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The discursive positioning of the Falkland Islands (las Islas Malvinas): A corpus-based collocational analysis of British and Argentinian websites

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Abstract: Considering "discursive positioning" to be a form of "placement," this study examines how the Falkland Islands or *las Islas Malvinas*, a place which has long been politically controversial, are discursively positioned on British and Argentinian websites. The data came from two reference corpora: namely the Corpus of Global Web-Based English (GloWbE) and the Corpus del Español: Web/Dialects. The 388-million-word British section of the former and the 183-million-word Argentinian section of the latter were selected for analysis. Attention was paid to the 20 most frequent collocates of "Falkland Islands"/"*Islas Malvinas*." Semantic prosody, collocation networks and word clusters were also investigated. It was found that the Falkland Islands are positioned differently in the two corpora. While the collocates of "Falkland Islands" in the British corpus (e.g., "government" and "population") position the Islands as a territory with "self-determination," the collocates of "*Islas Malvinas*" in the Argentinian corpus (e.g., "*nuestras* " [our (feminine plural)], "*territorio*" [territory] and "*recuperación*" [recovery], together with the 5-gram "*las Islas Malvinas son argentinas*" [the Falkland Islands are Argentinian]) subsume the Islands under the ownership of Argentina. Not only are the Falkland Islands "discursively positioned," Britain and Argentina are also subject to positioning. For instance, in the British corpus, Argentina is construed as an invader (as suggested by the collocates "invasion" and "1982") whereas in the Argentinian corpus, Britain is given this demonized role (via the collocates "*militar*" [military] and "*británica*" [British (feminine singular)]). Such findings add strength to van Dijk's (2011) discussion of "positive self-presentation and negative other-presentation." As an example of corpus-assisted discourse studies (CADS), the current research also offers solid evidence on the social phenomenon of "classification" proposed by Bourdieu (1990)—i.e., "a vision of the world is a division of the world."

Keywords: Corpus-assisted discourse studies, discursive positioning, Falkland Islands, Argentina and Britain, collocation.

1. Introduction

In March 2016, the United Nations Commission on the Limits of the Continental Shelf (CLCS) decided that the territory of Argentina ought to be enlarged to incorporate the waters around the Falkland Islands—an archipelago situated in the southern part of the Atlantic Ocean. This ruling generated opposing reactions from British and Argentinian political leaders. While the Argentinian representative gladly accepted the decision, the British government brushed it off (Payton 2016). The Falkland Islands, or *las Islas Malvinas* (the Spanish name used by the Argentinians), have long been a source of tension between leaders of the two countries. Although the current status of the Falkland Islands is a British overseas territory, the Argentinian government maintains the view that the Islands belong to Argentina. Another notable event which happened on the Falkland Islands within recent years is the referendum held in 2013, where the vast majority of the voters on the Islands indicated their wish for the Islands to remain a British overseas territory. Different from the United Nations ruling mentioned above, the referendum result was dismissed by Argentina whereas the British government stressed that the wish of the Islanders had to be honored (Ford et al. 2013). The antagonistic diplomatic relation between Argentina and Britain could be traced to the Falklands War which occurred in 1982. On 2 April 1982, Argentina sent troops to occupy the Falkland Islands. Two months later, the Argentinian soldiers were defeated by the British army and surrendered (Boyce 2005).

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Despite its defeat in the Falklands War, Argentina has never given up its pursuit of the Falkland Islands. The debates regarding the status of the Islands are still ongoing. Even international law has failed to offer a resolution since the Falklands War ended (Chommeloux 2015). As described by Raimondo (2012: 402), the Falkland Islands are included as part of Argentina's territory under the Argentinian constitution, while the British law states that the Islands form an overseas territory of Britain. When discussing this issue, both parties have presented conflicting claims. Foregrounding the principle of *uti possidetis juris*,[2] Argentina suggested that the Falkland Islands had been inherited from Spain in 1810 during the South American course of seeking independence from the colonial Spanish regime (Raimondo 2012: 403). On the other hand, Britain claimed that the first person who landed on the Islands was a British captain and a British settlement had already been established on the western island of the archipelago in 1766. Although there were attempts from the then Argentinian government (the United Provinces of the River Plate) to occupy the Islands between 1820 and 1832, Britain reasserted its authority over the Islands in 1833 (Raimondo 2012: 406). In response to the disputes over the Falkland Islands, the British officials have been underlining the idea of "self-determination" since the 1960s (Raimondo 2012: 407). As Boyce (2005: 8) opined, "self-determination" is one of the most frequently employed concepts in contemporary political history. It basically refers to the right of the people who share a common identity based on culture, ethnicity, race or language, etc. to reside in their own "sovereign state" and rule themselves (2005: 8). Britain believes that the Falkland Islanders who share a unique identity should earn their right to "self-determination" so their wish for the Islands to continue being a British overseas territory has to be respected (Raimondo 2012: 410).

Another political concept which habitually appears in the discussion about the Falkland Islands is "sovereignty." Nevertheless, as Heywood (2015: 82) illustrated, the interpretation of this term is subject to many variations, although "sovereignty" itself means "absolute and unlimited power." Boyce (2005: 8) said that "sovereignty" can be split into the "external" and the "internal." "External sovereignty" underscores the endorsement of a state as having rights of jurisdiction over a specific group of people and being totally accountable for that jurisdiction amid international law. "Internal sovereignty" focuses on the supreme power exercised over a society and how internal affairs are governed (2005: 8). Given the complexity of the term "sovereignty," we may wonder what it really means when people are debating about the "sovereignty of the Falkland Islands." In this study, I would adhere to the postmodernist line of thought (e.g., Potter 1996) and consider the "sovereignty of the Falkland Islands" to be a social discursive construct, which can be analyzed only via examination of relevant discourses.[3]

The debates over the Falkland Islands involve principally three places (Britain, Argentina and the Falkland Islands) and the stance taken by different parties (e.g., the British and the Argentinian governments, the general public in the two countries, etc.) is reflected or even constituted by the ways they discursively position the Falkland Islands. It is at this point that the present research turns to the theme of this particular issue of *Globe*—places and placement. In this paper, I will align the term "placement" with the concept of "discursive positioning." More details about "discursive positioning" will be given in the next section. The major objective of this study is to analyze how the Falkland Islands are discursively positioned on British and Argentinian websites via exploration of two existing online corpora. It is hoped that the findings will offer solid empirical evidence which deepens our current understanding of the controversy surrounding the Falkland Islands.

2. Theoretical background

To better illustrate what "placement" means within the context of the present study, I would like to

[2] As explained by Lone (2012), *uti possidetis juris* is a principle which has governed the territorial boundaries of many postcolonial states. According to this principle, the borders of newly established sovereign nations should be drawn to match their former dependent terrain prior to their independence so that "territorial integrity" can be ensured.

[3] In this study, I will comply with Fairclough's (2003: 3–4) distinction between "discourse" and "discourses." As he stipulated, the former refers to language in use (viz., texts) whereas the latter denotes different social practices or ways of representing the world.

refer to the notion of "classification" in addition to that of "discursive positioning." In this section, I am going to provide an account of these two concepts which will be the theoretical foundation of this study. Also, relevant prior scholarly works about the Falkland Islands, as well as those concerning other politically contentious issues, will be reviewed.

According to Fairclough (2003: 213), the term "classification" was introduced by the sociologist Pierre Bourdieu. "Classification" refers to the countless ways of dividing the world, which lead to different perceptions and human behaviors. It is Bourdieu's belief that in order to "see the world," one has to "classify" or "categorize" it and the classification (or categorization) is done mostly in accordance with a typical "binary or dualistic model of order" (Jenkins 2002: 28). In other words, the result of classification tends to be a "dichotomized" world. As Fairclough (2003: 213) postulated, different discourses represent different classifications. Assuming that British and Argentinian websites are different discourses,[4] we can envisage that different classifications of the Falkland Islands can be uncovered from the two groups of websites. One task which I have in the present research is to examine the discursive manifestation of the classifications.

"Discursive positioning" was mentioned in the work of Trent (2012). Trent (2012) performed interviews with eight native speakers of English teaching in Hong Kong government schools, where most of the English language teachers are local Chinese-English bilinguals. Trent's (2012) aim, through application of "Positioning Theory," was to see how these eight teachers positioned themselves via discourse.[5] Being the ones who introduced "Positioning Theory," van Langenhove & Harré (1999) stated that "positioning" can be regarded as a vital discursive process and may take many different forms. One of these forms is "self and other positioning." This means that in a discursive event, a participant constantly positions herself or himself while positioning the other(s) at the same time (van Langenhove & Harré 1999: 22). In my opinion, "positioning" as defined in "Positioning Theory" can be interpreted as a type of "placement" because the outcome of both "positioning" and "placement" is to secure a place, position or role of somebody or something in the social and/or the discursive world.

Academic works on the Falkland Islands by discourse analysts are rare. Berbéri & Castro's (2015) edited volume contains three studies (Durán 2015; Fournier 2015; Leggett 2015) which concern the representation of the Falklands War in novels, fiction films, documentaries and British news. Among these studies, Leggett's (2015) contribution has the most relevance to the current research because Leggett (2015) investigated how certain lexical items used by the press epitomize particular ideological orientations, whereas the other two studies mainly deal with how events in the War were used as materials for creative works. Leggett (2015) compared the ways in which the BBC and the tabloid newspaper *The Sun* presented the War, arguing that the BBC attempts to project an impartial tone by referring to the task force on the Islands as either "Argentinian" or "British," instead of "enemy troops" or "our troops" which would be favored by the patriots in Britain (2015: 16–17). On the other hand, *The Sun* employs nationalistic rhetoric like "support our boys" (2015: 20). Leggett (2015: 21–22) concluded that the BBC refrains from being a means of propaganda while *The Sun* is keen on exhibiting its support for the government's decision to take part in military actions.

