

Codeswitching and Borrowing on Algerian Social Networking Sites: The Case of Facebook

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Abstract:

The rapid rise of social media use among Algerian individuals has created an unparalleled opportunity to study how Algerians reflect their linguistic practices on computer-mediated communication platforms. The aim of this paper is to explore and analyse Algerian language practices on Facebook, mainly language use related to the varieties already widely used in the Algerian linguistic landscape (Algerian Arabic, Modern Standard Arabic, and French). In order to accomplish this objective, a sample of two hundred contributions (27 posts and 173 comments) were collected from two sources: (1) a Facebook group and (2) a Facebook page. Conversational Analysis and language frequency distribution were used to scrutinize the collected data. The findings revealed that Algerian Arabic is the primary mode of communication in the studied sample, and codeswitching practices appear infrequently in the composed corpus.

Keywords: Algerian Dialect, CMC, Codeswitching, Diglossia, Facebook.

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1. Introduction:

A new sort of linguistic and sociolinguistic research has been made possible by the rise of social media platforms. Researchers from all over the world seized the chance to delve into this vast corpus of impromptu writing in order to uncover the underlying principles guiding language use in the context of computer-mediated communication (CMC). A new language manifestation that sits in between email and instant messaging has been produced by social networking sites (SNS). This new form of language use incorporates the features of both email and instant messaging.

On Algerian SNS, a plethora of linguistic phenomena are observed, reflecting the diversity of the Algerian linguistic repertoire. Among these phenomena we can observe the phenomenon of Diglossia, i.e., the dual use of two related varieties (Modern Standard Arabic (MSA) and Algerian Dialect (AD)). Bilingualism is another observed linguistic phenomenon due to the presence of foreign languages (e.g., French). This situation will lead to the appearance of other sociolinguistic phenomena such as codeswitching (CS) and borrowing.

Trudgill described how speech conveys important information about the speaker and hints at a variety of personality traits (Trudgill, 2000, p. 2). However, this is not just related to spoken language. It is possible to dismantle the relationships between language use, attitudes, and policies by analysing how people communicate in every context where individuals engage linguistically (De Bres & Belling, 2015, p. 360). In addition to that, written discourse is a self-conscious, planned, and modifiable textual interaction between the author and the reader; it differs from vocal communication. Written communication has its own style, rhetoric, and structure that aren't necessarily compatible with spoken communication. Because of this, the writer's capacity for editing and polishing their work ought to demonstrate a deeper understanding of the "conventions" of written discourse and the general expectations of the public in a particular setting (Albirini, 2016, p.p. 250-251).

Analysing Computer Mediated Communication (CMC) language use will reveal how language practices are brought from the real environment to the digital one.

This study will focus on the written form of language. The aim is to scrutinize the language of Algerian Facebook users and to explore the

manifestation of CS as well as the use of other languages in this CMC environment. The analysis of language use in this investigation is achieved by observing a corpus collected from two different environments: a Facebook group dedicated to patients with Keratoconus (eye disease) in Algeria and a Facebook page that centers around news and daily updates related mostly to the town of Sidi Bel Abbes (Algerian province).

2. Literature Review:

Today's Algeria is known for its diversity, which can be seen in a number of areas, most notably the linguistic landscape. A number of sociolinguistic phenomena, including diglossia, CS, and bilingualism, were born from the resulting Algerian linguistic repertoire. These sociolinguistic phenomena were made possible by the interplay of MSA, AD, French, Berber, English, Spanish, etc. This manifold language situation in Algeria is mirrored in the CMC world.

Algerians from many social classes have started using Facebook, bringing to this SNS their language usage habits. According to Alexa Internet, Facebook is Algeria's third most popular website, behind Google and YouTube ("Amazon Alexa," n.d.). An estimated 25.26 million people use Facebook in Algeria, and 32.3% of them are between the ages of 25 and 34 (Saleh, 2022). These numbers indicate that Facebook is an excellent setting for undertaking language use research.

The nature of social media creates a language-use situation that is unprecedented. The initial contributor to a given social network chooses his contribution based on a number of factors, some of which are: (1) prior online and offline interactions with members of the concerned network; (2) those members' online responses (responses to that contribution or previous responses); Due to this new kind of communication, people are required to adapt their language use to a variety of heterogeneous, broad, and often multifaceted language styles (Androutsopoulos, 2014, p. 64). Even if sharing takes place in a virtual setting (SNS), it is still influenced by the social context, which is defined by linguistic standards related to language usage.

