators. By contrast, the contracted form n't cannot be used independently. We will, therefore, present the overall distribution of the auxiliary and modal verbs to which n't is attached and carry out contextual analyses of the lexical verbs which combine with the auxiliaries, modals and n't.

The paper is structured as follows. In Section (2), we will briefly present the main features of tweets, in general, and on political tweets sent during electoral campaigns, in particular. Section (3) is dedicated to the discussion of the three categories of negation: *no*-negation, *not*negation and *n't*-negation. In Section (4), particular attention is paid to the data analysis, with an emphasis on how the relevant data have been retrieved. For *no*-negation and *not*-negation, we will present the overall frequency of the negation categories and we will analyze the top ten token collocates and the four most used parts of speech, with a span of one word to the right and to the left. For *n't*-negation, we will present the overall distribution and analyse the auxiliaries and modal verbs *n't* attaches to. Section (5) concludes the paper.

#### 2. The linguistics of tweets

The extensive use of the Internet and computer technology has led to the emergence of more types of digital communication and discourse genres (Davis & Brewer, 1997; Panckhurst, 2006; Thurlow & Mroczek, 2011; Bou-Franch & Garcés-Conejos Blitvich, 2019). The messages sent on the Twitter platform, coined as tweets, are one such example. In comparison to other forms of digital communication, tweets display important changes and significant variation in the way in which language is structured and used. In what follows, we will briefly present the formal and discursive features of tweets and then indicate how they shape the electoral political discourse in the digital environment.

Tweets are a form of multimodal communication, where typed, oral and visual elements combine in novel forms. Although tweets are mainly text-based, images, audio elements and videos can also be used, hotlinked or embedded and displayed inline (Wikström, 2017). Generally limited to no more than 140 characters, the body of a tweet may also contain communicative operators: @-mentions, retweets (RT), hashtags (#) and hyperlinks (http://). Having developed an important number of pragmatic functions, the operators compensate for the lack of any visual or auditory information, such as body movement, facial expressions, eye gaze, or intonation and pitch of the voice (Scott, 2015; Einspanner-Pflock et al., 2016). In addition, other Twitter-specific strategies have been developed: non-standard spelling conventions, alternate spellings of words, special orthography and the creative use of punctuation, acronyms, emoticons and emojis (Androutsopoulos, 2015; Knobel & Lankshear, 2008). Other techniques, such as abbreviations, clippings, orthographic reduction, shortenings ellipsis and deletion of pronouns, are used as a means of linguistic economy (Ferrara, Brunner, & Whittemore, 1991; Werry, 1996). However, not all forms are necessarily intended, as some spelling errors or the utilisation of non-standard punctuation and upper case may also be the result of the spontaneous nature of digital communication (Sims, 1996).

Tweets are often considered a form of written discourse, which contains oral features or have an oral discursive style (Soffer, 2016; 2019). In this regard, different labels have been suggested to describe the language on Twitter: 'spokenlike', a 'chatty' writing environment or a part of 'Netspeak', which relies on characteristics of both speech and writing (Crystal, 2006; Kern, 1995; Wikström, 2017). Some of the features that have been attributed to orality are: lexical substitutions, where the phonetic sound of a single letter or digit may replace entire words or repetitions of letters, filled pauses (uhm, uh..), onomatopoeic signs, the strategic uses of punctuation, and the use of emoticons and emoji (Soffer, 2019; Yus, 2011; 2014). Typographic playfulness, flexibility and multimodality are usually employed to establish a dialogical atmosphere (Jovanovic & Van Leeuwen, 2018). In comparison with face-toface conversation, there are no turn transitions, silences, overlappings, interruptions, or interactional combinations such as adjacency pairs and latched turns on Twitter. The number of digressions and hesitations is usually reduced, and if they are used, they are pragmatically loaded. In addition, despite their written format, tweets are said to be registered psychologically as having the temporal immediacy of oral exchanges, which has led to their labelling as 'textual verbal exchanges' (W. Ong in Kleine & Gale, 1996).

The interaction on Twitter can be described as a form of conversation (Zappavigna, 2012), but compared to face-to-face conversation, online conversations often shift from the prototypical dyadic structure to a multi-party configuration, allowing the user to participate in an open-ended, multi-user, one-to-many conversation (Wikström, 2017). The tweets are usually public, the messages becoming instantly visible to other users, especially the sender's followers. Even if the messages are sometimes directly addressed to a user, they can be seen by others who can also take part in the interaction by means of a relevant hashtag. If different forms of Internet communication have been initially described as either being synchronous or asynchronous (Hirotani, 2009; Munneke et al., 2007), tweets are characterised by a mixed temporality. Herring (2008) suggests the term of 'semisynchronous', while Wikström (2017) uses the notion of 'heterochronicity' to talk about the simultaneous presence of several different temporal logics, i.e., they are both interactions in the present and archived artefacts.

Political talk has quickly adapted to the digital environment and to the novel production conditions and, as a result, a new form of political communication has emerged in the form of political tweets. Political tweets are powerful communicative tools, especially during electoral campaigns, and have been greatly used during parliamentary, presidential, congressional, federal and local elections in numerous countries (Conway et al., 2012; Gaffney, 2010; Golbeck et al., 2010; Larsson, 2012). For instance, the 2014 European elections are considered to be 'the Twitter elections' due to the extensive use of the online platform in all 28 member states (Smyrnaios, 2014).

Political discourse is going through a process of 'hybridisation', as a result of the digital environment in which it is used (Moschini, 2010). The structure of the electoral talk has undergone a major change: the traditional one-way oriented electoral speech has shifted to a multi-party configuration and a conversational structure, which invites both the senders and the receivers to interact. The digital medium has shortened the distance from the audience, granting them the possibility to interact with and get immersed in the campaign. In this regard, the

political tweets sent during electoral campaigns have been labelled as 'electoral' or 'collective' conversations (Moschini, 2010), where both the public sphere and the private dimension are combined.

#### 3. No-negation, not-negation and n't-negation

Negation is a complex linguistic phenomenon, with multiple forms of expression and various discursive functions. It can be expressed by employing negative markers, *n*-words, negative affixes and lexical words. It is also associated with discourse functions, such as denial, contradiction, rejection, refutation, disagreement and irony, to name a few. Although negation is often associated with negativity, the two notions do not overlap: not every negative form leads to a negatively connoted structure and not every negatively connoted structure is expressed by means of a negative form (for a comprehensive overview, see Horn & Wansing, 2017; Horn, 2001).