As mentioned above, the assumption of the current study is that Argentinian and British websites embody different visions of the world, particularly in relation to the issue of the Falkland Islands. It is worth finding out in a more concrete manner what these visions are and how they are discursively realized. Such a contrastive approach has been quite often employed by discourse analysts to examine the discursive representation of politically controversial matters. Slingerland et al. (2007) compared how the American and the Chinese newspapers reported the crash of an American surveillance aircraft with a Chinese military jet in 2001. The collision caused the death of a Chinese pilot and forced the American plane to land without prior consent on Hainan Island in China, leading to China's call for an apology. Slingerland and his associates (2007: 67–69) noted that whilst the Chinese press uses phrases which are suggestive of violation and victimization, its

[4] See footnote 3 about Fairclough's (2003) explanation of "discourses".
[5] See footnote 3 about Fairclough's (2003) explanation of "discourse".

American counterpart construes the whole incident as a game or sport by using phrases such as "players," "pawns" and "win." Slingerland et al. (2007: 68) argued that the Chinese strategy is to ignite emotions and the American tactic is to soften the burden of the American side since remorse and punishment are less applicable to games and sports. When a person wins in a game, the other party just has to accept the result. The other relevant study is that of Alameda-Hernández (2008). She looked at how media discourse in Gibraltar, Spain and Britain represented Gibraltar (which is also a politically controversial territory) during the period of 2002 when the referendum about joint sovereignty of Spain and Britain over Gibraltar was held. Analysis revealed that within the Spanish and the British newspapers, Gibraltar's voice tends to be diminished as it is often "backgrounded" or "passivated" (e.g., "[Gibraltar] would have to be sacrificed […]" and "Gibraltar is caught in […]"). The results of both studies (viz., Slingerland et al. 2007; Alameda-Hernández 2008) have demonstrated that discourse about the same event or entity can vary by geographical locations. The findings provide a very good stepping stone for the present research on the "discursive positioning" of the Falkland Islands. In the next section, I will talk about how I collected the data and conducted the analysis.

3. Data and methodology

The data of the present study came from two existing reference corpora which are available for online access. These two corpora are the Corpus of Global Web-Based English (GloWbE) (Davies 2013) and the Corpus del Español: Web/Dialects (Davies 2016). As their names suggest, the former is an English language corpus whereas the latter is based on the Spanish language. The two corpora can be considered comparable corpora, not only because they were both compiled by Mark Davies and are housed by Brigham Young University, but also owing to the composition of the corpora. They both consist of texts taken from a large amount of websites in territories where English or Spanish is an official or dominant language. The GloWbE has 1.9 billion words from more than 300 000 websites in 20 territories, one of which is the United Kingdom (Davies 2013). The Corpus del Español: Web/Dialects contains 2 billion words from more than 170 000 websites in 21 territories, one of which is Argentina (Davies 2016). The online interface of the two corpora allows users to conduct basic corpus-related enquiries, such as frequency counts of search words nominated by users as well as lists of collocates. The co-text of the search words and their collocates (viz., concordance) is also provided. For each concordance line, a hyperlink is attached so that users can visit the original website from which the text was taken. In both corpora, users have the option to limit their enquiries on texts from individual territories. Since the Falkland Islands are supposedly the concern of mainly Britain and Argentina, I decided to select only the 388-million-word British section of the GloWbE (hereinafter referred to as the British corpus) and the 183-million-word Argentinian section of the Corpus del Español (hereinafter referred to as the Argentinian corpus) for analysis. Table 1 provides a breakdown of the figures related to the two corpora.

Table 1: The British section of the GloWbE and the Argentinian section of the Corpus del Español (Davies 2013, 2016)

	Corpus of Global Web-Based English (Great Britain)	**Corpus del Español: Web/Dialects (Argentina)**
General	255 672 390 words (66%)	93 195 550 words (51%)
Blogs only	131 671 002 words (34%)	89 509 348 words (49%)
Total	387 615 074 words	182 704 898 words

The choice of the two corpora for the present research is justifiable. First, the two corpora are sufficiently large to yield findings which are generalizable. Second, both corpora were compiled from

web pages. In the contemporary world, web pages have become an important means of knowledge dissemination and acquisition. Their role of ideological formation and reproduction in society is hardly contestable. Although noticeable portions of either corpus are comprised of blog posts which could make the data more subjective than those from other web pages (viz., the General category), blog posts are highly valuable resources with which to examine prevailing ideology held by a wide cross-section of the population. For example, bloggers may have different social backgrounds and various political opinions. As Hoffmann (2012: 18) remarked, people who write blogs "discuss affairs with a personal perspective but, notably, without the interference of any internal or external censor." Thus, with the inclusion of blogs in the corpora, it is feasible to capture a broad range of societal voices in relation to the positioning of the Falkland Islands (*las Islas Malvinas*).[6]

To be able to compare how the Falkland Islands are represented in the two corpora, I employed "Falkland Islands" and "*Islas Malvinas*" as the search term of the British corpus and the Argentinian corpus, respectively. The term "Falkland Islands" occurs 1322 times in the British corpus whereas there are 1313 tokens of "*Islas Malvinas*" in the Argentinian corpus. The next step was to identify the collocates of these two search terms (known as the "nodes") in the corresponding corpus. As defined broadly by Sinclair (1991: 170), a word which appears in the neighborhood of a word under examination is a collocate of it. For instance, "happy" is a collocate of "news" in the two-word cluster "happy news." The co-occurrence of "happy" and "news" is called "collocation." In this example, "happy" and "news" are directly next to each other. However, there are cases where a collocate occurs more than one place to the left (or right) of a specific word, as in "**happy** morning **news**." In general, when researching collocation, analysts can set the distance at five words on either side of the search word (Sinclair 2004: 141). As pointed out by Baker et al. (2013: 36), such a collocation span is optimal because spans which are shorter may produce insufficient words for analysis, whereas longer spans are likely to detect cases where words do not actually have a meaningful relationship with each other. Based on this reason, I set the collocation span at five words on either side of the search word in the present research.

Another issue in relation to collocation analysis is the use of statistical tests to calculate the strength of the collocation. In McEnery & Hardie's (2012: 126–127) words, this is known as "collocation-via-significance." Through statistical measures, "collocation-via-significance" aims to identify the collocates of a specific word which are statistically significant, rather than occur by chance. As suggested by Cheng (2012: 94), the two most popular statistical indicators for collocation are the "mutual information" (MI) value and the "t-score."[7] These two indicators are governed by different formulae and thus can represent very different results. While the t-score is prone to identify function words as collocates, the MI value has a tendency to catch lexical collocates (Cheng 2012: 95). As a convention, when an MI value is 3.0 or above, statistical significance is reached. On the other hand, a t-score of at least 2.576 is regarded as the threshold for attaining significance (Xiao 2015: 109–110). In the current research, MI was adopted as the statistical measure of collocation because this is the only built-in option available from the online interface of the two corpora.

The study of collocation is valuable for discourse analysis as it can shed light on the ideological use of language (Baker et al. 2013: 36). In fact, collocation analysis is a research technique developed from corpus linguistics. In recent years, numerous researchers (e.g., Baker et al. 2008; Cheng 2013; Mautner 2016) have advocated the integration of techniques from corpus linguistics into discourse studies, especially those studies in which a critical lens is taken (aka "critical discourse studies"). The term CADS ("corpus-assisted discourse studies") was coined to denote research which employs statistical methods from corpus linguistics in discourse analysis. The label "corpus-assisted" is used to describe such research because corpus techniques are just one among many others, and researchers are entitled to use as many as needed to yield meaningful findings (Partington et al. 2013: 10). As noted by Baker & Ellece (2011: 24), CADS is a form of discourse-oriented research which leans

[6] The present study focuses on comparing the two corpora as a whole and will not go into detail about the differences between general and blog data.

[7] Apart from these, "collostructional analysis" can be adopted to measure the extent to which lexical items and grammatical structures are attracted to, or resisted by, each other (Yoon & Gries 2016: 4).

towards a critical approach to analysis (viz., reminiscent of critical discourse studies). Hardt-Mautner (1995) was one of the CADS pioneers. She examined a 168 000-word corpus of British newspaper editorials covering the European Union or European Commission. Hardt-Mautner (1995) made use of information on frequencies of salient lexical items and concordances to study the representation of important news actors such as Jacques Delors, the then President of the EU Commission. As another notable proponent of CADS, Stubbs (1996) analyzed a variety of texts and text corpora including formal speeches and school textbooks in order to show how concordances, the identification of recurrent syntactic structures and lexical collocation could facilitate text analysis.

Forchtner (2013: 1444) maintained that methods from corpus linguistics can enhance the "methodical rigor" of discourse-related research, resulting in analysis that is more transparent and verifiable. For example, O'Halloran (2007) examined the collocation patterning of selected words in British news reports by using a corpus approach. Those selected words are "simmering," "erupted," "erupt(s)," "eruption(s)" and "swept through." It was found that "simmering," "erupted" and "erupt(s)" regularly co-occur with hostile human behaviors whereas "eruption(s)" and "swept through" are significantly related to volcanoes and fire respectively (2007: 10–19). O'Halloran (2007: 21) stressed that such lexical preference in news reports would not have been revealed if corpus techniques had not been applied.

The study by O'Halloran (2007) illustrates that some lexical items are bound to carry negative connotations. It also shows that there is more to analyze beyond simple collocation. To enrich the findings of the current research, I included "semantic prosody" and "collocation networks" when analyzing the data. Basically, "semantic prosody" concerns how evaluative or attitudinal meanings are conveyed in collocational relations (Sinclair 2003: 178). Other names of "semantic prosody" are "evaluative prosody" and "discourse prosody" (Partington et al. 2013: 58). For instance, Louw (1993: 171) discovered that when the phrase "build up" is utilized transitively with an animate subject as in "we build up our business," the semantic prosody is consistently positive. However, when the phrase is used intransitively as in "tension builds up," the semantic prosody is habitually negative.