Discourse is heavily used in online engagement. Vocal communication between participants takes place through text that is typically written on a keyboard and shown as text on a computer screen. (Herring, 2004, p. 339). In this study, Computer-Mediated Discourse Analysis (CMDA) is used for the examination of CMC. CMDA employs techniques derived from language-focused disciplines, including linguistics, communication, and rhetoric (Herring, 2004, p. 339). In addition to CMDA, frequency distribution is used to

categorise the collected data according to specific trends.

It's important to note that the CMC is viewed as a setting where the characteristics of speech and writing can coexist; "it may be informal, synchronous, and ephemeral (like speech) and/or editable, text-based, and asynchronous (like writing)" (Squires, 2018, p. 462).

This study attempts to answer the following research questions:

- How does CS manifest itself on Algerian SNSs?
- What is the frequency distribution of CS and borrowing on Facebook?

Before diving into the actual process of research, a number of concepts should be defined. First, what is bilingualism? Myers-Scotton defines it as follows: "We define bilingual speech as any clause that includes elements from two or more languages." (Myers-Scotton, 2006, p.234) The interaction of two different languages leads to the emergence of a number of linguistic and sociolinguistic phenomena, among which CS, which is the focus of this research. "People, then, are usually required to select a particular code whenever they choose to speak, and they may also decide to switch from one code to another or to mix codes even within sometimes very short utterances and thereby create a new code in a process known as code-switching" (Wardhaugh, 2015, p. 101).

Dealing with CS necessarily brings with it the ongoing debate about the dichotomy between CS and borrowing. It is necessary in any research endeavour to draw lines between these two concepts.

The highest degree of phonological and morphological integration is frequently observed with the oldest foreign lexemes, and it is related to borrowing rather than codeswitching. The reason for this is that at early phases of language interaction, speakers of the matrix language have minimal understanding of the "donor" or source language, and the oldest foreign lexemes in use in a bilingual community come from those early stages of bilingualism (Haugen, 1950: 216-7 in Boumans, 1998, p. 54). As a result, the speaker is unable to fully replicate the phonology and morphology of the donor language when he/she introduces words from it into his/her own language. Instead, he/she will translate and replicate the form of the foreign language using his/her own phonological and morphological systems. The adoption of the foreign lexeme by speakers who are even less familiar with the donor language may lead to further integration. But in the majority of the situations

that have been researched, exposure to the donor language (which is enforced economically and/or culturally) has grown with time. More recent foreign lexemes tend to be less integrated than older ones as a result of the bilingual community's increased use of and familiarity with the donor language over time. The association between age and the incorporation of foreign lexemes, as explained above, only holds true in situations where exposure to the foreign language grows over time. Additionally, it only pertains to one specific continuing circumstance of language communication (Boumans, 1998, p. 54).

With that being said, borrowing can be defined as: "when bilingual speakers transfer lexical items from one language to another." (Llamas, C., Mullany, L., & Stockwell, P., 2007, p. 207). The distinction between CS and borrowing has to do with how academics categorize a set of data; it is not a natural reality. In fact, identifying the terms one employs becomes essential given the lack of agreement that characterizes the field of linguistic nomenclature. Depending on the research environment, a criterion may or may not be applicable (Boumans, 1998, p. 58).

To settle this debate on CS/borrowing, this paper will adapt the definition of Haugen (1956, 1958, 1973) as stated in Boumans (1998, p.8): "CODE SWITCHING "the alternate use of two languages" (1956: 40) "including everything from the introduction of a single, unassimilated word up to a complete sentence or more into the context of another language" (1973: 521).

CS manifests in different forms. In this research, we will adopt the following categorisations: (1) intersentential codeswitching, and (2) intrasentential codeswitching, (3) extra-sentential codeswitching (tag). The first type is intersentential code-switching, or switching at the sentence boundary with one clause in one language and the other in another. The second type is intrasentential code-switching, where switches happen within the clause boundary, including within the word. Finally, there is extra-sentential code-switching (tag), which refers to the use of a tag phrase from another language (Hamers & Blanc, 2004, pp. 259-260).