The typical ways of expressing negation in English are the negative adverb *not* (including the inflected bound morpheme n't) and the particle *no* (including the *n*-words *neither*, *never*, *nobody*, *none*, *no one*, *nothing*, *nor*, *nowhere*). This formal distinction has led to the classification of negation in *not*-negation and *no*-negation (Biber et al., 1999; Tottie, 1991). The negator *not* and the contracted form n't are usually used in the verbal phrase. However, *not* can also be part of non-verbal negative structures, i.e., when it is associated with quantifiers, adverbs, determinatives, degree expressions, prepositional phrases or coordinating structures. There are cases when the structures with *no* and the structures with *not* are used in alternation or have little difference in meaning. If they are grammatically similar, they display pragmatic and stylistic differences: for instance, *no* followed by a noun makes the negation stronger in comparison with *not* followed by the indefinite *a* or *any*.

Following Xiao and McEnery (2010), we distinguish between *no*-negation, *not*-negation, and *n't*-negation as separate categories. We consider that the tripartite division captures better the uses of negation, in line with the textual and discursive features of tweets. From a usage-based perspective, negation is globally more frequent in spoken language than in written texts (Tottie, 1991), and more prevalent in conversation when compared to fiction, news and academic texts (Biber et al., 1999). Additionally, different negative constructions are considered representative of either spoken or written language, formal or informal register, and dialogical or monological structure (Palacios Martinez,

1995; Roitman, 2017; Silvennoinen, 2017; Xiao & McEnery, 2010). Usage differences are found between the full form *not* and the contracted form *n't*: for instance, there is a preference for *not* in writing and for *n't* in spoken language (Xiao & McEnery, 2010). Furthermore, the contracted form *n't* is preferred in conversational contexts, unless there is a clear reason (such as strong emphasis) to use the full form. The contracted form is a marker of informality, and is not preferred in writing or in solemn contexts. When it is used, it increases the level of familiarity and accessibility of the information conveyed. With these findings in mind, before embarking on the analysis of *no*-negation, *not*-negation and *n't* negation in our corpus, we formulate the following assumptions:

- the higher the frequency of negation overall, the more the tweets show similarities with spoken language;
- the higher the frequency of *not*-negation, the more the tweets show similarities with written language;
- the higher the frequency of *n*'*t*-negation, the more the tweets show similarities with spoken language and display an informal style.

## 4. Data analysis

#### 4.1. Methodological aspects

This investigation is part of the international project "Twitter at the European Elections: A Comparative International Study of the Use of Twitter by Candidates at the European Parliamentary Elections in May 2014". The project aimed to compare Twitter use during the European Elections in several countries: Belgium, France, Germany, Italy, Spain and the UK. All the tweets sent by the candidates in these countries, along with the messages addressed publicly to them and major hashtagrelated conversations associated with the elections in each country were gathered (see Brachotte & Frame, 2015; Frame et al., 2016). Over 50 million tweets were collected in total within a time span of one month: three weeks prior to the elections and one week after the election date. The corpus under analysis comprises of the tweets sent by the UK candidates running for the European Parliamentary Elections in May 2014. A total number of 72,859 tweets (8,346,373 words in total, including all the retweets) were collected from all the 309 Twitter accounts identified as belonging to the UK candidates from 32 national political parties.

The hybridity and medium-specific properties of tweets (the nonconventional use of punctuation, the lack of capitalisation, the alternate ways of spelling the negative particles and the use of ungrammatical structures), the size of the corpus under investigation, and the exploratory nature of the study have posed challenges to the retrieval of the relevant data, rendering the simple automatic searches based on criteria of form more difficult. To retrieve as many instances of no, not and n't as possible, we first automatically split all the tweets by whitespaces and then defined category-specific steps within these substrings. For *no*-negation, we assumed that, once lowercased and deprived of any non-alphanumeric word character, the corresponding strings would be proper instances of no (except when it was part of the expression no one or part of a nickname). The remaining instances were inspected by hand, and in case of uncertainty, we referred back to the whole tweet. For instance, we eliminated the instances when no was used as an abbreviation for number one (e.g., no.1). The possible misspelling or alternate expression of the negative particle were also manually checked and included in the final count (e.g., noooooooooo, NO2EU). The same procedure was followed for retrieving the instances of notnegation. The presence of *nt* and *not* with additional *o* characters (e.g., noot, nooot, etc.) as possible misspellings or alternate expressions of not were also inspected manually and included in the final count.

In contrast, the contracted form n't is always attached to an auxiliary or a modal verb. We retrieved all the unique substrings that, once lowercased, contained n't, or the potential alternatives n't, n't or nt. Due to the big number of English words that include the substring nt, we restricted the search to the substrings that only ended in nt or contained at least one of the auxiliary or modal verb + n't tokens found in the previous step as well as any hashtag containing nt in any position in the tweet. Again, we always referred back to the whole tweet if needed (e.g., for *ant* we kept only the instances where it was used as an alternative for *ain't*).

#### 4.2. Overall frequency

The overall frequency comprises all the tokens that belong to one of three negation categories. Overall, 17.18% of the tweets in the corpus contain at least one negative instance, as shown in Figure 5.1. Regarding the overall counts per category, there are 5,230 total instances of *not*, 5,234 total instances of *n't* and 3,986 total instances of *no*, as shown in Figure 5.2.



Figure 5.1. The overall distribution of negation.



Figure 5.2. The distribution of *no*-negation, *not*-negation and *n't*-negation.

From a contrastive perspective, *not*-negation and *n't*-negation seem to have similar distributions (36.23% vs. 36.21%), while *no*-negation is less represented (*no* alone represents approximately 19%, while *n*-words represent approximately 9%). If we compare the instances of *not*-negation and *n't*-negation (72.44% in total) with *no*-negation, the latter is less numerous in our corpus. The similar distributions of *not* and *n't* do not allow us to draw any conclusions regarding the first assumption about the spoken vs. written features of tweets. Nevertheless, the overall frequency does not imply that the negative constructions have the same function. The contextual analysis will reveal whether *not*-negation and *n't*-negation are used interchangeably or whether there are finer-grained differences that can be drawn between them.