"Collocation networks" are based on the idea that text of a specific type or text dealing with a particular topic is arranged in accordance with lexical patterns, which can be visually presented as networks of words that co-occur with each other (Brezina et al. 2015: 142). As Brezina et al. (2015: 151–152) demonstrated, the advantage of collocation networks is that researchers can systematically study the "second-order" or even the "third-order" collocates of a specific lexical item (i.e., the collocates of the collocates of a node). To generate collocation networks, I copied the relevant concordance lines from GloWbE and the Corpus del Español into text files and ran them through the software *GraphColl*. For the purpose of analysis, the MI value of 3.0 was used as the level of significance. Also, I followed the default setting of *GraphColl* and disregarded co-occurrences which appear less than five times as far as collocation networks are concerned in this study.

As Cheng (2012: 94–95) noted, the drawback of using MI values in collocation analysis is that lexical items which are rare occurrences within the corpus tend to be identified as collocates. To circumvent this limitation, I opted for a method which is available through the browser of the two online corpora. With this method, the strong collocates identified (i.e., those with an MI score of 3.0 or above) are sorted by their frequency of co-occurrences with the node ("Falkland Islands" or "*Islas Malvinas*"). In other words, once the MI score of a lexical item reaches 3.0, it would be ranked on the basis of its frequency regardless of how high the MI score is. The advantage of this method is that those lexical items which appear at the top of the collocation list are common enough within the corpus to generate meaningful analysis. The top twenty collocates of "Falkland Islands"/"*Islas Malvinas*" are displayed in Table 2.

Table 2: Top 20 collocates of "Falkland Islands"/"*Islas Malvinas*" in the two corpora

Rank	**Corpus of Global Web-Based English (Great Britain)**			**Corpus del Español: Web/Dialects (Argentina)**		
	Collocate	**Joint frequency**	**MI score**	**Collocate**	**Joint frequency**	**MI score**
1	government	89	3.71	*las* [the (feminine)]	1160	3.07
2	Argentina	61	7.2	*soberanía* [sovereignty]	164	8.62
3	British	45	3.47	*del* [of the (masculine)]	130	3.97
4	sovereignty	41	8.13	*Georgias* [Georgia]	117	12.78
5	south	41	4.19	*sur* [south]	112	6.11
6	Malvinas	33	10.44	*cuestión* [question]	87	5.12
7	Islands	31	6.11	*nuestras* [our (feminine plural)]	38	4.11
8	Britain	27	3.44	*argentinas* [Argentinian (feminine plural)]	30	5.5
9	Georgia	25	7.65	*argentino* [Argentinian (masculine singular)]	30	3.4
10	defence	22	4.41	*Unido* [United]	27	6.04
11	Falkland	20	8.18	*Reino* [Kingdom]	26	5.18
12	governor	19	6.25	*recuperación* [recovery]	24	5.39
13	claim	19	3.47	*argentinos* [Argentinian (masculine plural)]	24	3.57
14	1982	18	6.95	*territorio* [territory]	22	4.46
15	Argentine	17	6.93	*militar* [military]	19	3.74
16	invasion	17	6.03	*británica* [British (feminine singular)]	18	6.9
17	Oil	17	3.64	*Islas* [Islands (plural)]	18	5.37
18	force	17	3.28	*estadio* [stadium]	18	4.9
19	visit	17	3.21	*aeropuerto* [airport]	17	5.93
20	population	16	3.4	*permanente* [permanent]	17	4.16

The concordance lines for these collocates were examined manually. In order to have a more focused discussion of the findings, I decided to concentrate on the collocates, the use of which reflects the following two key issues: (i) specific ideological positions vis-à-vis the sovereignty and/or administration of the Falkland Islands; (ii) "positive self-presentation and negative other-presentation" (van Dijk 2011: 397). Van Dijk (2011: 396–397) stated that in ideological discourse there is a tendency to "polarize" the in-group ("we") and the out-group ("they"). Four ways can help to achieve "polarization": (i) foreground "our" positive facets; (ii) foreground "their" negative facets; (iii)

background "our" negative facets; (iv) background "their" positive facets. Other scholars such as Potter (1996: 184) called such selective representation in discourse "ontological gerrymandering." It should be noted that the two key issues are highly interrelated and are not strictly separable. For instance, by presenting Argentina as the invader (viz., "negative other-presentation"), a British writer is denying the Argentinian sovereignty over the Islands.

Bearing the two issues in mind, I excluded 11 collocates in Table 2 from analysis after examination of the concordance lines. These 11 collocates are listed in Table 3. Reasons for the exclusion are provided as well.

Table 3: The 11 collocates excluded from analysis

Corpus of Global Web-Based English (Great Britain)		**Corpus del Español: Web/Dialects (Argentina)**	
Collocate	**Reason for exclusion**	**Collocate**	**Reason for exclusion**
South	It tends to co-occur with "Georgia" to form "South Georgia," which together with "South Sandwich" forms a British overseas territory near the Falkland Islands. Since the focus of the present research is the Falkland Islands, this collocate is excluded.	*las* [the (feminine)]	This definite article tends to precede the two-word cluster "*Islas Malvinas*" and thus can be considered to be part of the node.
Islands	This collocate overlaps with the node (viz., "self-collocation").	*del* [of the (masculine)]	It tends to occur in the clusters "*Georgias* ***del*** *Sur*" [South Georgia] and "*Sándwich* ***del*** *Sur*" [South Sandwich], which are not the focus of the present research. For details, refer to the explanation for "south" in the British corpus.
Georgia	Refer to the explanation for "south" above.	*Georgias* [Georgia]	Refer to the explanation for "*del*" above.
Falkland	This collocate overlaps with the node (viz., "self-collocation").	*sur* [south]	Refer to the explanation for "*del*" above.
oil	It is used in contexts related to the oil reserves near the Falkland Islands. Although it constitutes a highly debatable topic, it does not directly echo the two issues which are of central interest to the present study.	*Islas* [Islands (plural)]	It is part of the Spanish term "*Islas Malvinas*" used by Argentinians to refer to the Falkland Islands. Since its referent overlaps with the node, it is excluded.
visit	It is used in contexts related to tourism of the Falkland Islands. It does not directly echo the two issues which are of central interest to the present study.		

4. Findings and discussion

I will divide this section into four parts, each of which is about a central topic uncovered from the concordance lines. These topics are: (i) sovereignty over the Falkland Islands; (ii) dispute over the Falkland Islands; (iii) military intervention; (iv) positioning of Argentina and Britain.

4.1. Sovereignty over the Falkland Islands

The lexical item "government" is the most frequent collocate (N=89) of "Falkland Islands" in the British corpus. Examination of the concordance lines reveals that 81 co-occurrences of "government" and "Falkland Islands" refer to the Falkland Islands government. Figure 1 displays a sample of the concordance lines taken from the corpus.

Figure 1: Sample concordance of "government" when it collocates with "Falkland Islands" in GloWbE (Great Britain)

1	in hospital last night. # In a statement the	**Falkland Islands government** today paid tribute
2	to investigate the impacts of tourism. The	**Falkland Islands Government** also permits the
3	Whilst it is unrealistic to expect the	**Falkland Islands Government** to halt commercial
4	across the world. # In the late 1990s, the	**Falkland Islands Government** issued the first
5	round of offshore Licences was issued by the	**Falkland Islands Government** and this time one
6	these services completely viable and so the	**Falkland Islands Government** subsidises the
7	wife and son were in a house in Kent. # The	**Falkland Islands Government** said in a statement
8	votes cast be against the current status, the	**Falkland Islands Government** will undertake
9	I don't have a problem with it. Nor does the	**Falkland Islands Government**. In fact they were
10	chair is not acting with impartiality # The	**Falkland Islands government** complained on

The ten examples in Figure 1 show that there is a tendency for "Falkland Islands Government" to be the "agentive participant" (van Leeuwen 2008: 30). Manual examination of the 81 relevant concordance lines reveals that agency is often assigned (66 out of 81) to the Falkland Islands government. Two examples extracted from the corpus are:

(1) "The **Falkland Islands Government** governs the Falkland Islands, and the elected assembly men/women make the decisions." (Source: en.mercopress.com)

(2) "The **Falkland Islands Government** has announced an historic referendum on the future of the islands' sovereignty." (Source: conservativehome.com)

In Examples 1 and 2, the Falkland Islands government is the agent of "governing" the Islands and "announcing" the referendum on the future of the Islands. It can be inferred from the examples that the Falkland Islands are presented as having their own governing party (viz., "internal sovereignty"), who is capable of taking action, thereby constituting a self-contained political unit. In other words, the assignment of agency to the Falkland Islands government supports the discursive positioning of the Falkland Islands as an entity with self-determination/self-governance.

The portrayal of the Falkland Islands as a distinct unit is also reinforced by the collocate "population." There are 16 co-occurrences of "population" and "Falkland Islands" in the corpus. Figure 2 shows a sample of the concordance lines.