Among the various characteristics of language, one feature is of crucial importance to our study; this feature is called medium transferability, which stands for the process whereby language is depicted from the spoken form to the written form, i.e., transcription, or the opposite, which is moving from the written form to speech, i.e., reading (Lyons, 1981, p. 11). It is worth noting to distinguish between the study of these two media, "writing and reading," since "the structure of the written sentences depends upon identifiable distinctions of shape; the structure of the spoken sentences depends upon identifiable

distinctions of sounds" (Lyons, 1981, p. 13).

3. Methods:

3.1 Data Collection:

Digital language data can be remarkably varied, particularly if researchers sample from a variety of digital modes that people utilize for their online activities, each with their unique semiotic resources. Typography, still and moving images, and screen layout are all semiotic resources that are closely tied to written language online; the media-richness of modern digital settings increases the impact of multimodality on meaning-making (Mallinson et al., 2013, p. 237).

Collecting natural speech was a difficult task in regard to the influence of the observer on the speaker. In this vein, Labov states that "One way of controlling for this is to study the subject in his own natural social context - interacting with his family or peer group. Another way is to observe the public use of language in everyday life apart from any interview situation - to see how people use language in context when there is no explicit observation." (Labov, 2006, p. 304) Following this advice, observation was selected as the main research instrument in this study. We opted to collect a small corpus of language, created by Algerian Facebook users. The collected data was taken from two different sources; a Facebook group dedicated to patients with Keratoconus (an eye disease), and a Facebook page dedicated to local matters related to an Algerian town (Sidi Bel Abbes province).

Working with sequences, which are time-organized chains of posts or messages that are exchanged in a specific interactional configuration, requires acknowledging messages or posts as an additional level in the structuring of online data. A sequence is either assembled ("zipped together") from data transferred between different digital interlocutors or collected as such in a public CMC environment (such as a Facebook wall conversation or forum thread) (Mallinson et al., 2013, p.246).

At the beginning of data collection, the Keratoconus group included 4718 members. While the Facebook page of Sidi Bel Abbes Town at that time was liked by 521 209 Facebook users and followed by 1 062 557 followers.

The selection of the group was based on the Labov method when he was researching speech variation in New York. During his research, Labov used informal interviews during which he asked questions involving emotions. He stated that "... serious topics which eventually lead to greater emotional involvement." (Labov, 2006, p.92) The seriousness of the Keratoconus disease

will make the posters and commenters in the selected group much more natural and authentic in their language production. However, the Facebook page was selected because it is more localised.

The purpose of this study is to quantify the occurrence of codeswitching in the collected Facebook data by using a descriptive-quantitative research methodology. Data collection takes place at a specific period, which means that this cross-sectional study falls under the category of synchronous research.

We will use descriptive statistics to represent the collected data in a simple manner (Gravetter & Wallnau & Forzano, 2017, p. 50). This could be achieved by employing frequency distribution to represent the data in much clearer, understandable, and easy-to-read figures (Alhazmi, 2016, p. 187, Gravetter & Wallnau & Forzano, 2017, p.p. 36-50).

The results from a research study usually consist of pages of numbers corresponding to the measurements or scores collected during the study. The immediate problem for the researcher is to organize the scores into some comprehensible form so that any patterns in the data can be seen easily and communicated to others (Gravetter & Wallnau & Forzano, 2017, p. 36).

Frequency distribution organizes the collected data in one condensed form (table, graph, etc.), which will illustrate the high and the low scores and their distribution as well as their concentration on the scale (Gravetter & Wallnau & Forzano, 2017, p. 36). In other words, "A frequency distribution is an organized tabulation showing the number of individuals located in each category on the scale of measurement." (Gravetter & Wallnau & Forzano, 2017, p. 36).

3.2 Method of Collection:

The abundance of digital data makes it challenging to choose and concentrate on a single sample or place of conversation (Mallinson et al., 2013, p. 238).

200 contributions (posts and comments) were collected in this research, 100 from the Keratoconus group and 100 from the Facebook page of Sidi Bel Abbes province. During the process of collection, the comments containing only punctuation, emoji, tags, the name of a person, and signs were not taken into consideration. In the perfect scenario, 10 posts with 9 subsequent comments will be collected. The sum will result in 100 contributions (10 posts and 90 comments) for the Facebook group, and the same process will be repeated for the Facebook page. However, some posts have fewer than 9 comments. For this reason, each post with 9 or less than 9 subsequent

comments is taken into consideration. The collection of data stops at 100 contributions. The entire corpus is composed of 200 contributions, which is 27 posts and 173 comments.