Given the textual and discursive features of tweets, we have added to the general counts all the instances of the negative markers, including their presence in longer strings and hashtags, and their combinations with both conventional and non-conventional punctuation marks. The non-conventional use of punctuation marks may be a typing mistake, but it could also be a strategy used in the attempt to gain more space, given the limitation of 140 characters. Table 5.1 shows the overall counts for *no*-negation and *not*-negation.

Non-conventional spellings, non-standard uses of punctuation marks and inconsistency with standard capitalisation have led to variation among the forms of the negative markers. To illustrate, the standalone counts of no (1,338 instances of no, 615 instances of No and 91 instances of NO) are not very faithful to the traditional punctuation and spelling conventions: no is sometimes used in initial position, whereas No is sometimes found in the body of the tweet. The particle no is multifunctional, and only after analysing the contexts in which the particle is used, will we be able to accurately tell when no is used as a response particle or as a determiner (expressing both negation and quantification in a noun phrase structure).

NO		NOT	
no	1338	not	3786
No	615	Not	568
NO	91	NOT	251
with punctuation	444	with punctuation	291
in hashtags	105	in hashtags	180
longer strings	151	longer strings	161
total	2744	total	5238

**Table 5.1.** Overall counts for *no*-negation and *not*-negation.

Similar to *no*, there is also variation among the instances of *not*: the instances of stand-alone *not* consist of 3,786 instances of *not*, 568 instances of *Not* and 251 instances of *NOT*. We could also identify one instance of *nt* used as *not*, as shown in example (1):

(1) Hd 5k more voted in 2009 we wld nt hv hd 2 endure 5 yrs of bnp hate n portrayal of UK as intolrnt anti-islamic soc Pls dnt let UK dwn again

As previously mentioned, the contracted form *n*'t was found to have alternate spellings: either different symbols are used for the apostrophe or the characters are written together (*nt*). In comparison with *no* and *not*, the bound inflectional form *n*'t can only be part of longer strings, represented by the prototypical grammatical instances (*don't, can't,* etc.), non-standard instances (*dont, cant,* etc.) or hashtags (*#itslikehedoesntevenknowme, #DontVoteUKIP, #cantbeliveaword*). In sum, there are 4,985 instances of *n't*-negation and 249 instance of *nt*-negation. In line with the conventions of use, the hashtags can only contain the form *nt* (31 such instances were identified). A total number of 4,903 tweets have been retrieved.

#### 4.3. Collocations

This subsection discusses the token collocations of the negative markers no, not and n't. For simplicity reasons, we adopt a general view of collocation by which we intend any corresponding token identified by the tagger, be it a grammatical unit, a hashtag or punctuation, with a span size of one to the left and to the right. Punctuation marks are not usually found among the inventory of collocates but we have deemed their inclusion necessary because they are usually employed intentionally and strategically to compensate for the absence of other features. Based on the top neighbouring elements to their right and to their left, it is possible to formulate general assumptions about their behaviour and combinatorial preferences. This is the first step in discriminating between their distinct grammatical properties and multiple pragmatic values. However, only by means of a through contextual analysis can we tell with precision how these negators are grammatically employed and what their pragmatic values are. This is, however, beyond the aims of this paper.

**No-negation.** We have made an inventory of the first ten collocates and analysed the recurrent combinations with a span size of one word to the left and to the right. Table 5.2 shows the top ten collocates of *no*, together with the corresponding counts and percentages:

Ranking	-1 NO	Counts	%	NO +1	Counts	%
I	•	259	10.49	,	160	6.38
2	,	162	6.56	•	86	3.43
3	have	118	4.77	to	69	2.75
4	is	105	4.25	longer	69	2.75
5	:	94	3.80	doubt	48	1.91
6	-	72	2.91	more	41	1.63
7	?	52	2.10	wonder	40	1.59
8	"	48	1.94	idea	39	1.55
9	with	45	1.82	!	35	1.39
10	and	44	1.78	other	32	1.27

**Table 5.2.** Counts and percentages of the top ten collocates of *no*.

From a comparative perspective, the top ten collocates represent only 25% of all the instances of *no* to the right, whereas to the left they represent 40%. This shows that there is more variation to the right, indicating that *no* is being used in combination with more elements to the right than to the left. To the right, *no* is more frequently followed by punctuation marks, either commas or full stops, which suggests that the particle is most likely used as a response particle, i.e., being part of an on-going interaction between more users. It may be used to answer a question or to correct a mistaken belief or a previous statement. *No* is usually used in initial position, directly addressing previous tweets and users, as illustrated in (2), but it can also be used at the end of the tweet to refute a specific statement, as shown in (3):

- (2) @DavideDenti @simpatiku\_gj @savajanjic @ruben\_nyc No, it's a fact. It's PRN uni land now, sure – but was previously Yugoslav state property.
- (3) @HarryWKM My views are based on a positive view of humanity. Western freedoms important. And no, I didn't.

The imperative value of *no* in combination with the preposition *to*, used as an incentive to take some action, is also among the top collocates, as illustrated in examples (4) and (5). Other patterns we could identify are the comparative constructions *no longer* and *no more* and

the idiomatic phrases and formulaic expressions *no doubt, no wonder*, and *no idea*.

- (4) UKIPer Bobby Anwar. Attacked by Labour supporters who called him Kafir. Say no to political violence. Vote UKIP.
- (5) RT @pippabartolotti: Say NO to the privatisation of the NHS and #votegreen2014 https://t.co/ZyNSCqTnsy
- (6) #bbcaq well said the LD spokesperson no compromise on racism or scaremongering or xenophobia
- (7) RT @sturdyAlex: The problem with Farage claim "it's a witch hunt" is: no hunting is required. One just lifts any Ukip rock & they scuttle out like roaches

To the left, *no* collocates even more often with punctuation marks, but the values are different: after a full stop, a colon or a dash, *no* is most likely a quantifying determiner in a nominal phrase, used in negative explanations or additional comments, as shown in (6) and (7). The verbal tokens *have* and *is*, followed by the coordinating conjunction *and* and *but* and the preposition *with* are also among the top collocates. Although both verbal forms *have* and *is* are in the present tense, they show grammatical differences in the choice of the grammatical subject. Restricted only to the third person singular, *is no* combines mostly with the pronoun *there*, being part of the negative existential expression *there is no*. In contrast, as a result of the great variability of the items used to the right of the collocation, no particular pattern seems to stand out for *have no*. Taken together, the particle *no* has weak recurrent patterns as a result of the great variability among the elements used.