Figure 2: Sample concordance of "population" when it collocates with "Falkland Islands" in GloWbE (Great Britain)

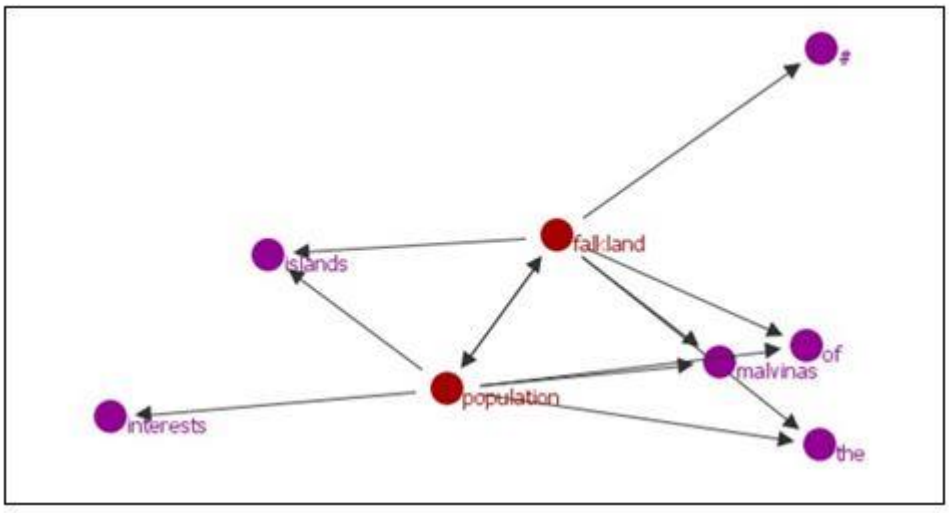
1	would be the end of any discussion. # 1. The	**population** of the **Falkland Islands** only can vote or
2	ends up? (bearing in mind) the interests of the	**population** of the **Falkland Islands**." Argentina cares
3	resolution 1514 (XV) and the interests of the	**population** of the **Falkland Islands** (Malvinas);" So it is
4	resolution 1514 (XV) and the interests of the	**population** of the **Falkland Islands** (Malvinas)" # Thus
5	of any claim by Argentina is that the local	**population** of the **Falkland Islands** want nothing to do
6	is simply absurd.' # The **Falkland Islands** has a	**population** of around 3,000 people, with just over half

The co-occurrences of "population" and "Falkland Islands" facilitate the creation of a unified voice among the residents of the Falkland Islands, as Example 3 demonstrates:

(3) "The underlying problem of any claim by Argentina is that the local **population** of the **Falkland Islands** want nothing to do with them." (Source: guardian.co.uk)

Example 3 is a manifestation of the representational strategy named "collectivization" (van Leeuwen 2008). According to van Leeuwen (2008: 37), "collectivization" is a form of "assimilation"—i.e., social actors being referred to as groups through mass nouns and the like (e.g., "the community"). In Example 3, the people living on the Falkland Islands are "collectivized" via the collocate "population." With "collectivization," a consensus among these people ("want nothing to do with them [Argentina]") can be conveyed.

Figure 3: Collocates of "population" when it co-occurs with "Falkland Islands" in GloWbE (Great Britain)



The collective voice of the people on the Falkland Islands is signaled by the cluster "interests of the population of the Falkland Islands" as well. The collocation network displayed in Figure 3 indicates that "interests" is a collocate of "population" when it co-occurs with "Falkland Islands." A study of the wider co-text of all the six relevant concordance lines shows that this cluster is uniformly used in contexts where the United Nations' (UN) recommendation on how to handle the Falkland Islands is mentioned. An example is:

(4) "The UN 'invites the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland to proceed without delay with the negotiations recommended by the Special Committee on the Situation with regard to the Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples with a view to finding a peaceful solution to the problem, bearing in mind the provisions and objectives of the Charter of the United Nations and of General Assembly resolution 1514 (XV) and the **interests** of the **population** of the **Falkland Islands** (Malvinas).'" (Source: en.mercopress.com)

As Example 4 illustrates, the collocational relations among "interests," "population" and "Falkland Islands" in the British corpus foreground the importance of the Islanders on matters related to the sovereignty of the Falkland Islands. This is in line with the British political rhetoric concerning the sovereignty of the Falkland Islands, as the co-occurrences of "sovereignty" and "Falkland Islands" have revealed:

(5) "'Your right to self-determination is the cornerstone of our policy. We will never negotiate on the **sovereignty** of the **Falkland Islands** unless you, the Falkland Islanders, so wish. No democracy could ever do otherwise.'" (Source: telegraph.co.uk)

(6) "The Foreign Office message adds that Britain has no doubts about its **sovereignty** over the **Falkland Islands** and will continue to support the right of the Islanders to determine their own political future." (Source: en.mercopress.com)

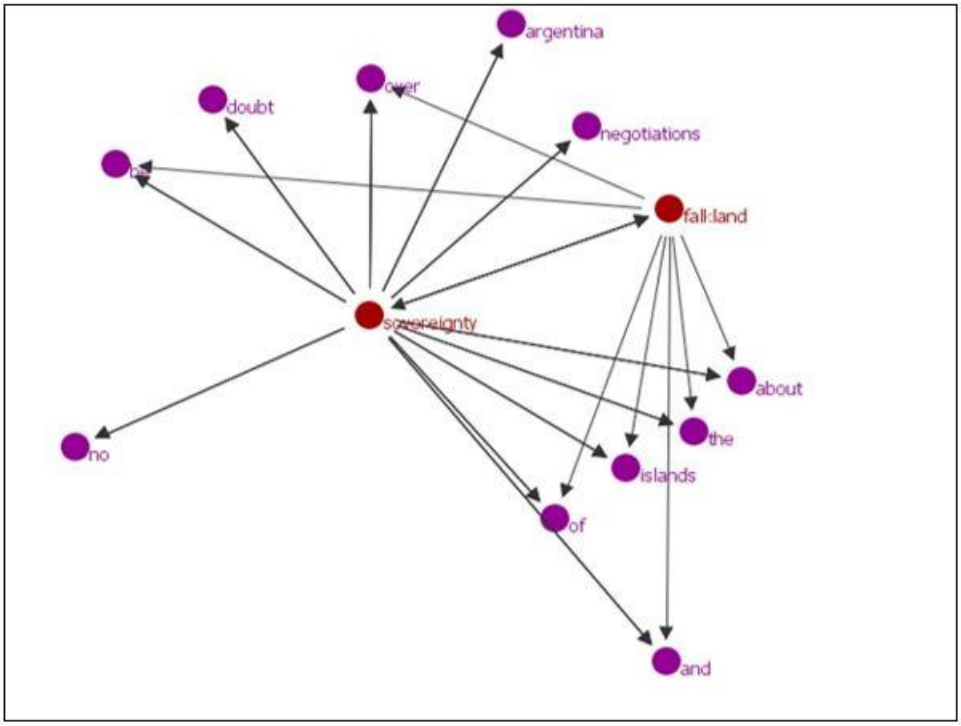
Examples 5 and 6 are both quotes from the British authority. While Example 5 comes from the then Prime Minister David Cameron, Example 6 cites the British Foreign Office. The voices of the British government, as conveyed by the two examples, emphasize the "wish" or the "right" of the Falkland Islanders. It can be deduced that when the British officials present their view about the sovereignty of the Falkland Islands, they do so in conjunction with the self-determination of the Islands.

"Sovereignty" is a strong collocate of "Falkland Islands" (N=41). Figure 4 is a sample of the concordance lines with the co-occurrences of "sovereignty" and "Falkland Islands." When "sovereignty" co-occurs with "Falkland Islands" in the British corpus, it tends to be embedded in quotations from British officials (20 out of the 41 co-occurrences), like Examples 5 and 6 discussed above.

Figure 4: Sample concordance of "sovereignty" when it collocates with "Falkland Islands" in GloWbE (Great Britain)

1	over the water". # "When it comes to the	**sovereignty** of the **Falkland Islands**, there will be
2	added: 'There can be no negotiation on the	**sovereignty** of the **Falkland Islands** unless and until
3	said her country had no doubt regarding the	**sovereignty** of the **Falkland Islands**. There could be
4	our policy. We will never negotiate on the	**sovereignty** of the **Falkland Islands** unless you, the
5	adding "there can be no negotiations over the	**sovereignty** of the **Falkland Islands**". # MLA Rogers
6	its way. There can be no negotiations over the	**sovereignty** of the **Falkland Islands**. The United
7	said the UK had no doubt about its	**sovereignty** over the **Falkland Islands** and its
8	Choice?. # And Argentina has no legitimate	**sovereignty** claims over the **Falkland Islands** beyond
9	Argentina is calling for negotiations over the	**sovereignty** of the **Falkland Islands**, this referendum
10	who threatened them. Lies about the lawful	**sovereignty** of the **Falkland Islands** and the conduct

Figure 5: Collocates of "sovereignty" when it co-occurs with "Falkland Islands" in GloWbE (Great Britain)



The concordance lines in Figure 4, as confirmed by the collocation network in Figure 5, show that the lexical items "doubt" and "negotiations" have a propensity to appear in the neighborhood of "sovereignty" when it co-occurs with "Falkland Islands." Here is an example from the corpus:

(7) "Speaking in exercise of the right of reply, the representative of the UK said her country had no **doubt** regarding the **sovereignty** of the **Falkland Islands**. There could be no **negotiations** on that sovereignty if the population of the Islands did not so wish." (Source: en.mercopress.com)

With the negative marker "no"[8] preceding "doubt" and "negotiations," Example 7 indicates the unwavering British institutional outlook on the sovereignty of the Falkland Islands. It should be borne in mind that the conditional clause "if the population of the Islands did not so wish" highlights once again the collective voice of the Islanders, adding strength to the aforementioned finding about the importance attached to the Islanders by the British officials.

What Figure 5 also displays is the salience of the lexical item "Argentina," which was found on 13 of the 41 concordance lines in question. In the vast majority of them (N=11), "Argentina" emerges in unfavorable environments, thus suggestive of a negative semantic prosody. Two examples are:

(8) "**Argentina**'s ever more aggressive rhetoric challenging the **Falkland Islands sovereignty** underlines the significance of the right to self-determination, said Sukey Cameron." (Source: en.mercopress.com)