4. Results:

4.1 Keratoconus Facebook Group:

Tab. 1 Distribution of used script in writing posts and comments (Keratoconus Facebook Group)

Contributions written in Arabic script	Contributions written in Latin script	Contributions written in both Arabic and Latin script	Contributions written in both in Latin and number (Arabizi) script
87%	7%	5%	1%

Table 1 shows the distribution of used scripts in posts and comments concerning the studied Facebook group. The table indicates that 87% (13 posts in Arabic script and 74 comments in Arabic script) of the collected contributions were written using Arabic script, while 8% were written in Latin script, and 5% (1 post and 4 comments) of contributions were composed using both Arabic and Latin letters. Only 1% of the collected contributions used a combination of Latin letters and numbers; an informal method of writing known as Arabizi, which is described by Albirini (2016) as follows: "The high frequency of mixing between Arabic and English at all levels has led to the coinage of terms such as Arabic-English, Romanized Arabic, Arabish, and Arabizi – all basically referring to colloquial Arabic speech rendered in a mixture of English letters and Arabic numbers and infused with borrowed English words and abbreviations." (Albirini, 2016, p.p. 268-269). The results indicate the dominance of the Arabic script. Users in the studied sample composed their posts and comments mostly via Arabic script.

Tab. 2 CS and borrowing frequency distribution (Keratoconus Facebook Group)

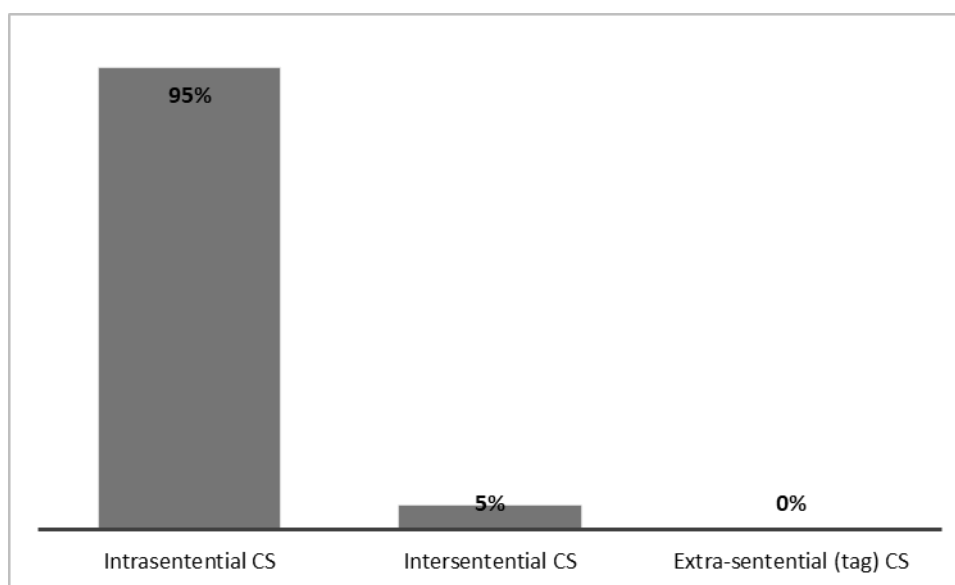
No CS & B	CS	B	CS & B
72%	20%	6%	2%

The table above (Tab.2) represents the occurrences of CS and borrowing in the corpus of 100 contributions collected from the Keratoconus Facebook Group. CS represents 20% of the entire collected data, 6% is considered as

borrowing instances, and only 2% of the contributions exhibited a combination of CS and borrowing. The rest (72%) were contributions without CS or borrowing.

The collected data indicates that CS as well as borrowing are present in the linguistic practices of Algerian Facebook users. However, these two phenomena do not dominate the linguistic production of the users concerning the studied Facebook group.

Fig. 1 Types of CS in Keratoconus Facebook Group



Concerning the types of CS in Keratoconus Facebook Group, 95% of the recorded CS instances can be regarded as intrasentential CS, whereas only 5% fall under the category of intersentential CS (Figure 1).