**Not-negation.** Looking at the top combinatorial preferences of *not* in Table 5.3, to the left, the collocates are divided mainly into two types: punctuation marks and primary and modal auxiliaries. This leads to a first division between the cases when *not* is part of the verb-phrase negation, and when it is part of non-verbal negation. Using *not* after commas, full stops and colons is an indication that the negative adverb is part of non-verbal negations, a different constituent being focused in order to give prominence to the associated piece of information.

The examples below illustrate a complex negative structure, consisting of a rejection segment (X) and a correction segment (X'). In examples (8), (9), (10) and (11), the negative segment (X) is preceded by the corrective segment (X') as part of the negative structure [(X') not (X)], whereas in (12), the order of the segments is reversed, being part of the structure [not (X) but (X')].

Ranking	-1 NOT	Counts	%	NOT +1	COUNTS	%
I	,	499	10.31	а	294	6.02
2	is	369	7.62	the	210	4.30
3		196	4.05	to	189	3.87
4	are	191	3.94	just	121	2.47
5	will	113	2.33	be	120	2.45
6	do	II <b>2</b>	2.31	sure	II <b>2</b>	2.29
7	I'm	II <b>2</b>	2.31		65	1.33
8	:	107	2.21	have	63	1.29
9	but	103	2.12	fear	58	1.18
10	did	93	1.92	British	56	1.14

**Table 5.3.** Counts and percentages of the top ten collocates of *not*.

- (8) RT @james\_WTF: @JulianFoster8 @ThomasEvansUKIP when I've heard Farage speak, I feel like I get a human answer, not a politicians answer.
- (9) @stamfordstu sure learning as I go....but fine thank you x I have always been man enough for a fair fight, not a twisted one.
- (10) @Magee\_\_ If you read the quote, it's tackling Islam in terms of society. Mohammedism. Not individual muslims.
- (11) Self funding. Not union or business funded. http://t.co/OIwUAlwgLX  $\rightarrow$  not initiated by previous lines
- (12) 'And so, on 22 May I will be voting for the Green party, for the first time. Not as a default choice, but as a... http://t.co/ySiqITrj6M

These are constructional strategies of contrastive negation (McCawley, 1991; Silvennoinen, 2017), which are a type of metarepresentational negation (Albu, 2012a; 2012b). The constituents in the scope of negation represent discourse-old information, while the corrected information represents discourse-new information. The negative segments (*not a politicians answer, not a twisted one, Not individual muslims, Not union or business funded, Not as a default choice*) reject some statements, which were either previously mentioned or implicitly recovered. In other words, the negative construction renders the negated information discourse-old information. Taken together, [(X') not (X)] and [not (X) but (X')] accommodate the negated information, which was probably not part of the hearer's knowledge before. Even though

both structures have the same structure - rejection of some propositional content and correction - the order in which the segments are used may have different motivations. Although the typical construction is [not (X) but (X')] with the negative segment on the first position, the second pattern with negation on the second position [(X') not (X)] is very well represented in our dataset. It appears to be an efficient and more economical construction with a strong argumentative force. It may, however, be more costly, demanding more cognitive effort in retrieving what the negated information represents and to whom it may be attributed. These constructional forms are employed more frequently in speech than in writing, as conversations are usually dominated by asyndetic clause combinations (Silvennoinen, 2017). Similarly, no corrective conjunctions are used in the corpus, and additionally, there does not seem to be much consistency at the level of the punctuation mark used, as the negative segment can be delimited by commas, full stops and dashes. It can, therefore, be speculated that the extensive use of these negative constructions represents a mark of spoken language and conversational style.

When preceded by punctuation marks, *not* can also be used in a less conventional way, as part of an elliptical construction in which the main verb is omitted: *not sure about* standing for *I am not sure about, not cool* standing for *it is not cool, not the way* standing for *this is not the way*, and *not interested* standing for *I am not interested*, as shown in (13-16). This telegraphic way of expression in which the verbs, the first-person pronouns and the discourse markers are omitted may be a strategy employed in the attempt to recreate spoken language and to shift away from the formality imposed by the traditional political discourse:

- (13) About to start a public meeting in Trafford. Not a bad turnout for a rainy match night. With @paulnuttallukip http://t.co/hA9pggq5HI
- (14) OMG Michael Heseltine has the same curtains as mine! Hmm, not sure if that puts me off them...
- (15) RT @Sue27Gillett: UKIP's @paulnuttallukip getting ever louder shouting the odds on@BBCLancashire debating with @SHKMEP. Not the way to get...
- (16) Morning troll message: I don't read you, not interested, we're winning

The negator is also associated with different inflections of the verb *to be* (*is not, are not, I'm not*), the modal *will* and the auxiliary *do*. Looking at the combinatorial patterns to the right, the verb *to be* is used as a copula verb, as shown in (17) and (18). In contrast, *will not* and *do not* usually require a lexical verb to the right, except the cases when they

are used at the end of the utterance. *Will not* is used in combination with more elements, but the recurrent patterns contain the verbs *to be* and *stop*, as illustrated in (19) and (20). *Do not* can be used in the indicative mood, situation in which it collocates with lexical verbs such as *want*, *have*, *understand*, *think*, or in the imperative mood, meant to convey various requests or commands, as shown in (21). *Does not* forms weak collocations patterns with *have*, *mean* and *get*.