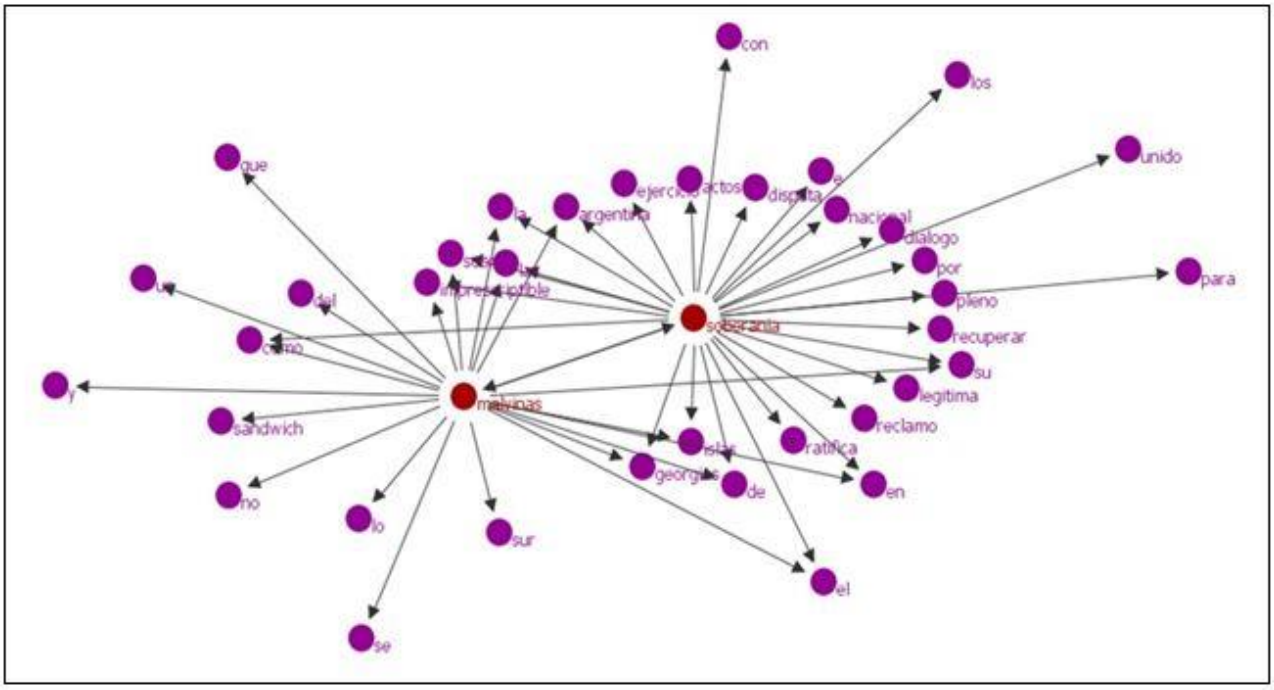
(9) "Britain put itself on a collision course with **Argentina** over the disputed **sovereignty** of the **Falkland Islands** when it gave explicit support to a £600m plan to develop oil reserves in the south Atlantic on Wednesday." (Source: guardian.co.uk)

[8] As can be seen in Figure 5, "no" was identified by *GraphColl* as a "second-order" collocate.

Example 8 construes Argentina as the troublemaker ("challenging") and the bearer of aggression ("aggressive rhetoric"). In this example, Argentina is the agent of undesirable action. In Example 9, Argentina is not portrayed as the agent. However, a sense of unpleasantness (as triggered by the phrase "on a collision course") is present. Both examples suggest that "Argentina" is loaded with negative meanings in the British corpus. More details on this will be given in Section 4.4 when the positioning of Britain and Argentina is discussed.

The Spanish equivalent "*soberanía*" [sovereignty] is a prominent collocate of "*Islas Malvinas*" in the Argentinian corpus. There are 164 co-occurrences of "*soberanía*" and "*Islas Malvinas*" and a number of "second-order" collocates were identified by *GraphColl* (see Figure 6).

Figure 6: Collocates of "*soberanía*" when it co-occurs with "*Islas Malvinas*" in Corpus del Español (Argentina)



To have a more focused analysis, I made use of *AntConc 3.5.0* (Anthony 2015) to identify common "n-grams."[9] It was found that the 2-gram "*soberanía argentina*" occurs 24 times. Two examples taken from the corpus are:

(10) "*Los contenidos a incorporar por la Dirección General de Escuelas serían la recuperación del ejercicio pleno de* ***soberanía Argentina*** *sobre las* ***Islas Malvinas****, Georgias y Sandwichs del Sur, los espacios marítimos circundantes y el sector antártico argentino, entre otros.*" (Source: mdzol.com)
[The contents to be incorporated by the General Directorate of Schools would be the recovery of the full exercise of **Argentine sovereignty** over the **Falkland Islands**, South Georgia and South Sandwich Islands, the surrounding maritime areas and the Argentine Antarctic sector, among others.]

(11) "*La banda irlandesa dedicó esta canción como homenaje al Almirante Brown y en apoyo al reclamo de la* ***soberanía argentina*** *sobre las* ***Islas Malvinas***." (Source: adhilac.com.ar)

[9] "N-grams" are also called "clusters"—strings or sequences of lexical items which repeatedly show up together. The letter "n" represents the number of lexical items in the sequence so a 5-gram would mean a five-word cluster (Partington et al. 2013: 18).

[The Irish band dedicated this song as a tribute to Admiral Brown[10] and in support of the claim of **Argentine sovereignty** over the **Falkland Islands**.]

Example 10 comes from a text about educating students in Argentina on issues related to the Falkland Islands whereas Example 11 is from a website which introduces viewers to the artistic works devoted to the conflicts arising from the Falkland Islands. Unlike the use of "Argentina" in the British corpus, the 2-gram "*soberanía argentina*" in the Argentinian corpus (as shown in Examples 10 and 11) is devoid of negative evaluation. In fact, the use of this 2-gram assumes the existence of "Argentine sovereignty" (viz., "existential presupposition").[11] This assumption is sustained by the lexical item "*recuperación*"[12] [recovery] in Example 10 because the recovery of something presupposes its existence.

The two-word cluster "*soberanía argentina*" is only one of the collocational patterns which suggest that the Falkland Islands are subsumed under the ownership of Argentina. For instance, the "second-order" collocate "*nacional*" [national] also marks Argentina's possession of the Islands. One example is:

(12) "*En ese sentido, es importante que junto con el legítimo y valorable reclamo por la devolución de las **Islas Malvinas** como parte de nuestra **Soberanía Nacional**, se avance, por ejemplo, en la estatización del comercio exterior y la nacionalización de nuestros bienes comunes y puertos.*" (Source: frentepopulardariosantillan.org)
[In that sense, it is important that together with the legitimate and valuable demand for the return of the **Falkland Islands** as part of our **National Sovereignty**, progress should be made, for example, in the nationalization of foreign trade and the nationalization of our common goods and ports.]

In Example 12, "*soberanía nacional*" is pre-modified by the first-person plural possessive determiner "*nuestra*" [our]. The use of "*nuestra*" is an overt indicator of ownership. The co-occurrence of "*Islas Malvinas*" and "*nuestra soberanía nacional*" here sets up a relation of "meaning inclusion" or more specifically one of hyponymy, in which the latter includes the former. As noted by Fairclough (2003: 101), such a strategy can subvert the meaning differences between the expressions involved, building up a particular world view in discourse.

As Table 1 in Section 3 of this article reveals, "*nuestras*" [our (feminine plural)] is a collocate of "*Islas Malvinas*" in the Argentinian corpus. It was found that 37 of the 38 co-occurrences are instances of the 3-gram "*nuestras Islas Malvinas*" [our Falkland Islands]. The only exception is Example 13, where the Spanish endearment term "*queridas*" [dear (feminine plural)] appears between "*nuestras*" and "*Islas Malvinas*".

(13) "*En ese sentido, es importante que junto con el legítimo y valorable reclamo por la devolución de las **Islas Malvinas** como parte de nuestra **Soberanía Nacional**, se avance, por ejemplo, en la estatización del comercio exterior y la nacionalización de nuestros bienes comunes y puertos.*" (Source: frentepopulardariosantillan.org)
[Today 31 years after the warlike conflict carried out between our country and Great Britain for the sovereignty of **our** beloved **Falkland Islands**, in which we were active participants…]

This sentence originates from an Argentinian veteran of the Falklands War. The word "*queridas*" is emotionally charged and adds a sense of affection to Argentina's claim over the Falkland Islands.

[10] A national figure in Argentina due to his participation in the Argentine War of Independence (Renmore History Society 2010).

[11] More information about existential presuppositions in ideological texts can be found in the work of Fairclough (2003: 56).

[12] As Figure 6 shows, the verb "*recuperar*" [recover] is a "second-order" collocate.

Other collocational patterns which exhibit the world view in which Argentina has sovereignty over the Falkland Islands are derived from the lexical items "*estadio*" [stadium] and "*aeropuerto*" [airport]. These two lexical items, when co-occurring with "*Islas Malvinas*" in the corpus, are actually names of an existing stadium and an airport located in Argentina, as is displayed by Figure 7.

Figure 7: Sample concordance of "*estadio*" [stadium] and "*aeropuerto*" [airport] when they collocate with "*Islas Malvinas*" in Corpus del Español (Argentina)

1	*El partido se jugará en el*	***estadio Islas Malvinas**, ubicado en el barrio capitalino*
	[The match will be played in the	**Estadio Islas Malvinas** located in the capital district]
2	*las entradas para el recital previsto en el*	***Estadio Islas Malvinas**, el 14 de septiembre. Eran*
	[the tickets for the predicted recital in the	**Estadio Islas Malvinas**, on 14 September. They were]
3	*El partido se jugará desde las 18 en el*	***estadio Islas Malvinas** de Floresta, con arbitraje*
	[The match will be played from 18:00 in the	**Estadio Islas Malvinas** of Floresta, with arbitration]
4	*la necesidad de un servicio igualitario. El*	***aeropuerto** internacional **Islas Malvinas** de Rosario*
	[the need for an egalitarian service. The	**Islas Malvinas** International **Airport** of Rosario]
5	*Raúl Garo, presidente de el Directorio del*	***Aeropuerto** Internacional **Islas Malvinas** de Rosario*
	[Raúl Garo, president of the Board of the	**Islas Malvinas** International **Airport** of Rosario]
6	*el Gobierno en obras de remodelación en el*	**aeropuerto Islas Malvinas** de Rosario
	[the government in works of renovation in the	**Islas Malvinas Airport** of Rosario]

It was found that 16 of the 18 co-occurrences of "*estadio*" and "*Islas Malvinas*" are instances of the 3-gram "*estadio Islas Malvinas*." In the two exceptions, "*polideportivo*" [sport center] appears between "*estadio*" and "*Islas Malvinas*," as Example 14 shows:

(14) "*La Copa Argentina 2013 de patinaje artístico y el 'World Roller Skating Grand Prix', se llevarán a cabo en el **Estadio** Polideportivo **Islas Malvinas**, organizados por la Confederación Argentina de Patín y la Asociación Marplatense de Patín, ambos eventos contarán con la participación de destacados patinadores nacionales e internacionales*." (Source: deporteshoy.com.ar)
[The Argentine Skating Cup 2013 and the 'World Roller Skating Grand Prix,' (which) will be held at the **Estadio** Polideportivo **Islas Malvinas**, are organized by the Argentine Confederation of Roller Skating and the Marplatense Association of Roller Skating. Both events will feature the participation of distinguished national and international skaters.]