4.2 Bel Abbes' Facebook Page:

Tab. 3 Distribution of used script in writing posts and comments (Bel Abbes Facebook Page)

Contributions written in Arabic script	Contributions written in Latin script	Contributions written in both Arabic and Latin script	Contributions written in both in Latin and number (Arabizi) script
88%	7%	3%	2%

Table 3 shows that the same practices of selected scripts observed in the studied Keratoconus Group are manifested in the Facebook page, with 88% of

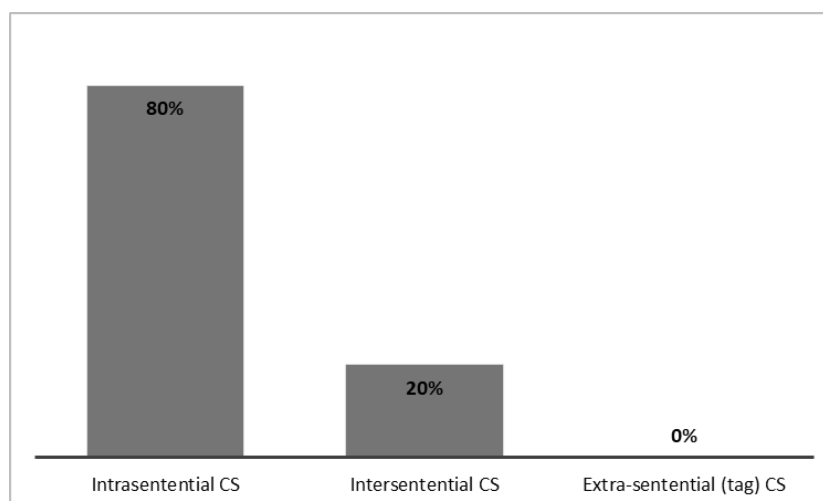
the contributions written in Arabic script, 7% in Latin script, 3% using a combination of both Arabic and Latin script, and 2% were composed in Arabizi.

Tab. 4 Frequency distribution of CS and borrowing (Bel Abbès' Facebook Page)

No CS & B	CS	B	CS & B
80%	5%	13%	2%

Table 4 is a representation of the occurrences of CS and borrowing in the collected posts and comments of the Bel Abbès Facebook page. Only 5% of the collected data contained instances of CS, 13% were cases of borrowing, and 2% of the contributions exhibited a combination of CS and borrowing.

Fig. 2 Types of CS in Sidi Bel Abbès Facebook page



Sidi Bel Abbès Facebook Page shows a similar distribution to that of Keratoconus Group. 80% of the recorded CS on the page is considered as intrasentential CS and 20% is intersentential CS (figure 2).