- (17) People NEED 2remember that this election is not a referendum. A vote for UKIP is not a vote 2leave Europe. Remember what ur voting 4 #bbctw
- (18) @mickburkesnr That may well be true but privatization and internal market is NOT the way to fix it.
- (19) @HouseOfTraitors @bencorde You will not be disappointed!!!!!!!!!
- (20) People of #Chester thank you for your support. We will not stop here! We want to represent you at every level! Join the people army! #UKIP
- (21) I grew up in Oz where voting is compulsory; I always took it seriously; please DO NOT waste your vote #EUelections2014 #vote @ NHAparty 22/5

When looking at the distribution to the right, the first positions are occupied by the indefinite and definite articles, indicating a nominal preference, to the expense of verbs, which are less frequently used. *Be* and *have* are among the top collocates, being most likely preceded by modal verbs (*will not, may not, should not, could not, would not*). An interesting collocational pattern is represented by *not* followed by full stops. In addition to its common value, i.e., used in combination with the subject and the auxiliary verb to reinforce negation, *not* can also be used as an anaphoric pro-form for a negative clausal complement, marking non-verbal negation in structures like *I'm afraid not, I suspect not, Thought not*, as illustrated in (22) and (23):

- (22) @GoofyNewfie2012 Sour grapes!, Interesting in discussing the issue and not the personalities? Thought not!
- (23) @kvmarthur @B\_HQ it may be, but will Ukip agree? I suspect not.

All in all, there is great variation among the elements used, which leads to a lack of recurrent expressions and repetitive constructions. The use of the present tense is predominant, while past tense seems to be deficient. Negative descriptions and negative evaluations with mainly mental verbs anchored in the present appear to be preponderant. This is not a surprising finding if we consider the context in which the tweets are sent. Unexpectedly, the distribution of *not* in verbal (approximately 52%) and non-verbal negations (approximately 48%) appears to be almost equal among the top ten collocates.

**N't-negation.** In comparison with the negative markers *not* and *no*, the bound inflectional form n't is always attached to primary or modal auxiliaries. Instead of the top ten collocates to the right and to the left, we present the distribution of the contracted form n't, including the alternative spelling *nt* in combination with the verbal base, as shown in Table 5.4. The merged lemmas stand for all the instances of both n't and *nt* tokens, while the other columns (\**n*'t tokens and \**nt* tokens) show their frequencies separately. The lemmas are illustrated in the table with capitalised letters, but the counts include tokens with both upper and lowercase letters. To show their general prevalence, the percentages include all the *n*'t and *nt* instances (5,234 in total).

The data show that there is a strong tendency to use n't to the expense of non-conventional forms (which represent only 3.98%). We could also identify alternate spellings of some auxiliary verbs, but they are isolated occurrences: dn't, havn't, din't, sin't, dsn't, musn't, arn't, cudn't, cdn't, wldn't, wdn't. Overall, the most used auxiliaries are don't, didn't, and doesn't, followed by isn't, haven't, aren't, and wasn't, whereas the most used modal verbs are *can't*, won't, couldn't, and wouldn't. From a comparative perspective, the auxiliary do, including all its inflected forms, represents approximately 55% of the data, the modal verbs altogether represent approximately 27%, and the auxiliaries be and have represent approximately 13% and 6%, respectively. If one looks at the stems to which n't attaches, don't is the most used form, representing 38.8% of the entire category of *n't* negation. The second most used verbal base is the modal verb *can't*, but the latter is considerably less used. Don't is widely employed, either as an auxiliary in the indicative mood, as shown in (24) and (25), or as part of an imperative structure, as illustrated in (26) and (27). When used in the indicative mood, it further correlates to the left with subjects such as: I (282 instances), you (178 instances, including u), we (141 instances), they (82 instances), and *people* (49 instances, including *ppl*). There are also cases, when the subject is omitted (I in particular), contrary to the grammatical rules in English. In line with the findings in Werry (1996), the deletion of pronouns may be a strategy of linguistic economy.

- (24) @Danjam2014 wrong is wrong and don't think labour are any better. They smear and sneer at the British worker
- (25) RT @Aerliss: @PiratePUKMaria @PiratePartyUK why ARE people wanting to clone animals for food? Don't know enough to make informed decision ...

<i>n't</i> -negation.
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Table 5.4.	Overall counts a:	nd percent	tages for	'n't-negation.					
Ranking	N'T lemmas	Counts	%	*N'T tokens	Counts	%	*NT tokens	Counts	%
I	DON'T	203 I	38.80	don't	1915	36.58	dont	116	2.21
4	CAN'T	615	11.75	can't	59 I	11.29	cant	24	0.45
6	DIDN'T	458	8.75	didn't	442	8.44	didnt	16	0.30
4	DOESN'T	38т	7.27	doesn't	363	6.93	doesnt	18	0.34
5	T'NOW	368	7.03	won't	339	6.47	wont	29	0.55
6	ISN'T	327	6.24	isn't	322	6.15	isnt	5	60.0
7	HAVEN'T	208	3.97	haven't	200	3.82	havent	8	0.15
8	COULDN'T	179	3.4I	couldn't	тζт	3.26	couldnt	8	0.15
6	WOULDN'T	141	2.69	wouldn't	136	2.59	wouldnt	5	0.09
IO	AREN'T	131	2.50	aren't	130	2.48	arent	Ι	10.01
II	WASN'T	131	2.50	wasn't	128	2.44	wasnt	С	0.05
12	SHOULDN'T	78	1.49	shouldn't	73	1.39	shouldnt	5	0.09
13	HASN'T	74	1.41	hasn't	73	1.39	hasnt	Ι	10.01
14	AIN'T	41	o.78	aint't	36	0.68	aint	5	0.09
1 S	WEREN'T	30	0.57	weren't	30	0.57	I	I	I
16	HADN'T	29	0.55	hadn't	27	0.51	hadnt	4	0.03
Iγ	<b>T'NTSUM</b>	ΙΟ	0.19	mustn't	IO	0.19	I	I	I
18	SHAN'T	8	0.15	shan't	5	0.09	shant	6	0.05
20	DAREN'T	Ч	0.03	daren't	ч	0.03	I	I	I
21	NEEDN'T	Ι	10.0	needn't	I	10.0	I	I	Ι

- (26) It's election day! Your vote counts use it, don't lose it! #VoteGreen2014 for a fairer, more sustainable future. http://t.co/XwPgbxA180
- (27) Don't trust #DodgyDave on May 22nd https://t.co/FL7UNewSRA

As expected, to the right, *don't* is followed by lexical verbs: *forget* (192 instances), want (111 instances), have (110 instances), know (101 instances), think (87 instances), let (80 instances) and vote (71 instances). Don't forget further collocates with the preposition to (139 instances), followed either by the verb vote (52 instances) or similar expressions, e.g., go and vote, use your vote, post your postal votes, get out and vote, cast your vote, register to vote, have your say and vote. There does not seem to be a preference for the subject with which don't *want* combines, because the distribution of the pronouns is similar. In contrast, the verb *think* shows a preference for the first-person singular pronoun (I don't think), 63 instances being identified in total. Our observations are in line with the findings in Iyeiri, Yaguchi and Baba (2015), who found that the mental verbs know, think and want were frequently used in the press conferences from the White House. Biber et al., (1999) further highlighted that mental verbs (e.g., forget, know, mind, remember, think, want, and worry) are more likely to collocate with negation in conversations. If we compare the same mental state verbs used in combination with the full form not, the recurrent patterns change. We could find only one instance of do not forget, 12 instances of do not want, 11 instances of do not have, two instances of do not know and three instances of do not think and do not let. These findings endorse the observation that the association with mental verbs is especially strong with the contracted form n't(Biber et al. 1999).