Although "*Estadio Polideportivo Islas Malvinas*" and "*Estadio Islas Malvinas*" are different places, all instances of "*estadio*" appear in contexts where sports events are mentioned. Perhaps it is not surprising that "*estadio*" has a preference for the semantic field of sports. Nevertheless, what is worth highlighting is the representation of Argentina's sovereignty over the Falkland Islands via the practice of naming specific Argentinian sites "Islas Malvinas."

The 17 occurrences of "*aeropuerto*" [airport] all denote the same airport in Argentina, which is officially called "*Aeropuerto Internacional de Rosario – Islas Malvinas*" [Rosario – Islas Malvinas International Airport]. All the 17 concordance lines are about the renovation of the airport in 2013, as Example 15 demonstrates:

(15) "*Ramos hizo ese anuncio al recorrer las obras de refacción que el gobierno nacional realiza en el marco de su plan de inversión para el **aeropuerto Islas Malvinas***." (Source: elsolquilmes.com.ar)
[Ramos made that announcement when looking around the refurbishment works that the national government carries out under its investment plan for the **Islas Malvinas Airport**.]

Since the remodeling of the airport was done as part of the national plan, the agency of the Argentinian

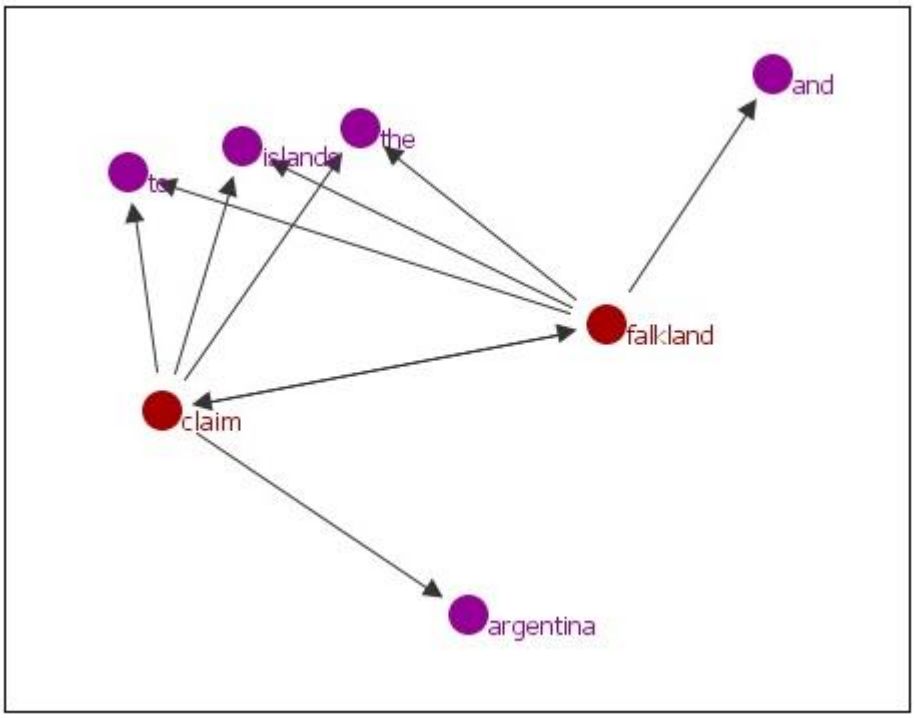
government is established. In some way this echoes the Argentinian government's proactive approach to claiming the sovereignty of the Falkland Islands.

4.2. Dispute over the Falkland Islands

In this subsection, I will look at the collocates of "Falkland Islands"/"*Islas Malvinas*" which position the Islands as an object of dispute. These collocates include "claim" and "Malvinas" in the British corpus and "*cuestión*" [question], "*permanente*" [permanent] and "*territorio*" [territory] in the Argentinian corpus.

When co-occurring with "Falkland Islands," "claim" tends to be found in the vicinity of "Argentina." Figure 8 shows the collocation network generated by *GraphColl*.

Figure 8. Collocates of "claim" when it co-occurs with "Falkland Islands" in GloWbE (Great Britain)



Argentina is construed as the claimant in 15 of the 19 co-occurrences of "claim" and "Falkland Islands" in the British corpus. Although the lexical item "Argentina" does not really appear in six of these 15 instances, it can be deduced from the co-text that Argentina is being referred to. Figure 9 displays a sample of the concordance lines.

Figure 9: Sample concordance of "claim" when it collocates with "Falkland Islands" in GloWbE (Great Britain)

1	# It is highly hypocritical for Argentina to	**claim** that the **Falkland Islands** is comprised of 'implanted'
2	The reasons that Argentina uses to support its	**claim** to the **Falkland Islands** are, at best, specious.
3	their problem, not mine. # Argentina's	**claim** to the **Falkland Islands** is not ridiculous, only based
4	conclusive that Argentina has no legal	**claim** to the **Falkland Islands**. End of argument... # In any
5	determination; (b) support the false argentine	**claim** to the **Falkland Islands** and territorial aggression
6	due to state, yet again, her country's dubious	**claim** to the **Falkland Islands** on the 14th to the
7	above is as far from reality as is the Argentine	**claim** to the **Falkland Islands**. I have lived in Colombia,
8	just about follow how Argentina justifies its	**claim** to the **Falkland Islands** (although I do not agree with

As can be seen in Figure 9, Argentina's claim is represented as something problematic. This is evident in the use of unfavorable evaluative lexis including "hypocritical," "specious," "false" and "dubious." The example below illustrates the explicit rejection of the validity of Argentina's claim:

(16) "*Ramos hizo ese anu* "After signing the 'Convention of Settlement in 1850' Argentina published maps in the 1870s and 1880s which showed that the Falklands DID NOT BELONG TO ARGENTINA. The 1882 Latzina map clearly indicates this fact. It is therefore conclusive that **Argentina** has no legal **claim** to the **Falkland Islands**. End of argument…" (Source: en.mercopress.com)

Example 16 is a comment made by a blogger. This excerpt suggests that the dispute surrounding the Falkland Islands primarily stems from Argentina's claim to the Islands and that once the claim is ruled out, the dispute will end (as hinted at by the phrase "end of argument").

In the British corpus, the lexical item "Malvinas" has in principle the same referent as "Falkland Islands." In 23 of the 33 co-occurrences, either "Malvinas" or "Falkland Islands" is enclosed in brackets, like the concordance lines in Figure 10 show.

Figure 10: Sample concordance of "Malvinas" when it collocates with "Falkland Islands" in GloWbE (Great Britain)

1	"These cruises often include visits to the nearby	**Falkland Islands** (Islas **Malvinas**) and South Georgia."
2	United Kingdom and the United States and the	**Falkland Islands** (Islas **Malvinas**). # Members have
3	# Spring flowers begin blooming in the	**Falkland Islands** (Islas **Malvinas**) and elephant seals
4	The longer trips usually include visits to the	**Falkland Islands** (Islas **Malvinas**) and South Georgia, or
5	GA Resolution 43/25 on the Question of the	**Falkland Islands** (**Malvinas**) dated 7 November 1988?
6	and the interests of the population of the	**Falkland Islands** (**Malvinas**)" # Thus, the General
7	you are. # 1850 Treaty does not deal with the	**Falkland Islands** (**Malvinas**) dispute at all. It concerned
8	considered the question of the **Malvinas** Islands	(**Falkland Islands**), Taking into account the chapters of
9	of which fits the case of the **Malvinas** Islands	(**Falkland Islands**). # (THE FOLLOWING IS
10	of which fits the case of the **Malvinas** Islands	(**Falkland Islands**). We all know that we speak of

There are 18 instances in which "Falkland Islands" comes first and "Malvinas" is placed in parentheses (e.g., Lines 1 to 7). On the other hand, there are only 5 cases where the reverse pattern is used (e.g., Lines 8 to 10). Generally, what is put in brackets is supposed to be supplementary information, which may be omitted without disruption to the overall sentence in question. It can be argued that the tendency to place the Argentina-oriented label "Malvinas" in round brackets alongside the English name "Falkland Islands" reflects the peripheral role of Argentina in British discourse about the Islands.

In order to find out in which environments the lexical item "Malvinas" is primed to occur in the British corpus, I examined the 33 concordance lines. Only two of them contain clear disapproval of Argentina. One example is:

(17) "It should be compulsory education in Argentine schools to learn about their country recent history, instead of teaching lies about the **Falkland Islands** (the imaginary **Malvinas**—which Argentina has NEVER had sovereignty over)." (Source: en.mercopress.com)

In Example 17, the adjective "imaginary" is used to pre-modify "Malvinas" when Argentina's claim over the Islands is condemned. Also, the word "lies," which evokes immorality, "delegitimizes" the Argentinian world view about the Falkland Islands.[13]

A majority of the co-occurrences of "Malvinas" and "Falkland Islands" in the British corpus

[13] More information about "moral evaluation legitimation" is provided in the work of van Leeuwen (2008: 110–111).

(N=26) appear in contexts where the dispute is referred to, as in Examples 18 and 19 below.

(18) "The Principle of self-determination, enshrined in the United Nations Charter remains a prime factor in any consideration of the question of the **Falkland Islands** (**Malvinas**)." (Source: en.mercopress.com)
(19) "When Argentina face England they might decide to wear a symbol commemorating the soldiers lost in the Battle for the **Malvinas**—or the **Falkland Islands**, as we call them." (Source: dailymail.co.uk)

Both examples touch upon the dispute arising from the Falkland Islands. Example 18 is devoted to the author's belief in how the dispute should be resolved. Example 19 does not only refer to the Falklands War, but it also draws a division between Argentina and Britain via the pronouns "they" and "we."