Fig. 3 Frequency distributions of Keratoconus Group and Bel Abbes Facebook Page

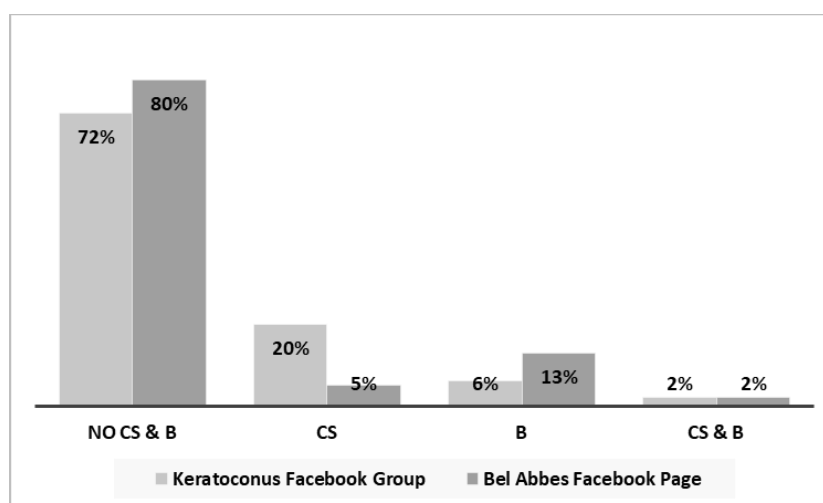


Figure 3 represents a comparison between the results of the Facebook group and the Facebook page. Percentages of “CS & borrowing” occurrences are nearly the same, except for the CS percentages, where the Keratoconus group CS frequency (20%) is higher than that of the Bel Abbes Facebook page (5%). Also, the borrowing frequency of the Facebook group is half that of the Facebook page (6% and 13%). By comparing the Facebook group and page findings, it was revealed that the percentages of “CS & borrowing” occurrences are nearly the same, with the exception of the CS percentages, where the Keratoconus group's CS frequency (20%) is higher than that of the Bel Abbes Facebook page's (5%). Additionally, the Facebook group's borrowing rate (6% vs. 13%) is half that of the Facebook pages.

5. Discussion:

The findings of this study show that the Arabic script predominates. Most postings and comments made by users in the study sample were written in Arabic script.

The information gathered suggests that borrowing and CS are both used by Facebook users from Algeria. However, neither of these two phenomena predominates over the individuals' verbal output in respect to the Facebook group under investigation. In terms of the forms of CS in the Keratoconus Facebook Group, 95% of the occurrences that were recorded can be categorized as intrasentential CS, while just 5% are intersentential CS.

The Facebook page exhibits the same patterns of chosen scripts as the investigated Keratoconus Group, with 88% of the contributions written in

Arabic script, 7% in Latin script, 3% combining Arabic and Latin script, and 2% written in Arabizi. Only 5% of the Facebook page data obtained showed instances of CS, 13% showed instances of borrowing, and 2% of the contributions represented instances of both CS and borrowing. The distribution on the Sidi Bel Abbes Facebook Page resembles that of the Keratoconus Group. 20% of the recorded CS on the page is intersentential, and the remaining 80% is intrasentential.

The dominance of one script (Arabic script in this study) and the use of one variety (Algerian Dialect) confirms the finding of Androutsopoulos (2014, p. 65), who found that the majority of the studied Facebook content was constituted using one language. However, other studies (Zitouni, Saaïd, 2019 & Sekhri, 2020) found that CS is a very common practice on the social networking site Facebook, but these studies were conducted on samples with a certain level of bilingualism, which can influence the analysed corpus. This will introduce the problem of generalization and population representation. Neither the present study nor the reviewed literature could claim a very high rate of representativeness of the population (Algerian Facebook users). Therefore, it is normal to observe contrasting or at least disconfirming results. Our study is not an exception, and the biggest limitation is the size of the corpus. Because the bigger the corpus, the more time-consuming it is. Another limitation is the inability to distinguish if a word belongs to MSA or AD since the researcher is dealing with a written form and not a spoken one. But that could be overcome by observing the context in which the word appeared as well as the clause or the sentence that contains the word in question.

Also, it is worth mentioning that there is a widespread use, in the composed corpus, of the Arabic script. This could be attributed to the development of smartphones and technologies which facilitate expression in the Arabic language. In this vein, Albirini (2016) argues that: “The decline in using Arabizi online could be due to the integration of Arabic platforms in social media, which makes it easier for Arabic speakers to utilize Arabic script” (Albirini, 2016, p. 291).

This study constitutes the foundation for a more deep and multifaceted investigation concerning the use of languages on SNSs and specifically on Facebook.

6. Conclusion:

The purpose of this study was to explore the manifestations of CS and borrowing in the Algerian digital environment. The research selected the SNS

Facebook as a field of investigation due to its popularity in Algeria. We opted for observation as a research instrument to examine the collected data. The source of the gathered data was a Facebook group of keratocnus patients and a Facebook local page focused on Sidi Bel Abbes province. The composed corpus exhibited the use of MSA, AD, and French, which reflects the real (non-virtual) linguistic landscape. Another insight that can be drawn from the data is the dominance of Arabic script in posts and comments. CS as a present phenomenon in the Algerian linguistic landscape does not take up a large portion of the studied corpus (20% in the Keratoconus Facebook group and 5% in the Sidi Bel Abbes page), which goes in line with what Androutsopoulos (2014, p. 65) found on Facebook content that is largely characterized by the use of one language. Examining CS types will clearly show the dominance of intrasentential CS at the expense of intersentential CS and tag CS, which can be seen as a feature of the SNS language, but this is far from generalisability since these types of generalisations require a large corpus.

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