The first ten collocates of n't show a preference for the auxiliary do compared to the collocates of not: don't represents approximately 39% of the data, whereas do not represents only 2.3%. This preference is contrary to the collocational tendencies of the token collocates of not, which showed a greater preference for the verb be. Another difference is found in the use of the modal verbs. There are four modal verbs among the first ten collocates of n't (can't, won't, couldn't, and wouldn't which represent almost 25%), whereas only the modal verb will is found among the top ten collocates of not (2.33%). There is also a preference for past tense among the n't-negation (didn't), tense which was less employed with the full form not.

In sum, if initially *not*-negation and *n't*-negation showed similar distributions, the analysis has revealed that *n't*-negation is the predominant form of verbal negation. This further indicates that the full form *not* and the contracted form *n't* shows that they are not used interchangeably, but instead they form different patterns and have distinct combinatorial preferences.

#### 4.4. Part-of-speech collocations

This subsection is dedicated to the analysis of the tokens that belong to the same part of speech. We used the off-the-shelf English Part-Of-Speech (POS) tagger, especially created for Twitter data (Gimple et al., 2011), and retrieved the four most frequent parts of speech employed to the right and to the left of the negative markers.

*No*-negation. Table 5.5 illustrates the main tagsets for *no*-negation in the corpus. The distribution to the right reveals novel patterns. In contrast to the information in Table 5.2, where the top collocates were mainly idiomatic expressions, the part of speech with which *no* collocates the most is represented by nouns. Within the noun category, the idiomatic phrases and formulaic expressions (*no doubt, no idea, no way, no point, no problem, no time, no thanks*) represent approximately 20%. This means that the nouns are more numerous, but they are also very dispersed and thematically widespread, leading to a few recurrent patterns. In addition, there is a big numeric difference between the parts of speech ranked first and second, which indicates that there is a strong tendency towards employing *no* in nominal structures.

–i POS NO	Counts	NO POS +1	Counts
Punctuation	741	Nouns	1333
Verbs	603	Punctuation	408
@ mentions	381	Adjectives	207
Prepositions and sub. conjunctions	157	Verbs	144

Table 5.5. Distribution of the main parts of speech with no.

To the left, the first two parts of speech that collocate with *no*, punctuation marks and verbs, corroborate the previous findings. The contextual analysis has revealed that the most frequent verb forms used in combination with *no* are the verbs *be* and *have*, followed by the verbs *say* and *vote*. Although they are not a traditional part of speech, @-mentions are also greatly used. This highlights the dialogical and conversational structure of tweets, indicating that the tweet is usually sent in response to previous messages and directly addressing particular users.

Regarding punctuation, if we compare the distribution of the punctuation marks to the right and to the left, *no* is more often preceded than followed by punctuation and the punctuation marks are more diversified to the left. The distribution of the punctuation marks to the left is presented in Table 5.6.

Punctuation + NO	Counts	NO + Punctuation	Counts
full stops	244	commas	126
commas	157	full stops	59
quotation marks	85	exclamation marks	33
dashes	68	ellipsis	20
question marks	47		
exclamation marks	26		

Table 5.6. Punctuation marks used to the left and to the right of no.

Using *no* after full stops indicates that it is used in initial position and that the tweet is made up of more utterances. As previously anticipated, the contextual analysis has revealed that *no* after a full stop is mostly used as a quantifying determiner in order to negate the noun phrase. Rarely does *no* appear in a fully formed utterance. Instead, it is frequently used in utterances where the predicate is omitted: in (28) and (29) the existential *there* is missing, in (30) the lexical verb and the subject are missing (*I do not have a tv*), while in (31) the elliptical predicate can be represented by either the existential expression *there is* or the lexical verb *have* (*I do not have any*). The corresponding utterances may also have different syntactic structures: for instance, in (33) the noun phrase stands for the entire utterance and seems to be part of an *if-then* structure, whereas in (30) and (32) *no* is used in relation to

the conjunction *so*, highlighting the consequences of the information expressed by the negative noun phrase:

- (28) #Labour party broadcast proves they really are missing in action. No policies and no mention of the crucial European elections on May 22nd.
- (29) Enjoyed the Hustings in Harrogate tonight. No show from UKIP candidate yet again. Sent Council candidate. They don't deserve support
- (30) In a campervan in North Wales on my tour of Wales. No tv so couldn't watch @SharpendITV. It's a glamorous life!
- (31) @Voltairesbeast @CulliganPA Yes, so true. No problem with either of these countries or any other: it's about numbers,equal opps & resources.
- (32) @laurenmehall @jessicarrrrb Typical liberal tactics. No argument whatsoever, so resorting to mockery. Makes you feel part of a community.
- (33) @StephenLees4 Ukip essential for keeping Cameron on straight and narrow. No Ukip, no referendum promise.

It can also be used as a directive speech act, aimed at provoking an action in the addressee, as shown in (34), or it can be part of a negative question, as illustrated in (35). These values are not numerous, but they reflect the multifunctionality of this negative particle.

- (34) I agree its their country. Perhaps the same should apply here. No vails please. We want to see your face. http://t.co/MyeFWc3b3A
- (35) RT @EngineMuseum: Sun shining over Poynton. No plans today? Why not visit museum – craft demonstrations, engines running, including... http...