There are five instances in which "Malvinas" and "Falkland Islands" co-occur in texts promoting tourism. These co-occurrences can be considered neutral or general in terms of their semantic prosody. One example is:

(20) "Most cruises depart from one of the gateway ports in southern South America, such as Ushuaia (Argentina), Punta Arenas (Chile) or Montevideo (Uruguay), to the scenic and wildlife rich northern tip of the Antarctic Peninsula. These cruises often include visits to the nearby **Falkland Islands** (Islas **Malvinas**) and South Georgia." (Source: iaato.org)

Based on what is discussed above, it can be concluded that when collocating with "Falkland Islands" in the British corpus, "Malvinas" tends to display a negative semantic prosody because of its occurrence in contexts where the dispute over the Islands is mentioned.

By contrast, the Argentinian websites represent the issue concerning the Falkland Islands in different ways. This is evident from the collocates "*cuestión*" [question] and "*permanente*" [permanent]. Figure 11 shows a sample of the relevant concordance lines.

Figure 11: Sample concordance of "*cuestión*" [question] and/or "*permanente*" [permanent] when co-occurring with "*Islas Malvinas*" in Corpus del Español (Argentina)

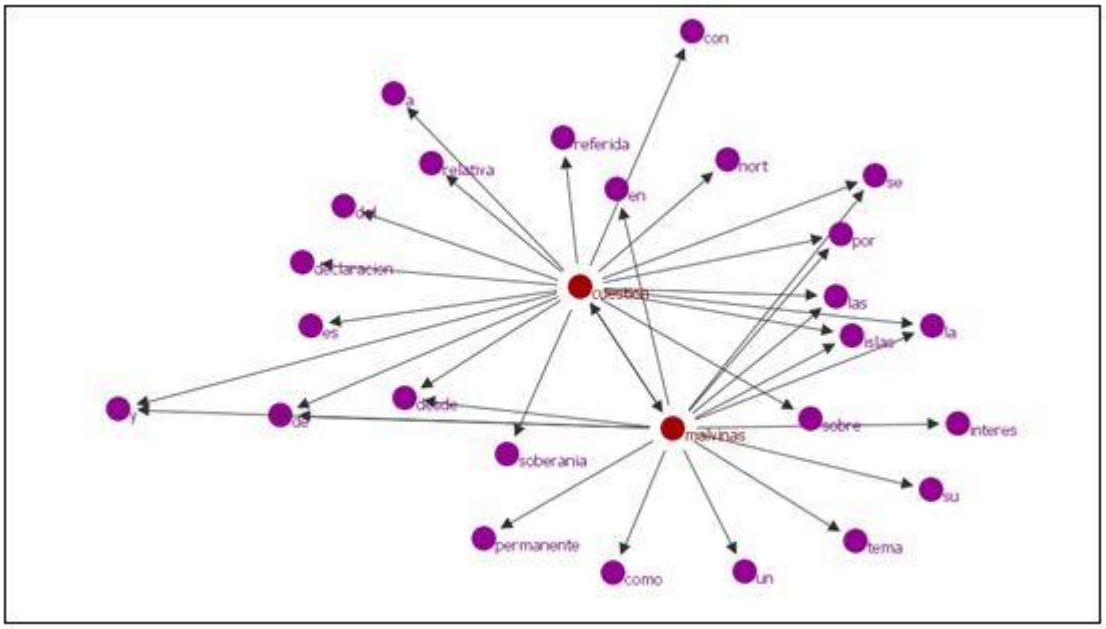
1	*el Gobierno argentino logró que la*	***Cuestión** de las **Islas Malvinas** pase a figurar*
	[the Argentinian government ensured that the	**Question** of the **Falkland Islands** proceeds to appear]
2	*en la disputa de soberanía referida a la*	***Cuestión** de las **Islas Malvinas**, brindando un claro*
	[in the dispute of sovereignty referred to as the	**Question** of the **Falkland Islands**, providing a clear]
3	*disputa sobre la soberanía en relación con La*	***Cuestión** de las **Islas Malvinas**, lo que perjudica*
	[dispute about the sovereignty in relation to the	**Question** of the **Falkland Islands**, which harms]
4	*tener presente que la **Cuestión** de las*	***Islas Malvinas** figura como tema **permanente***
	[remember that the **Question** of the	**Falkland Islands** appears as a **permanent** topic]
5	*reiteraron que la **Cuestión** de las*	***Islas Malvinas** constituye un tema de **permanente***
	[reiterated that the **Question** of the	**Falkland Islands** constitutes a topic of **permanent**]
6	*que establece que la **Cuestión** de las*	***Islas Malvinas** es de interés hemisférico **permanente***
	[which establishes that the **Question** of the	**Falkland Islands** is of **permanent** hemispheric interest]

As Figure 11 demonstrates, the dispute between Britain and Argentina over the Falkland Islands is conceptualized as a question. It was found that 83 of the 87 co-occurrences of "*cuestión*" and "*Islas Malvinas*" are instances of the 6-gram "*la Cuestión de las Islas Malvinas*." Another interesting pattern is that 81 of them come from the Argentinian government websites (as indicated by the domain "gov.ar"). An example is shown below:

(21) "*La Asamblea General de la Organización de Estados Americanos ha aprobado anualmente, entre 1982 y 1992, una resolución y desde 1993 se aprueba también anualmente, una declaración que establece que la* ***Cuestión*** *de las* ***Islas Malvinas*** *es de interés hemisférico* ***permanente****, convoca a la Argentina y al Reino Unido a reanudar las negociaciones a fin de encontrar, a la brevedad posible, una solución pacífica y definitiva a la disputa de soberanía…*"
(Source: eaust.mrecic.gov.ar)
[The General Assembly of the Organization of American States annually approved a resolution between 1982 and 1992, and from 1993 a declaration is also endorsed annually stating that the **Question** of the **Falkland Islands** is of **permanent** hemispherical interest, calling Argentina and the United Kingdom to resume the negotiations in order to find, as soon as possible, a peaceful and final solution to the dispute over sovereignty…]

First and foremost, the cluster "*la Cuestión de las Islas Malvinas*," which tends to crop up on official websites, seems to suggest that it is a "bona fide phraseme" in Argentinian political discourse. In fact, "*la Cuestión de las Islas Malvinas*" is the official rhetoric adopted by the Argentinian authority to capture the discussion with respect to the Falkland Islands (Ministerio de Relaciones Exteriores y Culto de la República Argentina 2017). Example 21 also reveals that the reference "*la Cuestión de las Islas Malvinas*" was established in an official document approved by the Organization of American States[14] (viz., "*declaración*" [declaration]). *GraphColl* identified "*declaración*" as one of the "second-order" collocates (see Figure 12). The strong collocational relation between "*declaración*" and "*la Cuestión de las Islas Malvinas*" strengthens the argument that the portrayal of the dispute as "the question" is a codified practice.

Figure 12: Collocates of "*cuestión*" when it co-occurs with "*Islas Malvinas*" in Corpus del Español (Argentina)

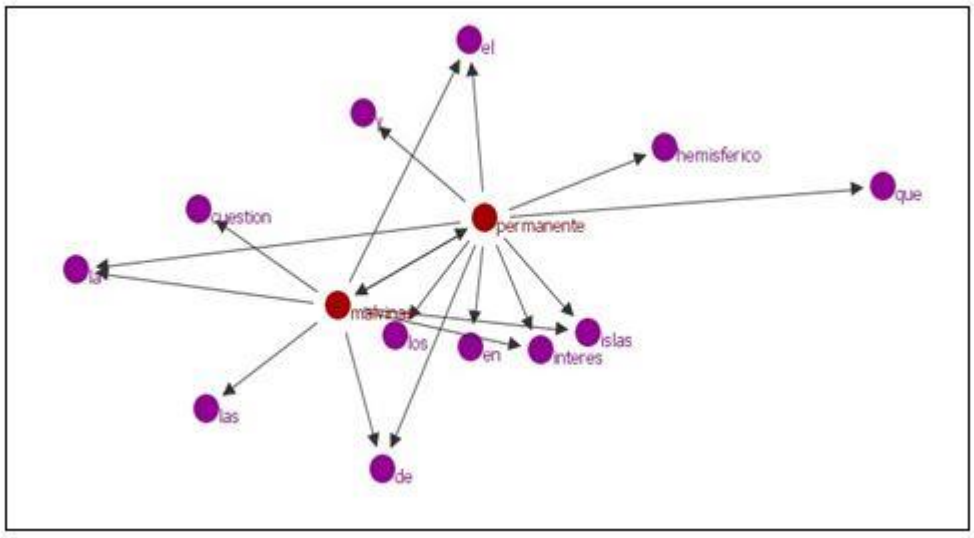


Example 21 contains another collocate "*permanente*" [permanent] of "*Islas Malvinas*." In 13 of the 17 co-occurrences of "*permanente*" and "*Islas Malvinas*," "*Islas Malvinas*" is part of the cluster "*la Cuestión de las Islas Malvinas*." This means that in the Argentinian corpus, the matter about the Falkland Islands is not only conceptualized as a question, but it is also construed as ongoing and long-lasting. In Example 21, "*permanente*" is part of the 3-gram "*interés hemisférico permanente*"

[14] The Organization of American States (OAS) was founded in 1948 in order to enhance solidarity among the 35 countries of the Americas (OAS 2017).

[permanent hemispherical interest]. It was found that "*hemisférico*" and "*interés*" are "second-order" collocates (see Figure 13). The use of "*hemisférico*" to depict the dispute over the Falkland Islands shows that in the Argentinian discourse, the interest of the hemisphere, rather than the interest of the Falkland Islanders as found in the British discourse, prevails.