When it is preceded by commas, *no* can be part of both positive and negative enumeration constructions, as illustrated in (36), (37) and (38), may be used to indicate repetition and emphasis, as shown in (39) and (40), or may be used to delimit markers of personal stance (*no surprise, no problem, no question, no doubt*) after addressing a particular person, as indicated in (41), (42), (43) and (44):

- (36) Good meeting with Gordon Ross of Western Ferries. Most frequently used route, no subsidy & lower fares. Impressive! http://t.co/ fBDNbnKzdZ
- (37) @JohnMcGlynn no UKIP, no Green in Scotland.
- (38) #skyelections EPP in the lead, Cameron left EPP to join fringe parties#UK\_EPP no UK leadership in Europe, no chance to renegotiate
- (39) Mrs. Blair calls for quotas to help "less exceptional women" succeed in politics and business. No, no, no,... http://t.co/JHaLlNUQM5

- (40) @Nosemonkey No idea, no idea at all, which is frustrating
- (41) @The\_AntiStatist @BarryJWoods you can't argue so you threatened violence, no surprise.
- (42) Me and @Alexander\_Ball did the Yorkshire Three Peaks in rain like this. GOTV, no problem.
- (43) @twogreatV8s I am wary about dogs, no question, but clearly have a lot to learn about letterboxes!
- (44) Absolutely devastated by Martin Callanan's loss in the North East. A true friend and patriot. He'll be back, no doubt about it.

In comparison to the distribution to the left, when *no* is followed by a comma to the right, it is most likely used as a response particle. It may be surprising at first sight to find full stops after *no*, but the analysis revealed that they function like commas, *no* being used as a response particle. There are, however, some pragmatic differences. The use of a full stop after *no* as a direct reply to a previous question or statement is meant to give more assertive strength to the answer and to dissociate it from the rectification introduced afterwards by means of *but* and *and*. The full stop is used similarly to a pause in spoken language, as illustrated in (45) and (46). The users are usually mentioned by means of @-mentions but when a name is employed, it is pragmatically loaded, as shown in (47):

- (45) @youngwd1 @Owen\_Thompson @ScottishPol @theSNP No. But campaigning in Donside to help defeat u is one of them. Now go act like an elected rep
- (46) @LeightonAndrews no. And i think you know that given his constant attacks on Plaid.
- (47) Osborne: "(UKIP) wants to pull up the drawbridge & cut Britain off". No George. We want to leave the EU and re-engage with the world.

We could also identify instances of *no* followed by exclamation marks, which are thought to put greater emphasis on the negative answer. It can be used as a single answer, as illustrated in (48) and (49), or it can be followed by further comments, as shown in (50) and (51). The emphasis can be additionally marked by multiplying the exclamation marks, as in (50).

- (48) @AyeMcClane @plyons45 NO!
- (49) EU Poll: Should the Anti-Counterfeiting Trade Agreement (ACTA) be adopted? A big resounding NO!
- (50) @LBC @arkwrightwilson NO!!!!! What debate more of a shouty match.
- (51) NO NO NO! Jimmy Young in @daily\_express We beg you to read this: http://t.co/fux3ioRFq3 before saying this: http://t.co /qUT...#NHS

In sum, when used in initial position, *no* is very often part of elliptical constructions, where the verb and the subject are omitted. The negative nominal phrase usually stands for the entire utterance, which highlights a non-standard use of the particle *no*. In contrast, when it is followed by punctuation marks, *no* is usually employed as a response particle. Accordingly, the tweets can be characterised as informal, resembling spoken language: they are short, simple and have a telegraphic style. Although some patterns can be identified overall, a thorough contextual analysis of all the instances of *no* is necessary in order to identify all its pragmatic uses in the digital environment.

*Not*-negation. The four most used parts of speech to the left and to the right of the *not* are illustrated in Table 5.7:

–1 POS NOT	Counts	NOT POS +1	Counts
Verbs	1618	Verbs	1704
Punctuation	932	Adjectives	668
Nominal + Verb	548	Determiner	662
Nouns	360	Adverb	531

**Table 5.7.** Distribution of the main parts of speech with not.

It is not surprising to find that the top positions to the left and to right are represented by verbs. To the left, there is a tripartite division: auxiliary verbs, modal verbs and a smaller number of lexical verbs, as indicated in Tables 5.8, 5.9 and 5.10. The most represented verb is *to be* with a percentage of approximately 42%, followed by the auxiliaries *do* with approximately 19% and *have* with approximately 3%. The modal verbs represent approximately 20%, whereas the lexical items that are used before *not* represent approximately 15%.

If we take a closer look at Table 5.9, *hope* is highly prominent when compared to the other lexical items. Moreover, it is part of a larger collocational structure [(X') not (X)]: *hope not fear* or *hope not hate*, as illustrated in examples (52) and (53). The negative segment is associated with negative emotions, e.g., *fear* and *hate*, while the affirmative segment is associated with *hope*, which is positively connoted (Albu, 2018). The tweets in which the structures are integrated represent illustrations of 'call for action' tweets (Albu, 2016), i.e., they represent a form of strategic and goal-oriented discourse meant to persuade the electorate to vote for them.

Modals	Counts	%
can	165	10.19
will	114	7.04
may	43	2.65
should	41	2.53
would	34	2.10
could	30	1.85
might	18	1.11
must	17	1.05

 Table 5.8. Distribution of the modal verbs to the left.

Table 5.9. Distribution of the lexical items to the left.

Lexical items	Counts	%
hope	96	5.93
replaced	8	0.49
vote	6	0.37
afford	6	0.37
love	6	0.37
leading	6	0.37
disappointed	5	0.30

 Table 5.10. Distribution of the auxiliaries to the left.

Auxiliaries	Counts	%	Auxiliaries	Counts	%
is	373	23.05	do	134	8.28
are	196	12.11	did	101	6.24
am	53	3.27	does	77	4.75
was	43	2.65	have	27	1.66
were	15	0.92	has	24	1.48
be	3	0.18	had	2	0.12

- (52) @Viv\_Savage\_CFC D130@EloquentParrot Yep epic fail for Hope Not Hate tweeting support for ex-BNP, wonder how your ethnic members feel about that
- (53) Hurrah we are trending # EP2014 # VoteGreen2014 it must be our rather droll election broadcast https://t.co/ epTcVm5zXm ... # hope not fear

The forms counted under *can* include 153 instances of *cannot* and 12 instances of *can not*. In comparison with the *n't* forms, although numerically different, the first positions are occupied by the same modal verbs: *can* and *will*. As for the instances of the verb *to be*, approximately 91% of these (and approximately 38% from the total) are used in the present tense (*is, are, am*). Among the lexical items used before *not*, there are 24 instances of *-ing* forms, 39 instances of past participle in *-ed* and 11 instances of irregular past participles.

To the right, after checking all the corresponding inflected forms, *be* (9.68%) is the most common, followed by *vote* (5.98%), *have* (4.46%) and *hate*, *get*, and *fear* with smaller percentages. There are 459 instances of the progressive aspectual form *-ing*, which encompasses 24.82% of the total number of verbs used after the full form *not*.

The third category is labelled *nominal* + *verbal*, and stands for structures where the operator is contracted and attached to the subject, i.e., followed by the full form of the negator *not*. Most of the occurrences contain personal pronouns in the subject position and the most frequently used operator is *be* (approximately 92%). As Table 5.11 shows, there is a preference for the present tense compared to past tense and other aspectual forms. In terms of subject forms, the first three positions are occupied by the impersonal pronoun *it*, followed by the first-person singular pronoun *I* and the second-person pronoun *you*. At the opposite end of the spectrum, the contracted forms of *have* are very rare, representing only 4.5% of this category. This contrasts with the findings of negative declarative sentences in spoken and written varieties of English in Varela Perez (2013).

By comparing the overall prevalence of the full form not when preceded by verbs, the operator contraction and the *n*'t occurrences, it can be concluded that *n*'t is the most prevalent form of verbal negation, followed by the negations with the full form *not* and the operator contraction. If we compare the operator contraction occurrences with those with *n*'t, the former shows a preference for *be*, whereas the latter is much more often used with different inflected forms of *do* (*don't*, *didn't*, *doesn't*). Another difference is that there is a preference for *I'm* in comparison with *I am*. There are less uses of *aren't* compared with *haven't*, which is contrary to the preference shown for the verb *be* in the case of operator contractions.

Operator contraction + not	Counts
it's	164
I'm	125
you're	69
we're	43
they're	31
that's	18
he's	17
she's	5

 Table 5.11. Overall distribution of the operator contraction.

#### 5. Concluding remarks

Based on the assumption that negation may be a useful strategy in the investigation of electoral tweets, we discussed the constructional strategies of no-negation, not-negation and n't-negation. Due to the novel production conditions and particular interactional features of tweets, negation was divided into three heterogeneous categories, including standalone occurrences of the negative markers, conventional and non-conventional punctuation use, alternative spellings, and longer strings in which the negators were included. The results showed that not-negation and n't-negation are more prevalent (72.44%) compared to no-negation (approximately 27.57% of the relevant data, including *n*-words). Even though *not*-negation and *n't*-negation seem to have similar distributions, the collocational analyses revealed that these two negation categories are not used interchangeably, and their uses do not overlap. Instead, they have distinct patterns and combinatorial preferences. For instance, not contributes almost equally to verbal and non-verbal clausal negation. The latter type is mainly expressed by means of the construction [(X') not (X)], which highlights the use of negation in combination with correction. Another pattern of not is represented by elliptical structures, where the subject and the predicate are omitted, resulting in a telegraphic way of expression similar to oral conversation. The use of not followed by full stops highlights some non-standard values that not can have in final position: as an anaphoric pro-form for a negative clausal complement (I'm afraid not, I suspect not, Thought not).

In contrast, *n't*-negation is the most frequently used verbal negation in this dataset. If we compare the first ten collocates of *n't* and *not*, the bound inflectional form *n't* shows a preference for the auxiliary *do*. In contrast, the token collocates of *not* showed a tendency to combine with *be*. Another difference is found in the use of the modal verbs: whereas the contracted form is mainly used in combination with *can't*, *won't*, *couldn't*, and *wouldn't*, the negative adverb *not* is mostly used with *will*. The two negators also show dissimilarities in terms of the tenses with which they combine: *not* is associated most of the time with present, predominantly in negative descriptions and negative evaluations, while *n't* is used with both present and past tense. We could also identify instances of *not* preceded by operator contraction forms, but they are less frequent. The predominant operator in this case is *be*.

The analysis of the top ten token collocates of *no* has indicated that it forms weak recurrent patterns, as a result of the great variety of items with which it combines. The frequent combination of *no* with punctuation marks is an indication of the fact that the particle is most likely used as a response particle when it is followed by commas and full stops, and as a quantifying determiner when it is preceded by them. Nevertheless, the particle *no* is multifunctional, and has a multifarious discursive behaviour, as illustrated by the selective contextual analysis. Further research with thorough contextual analyses is necessary in order to disambiguate between the multiple values that *no* can have.

The division between spoken and written language is considered obscured in digital communication. Based on previous research, we have made some initial assumptions meant to help disentangle these issues. First, we assumed that the higher the frequency of negation overall, the more the tweets show similarities with spoken language. The results showed that negation is not massively employed in our dataset, as only 17.18% of the overall tweets contain at least one instance of negation. Therefore, the similarity with spoken language cannot be confirmed based on this criterion. The second assumption was about the correlation between not-negation and written language, whereas the third assumption correlated n't-negation with spoken language. The overall frequency showed a similar distribution of *not*-negation and *n't*-negation, which renders the predicted assumptions between spoken and written language difficult to account for. Taken together, the general distribution of these negation categories in the present dataset do not show strong similarities with either the spoken or the written language. However, the patterns generated by not are usually illustrations of spoken language, showing a tendency towards the prevalence of oral features in comparison with written features.

Regarding the questions of whether the formal register of political discourse has shifted towards a more flexible and colloquial form, the short format and the interactive structure of tweets speak in favour of a new type of political discourse with distinctive properties. Although divergent from casual conversation, the political tweets in our dataset present features that point towards a shift from the formality imposed by the traditional political discourse. These include the use of elliptical structures, the use of non-verbal negation with the full form *not*, the telegraphic way of expression in which the verbs, the first-person pronouns and discourse markers are omitted, the typographic playfulness, the use of non-conventional punctuation with negative markers and the non-standard negative structures.

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#### Endnote

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