Figure 13: Collocates of "*permanente*" when it co-occurs with "*Islas Malvinas*" in Corpus del Español (Argentina)



The 22 co-occurrences of the other collocate "*territorio*" [territory] and "*Islas Malvinas*" also position the Falkland Islands as a politically contentious entity. When collocating with "*Islas Malvinas*," "*territorio*" has four referents: (i) a British overseas territory (N=5); (ii) part of the Argentinian territory (N=11); (iii) mainland Argentina—i.e., the continental territory of Argentina (N=4); (iv) the territory of the Islands (N=2). An example of each referent is provided below:

(22) "*Las advertencias fueron hechas semanas antes de realizarse un referendo sobre el estatus político en las **islas Malvinas**, **territorio** bajo dominación británica y cuya soberanía reclama Argentina*." (Source: interdefensa.argentinaforo.net)
[The warnings had been made weeks before a referendum about the political status was carried out on the **Falkland Islands**—**territory** under British rule and whose sovereignty is claimed by Argentina.]

(23) "*Esto significa que, como Chile reconoce a las **Islas Malvinas** como **territorio** argentino, los tramos entre Punta Arenas y Río Gallegos y entre Punta Arenas y las Islas Malvinas configuran vuelos internacionales entre la Argentina y Chile…*" (Source: enaun.mrecic.gov.ar)
[This means that since Chile recognizes the **Falkland Islands** as Argentine **territory**, the sections between Punta Arenas and Rio Gallegos and between Punta Arenas and the Falkland Islands form international flights between Argentina and Chile…]

(24) "*Durante casi todo ese período se le reiteró a la Parte británica la dificultad creciente para la Argentina de continuar autorizando este tipo de vuelos y la necesidad de iniciar conversaciones sobre las comunicaciones aéreas entre el **territorio** continental y las **Islas Malvinas***." (Source: enaun.mrecic.gov.ar)
[During almost that whole period, the British side was reminded of the growing difficulty for Argentina to continue authorizing this type of flights and the need to start conversations about the aerial communications between the continental **territory** and the **Falkland Islands**.]

(25) "*El 15 de octubre de 2010 el Grupo de Río emitió en Santiago de Chile una Declaración sobre actividades militares del Reino Unido en las Islas Malvinas con motivo de la comunicación remitida por fuerzas militares británicas a las autoridades argentinas, el 8 de octubre 2010, por la que se informó sobre un proyecto de realizar disparos de misiles desde el* ***territorio*** *de las* ***Islas Malvinas***." (Source: mrecic.gov.ar)
[On 15 October 2010, the Rio Group issued a Declaration about military activities of the United Kingdom on the Falkland Islands in Santiago, Chile because of the communication sent by British military forces to the Argentine authorities on 8 October 2010, by which a project of carrying out missile shots from the **territory** of the **Falkland Islands** was reported.]

With multiple referents, the lexical item "*territorio*" in the Argentinian corpus corroborates the complexity behind the dispute over the Falkland Islands. Besides, the relatively frequent use of "*territorio*" to represent the Islands as part of the Argentinian territory (11 out of the 22 co-occurrences of "*territorio*" and "*Islas Malvinas*") signals the mainstream world view concerning the sovereignty of the Falkland Islands in the Argentinian discourse, which has been reported in the previous subsection.

4.3. Military intervention

In this subsection, I will discuss the collocates of "Falkland Islands"/"*Islas Malvinas*" which position the Falkland Islands as an item of military intervention. These collocates are "defence," "force," "invasion," "1982" and "governor" in the British corpus and "*recuperación*" [recovery] and "*militar*" [military] in the Argentinian corpus.

Figure 14 displays a sample of the concordance lines from the British corpus. Britain is portrayed as the agent which offers protection to the Falkland Islands, as indicated by the collocates "defence" and "force." Argentina, on the other hand, is represented as the aggressive party that invaded them in 1982, as suggested by the collocates "invasion" and "1982."

Figure 14: Sample concordance of "defence," "force," "invasion," "1982" and "governor" when they collocate with "Falkland Islands" in GloWbE (Great Britain)

1	forces on their vital standing tasks, such as the	**defence** of the **Falkland Islands**. # The commission
2	its all doesn't matter since the UK provides	**defence** to the **Falkland Islands** and will continue to
3	since 1982, providing continuous front-line	**defence** of the **Falkland Islands** and its life-line air-
4	and routine operations, such as the crucial	**defence** of the **Falkland Islands**. He will also see that
5	by the Parachute Regiment, Royal Air	**Force**, **Falkland Islands** Defence **Force**, and many
6	100 infantrymen, with 200 reservists in the	**Falkland Islands** Defence **Force**. # The Royal Navy
7	Royal Air Force and a Detachment from the	**Falkland Islands** Defence **Force**. # The Band of HM
8	by representatives of the Armed Services,	**Falkland Islands** Defence **Force**, the Royal Fleet
9	restored after the break caused by Argentina's	**invasion** of the **Falkland islands** in **1982**. Relations were
10	the potential implications could be serious: the	**invasion** of the **Falkland Islands** in **1982** came about
11	Thirtieth Anniversary of the war to repel the	**invasion** of the **Falkland Islands** by Argentina, April
12	not surprising that, 30 years after the Argentine	**invasion** and occupation of the **Falkland Islands** and
13	of Samba? # If Argentina had not invaded the	**Falkland Islands** in **1982** in the first place there would
14	who resigned as Foreign Secretary when the	**Falkland Islands** were invaded in **1982**. But that was
15	that the British Military has a presence on the	**Falkland Islands** is because in **1982** it was invaded by
16	in April **1982** the Argentineans invaded the	**Falkland Islands**. The British sent a taskforce and on
17	Sir Rex Hunt, who has died aged 86, was	**Governor** of the **Falkland Islands** when Argentina
18	Foreign Secretary William Hague said: "As	**governor** of the **Falkland Islands** he served his
19	and overseas civil servant from 1951, was	**governor** of the **Falkland Islands** between 1980
20	news of the death of Sir Rex Hunt, former	**Governor** of the **Falkland Islands**, Foreign Secretary

Before specific excerpts (with the wider co-text) taken from the corpus are presented, it should be

noted that *GraphColl* identified collocational relations among these collocates. "Defence" and "force" are collocates of each other (see Figure 15); "invasion" and "1982" are collocates of each other (see Figure 16).

Figure 15: Collocates of "defence" and "force" when they co-occur with "Falkland Islands" in GloWbE (Great Britain)

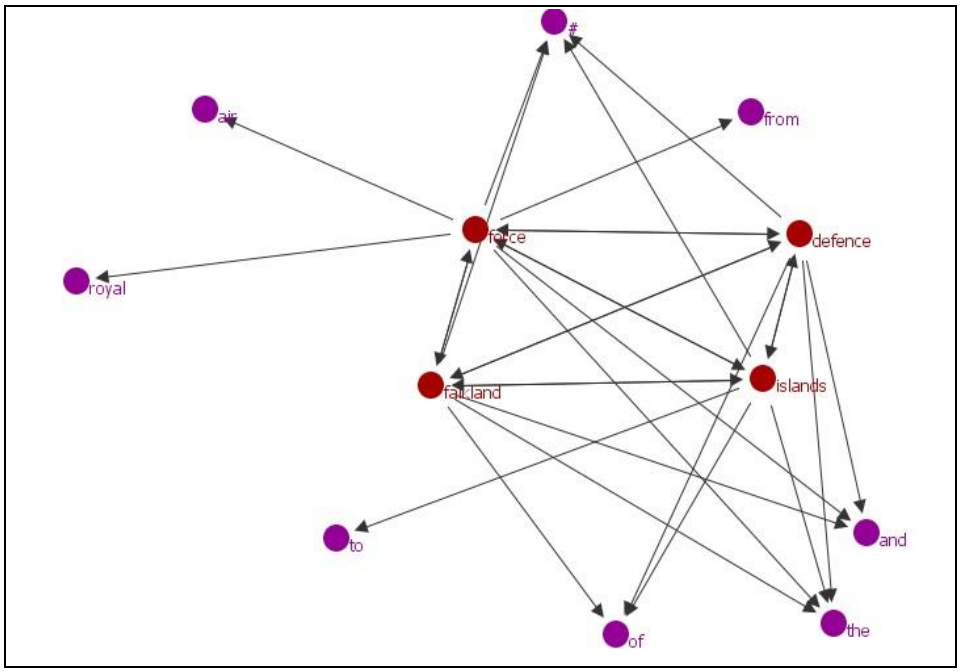
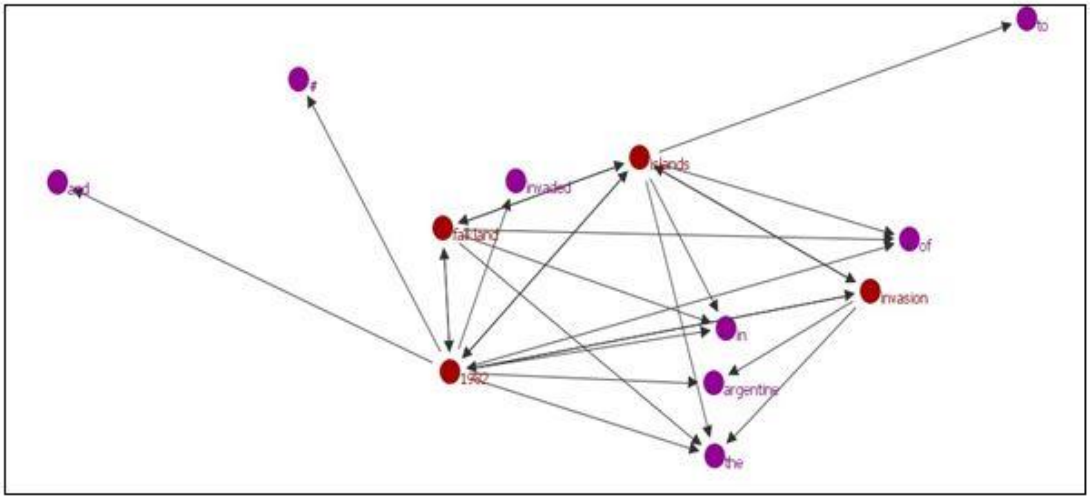


Figure 16: Collocates of "invasion" and "1982" when they co-occur with "Falkland Islands" in GloWbE (Great Britain)



The use of "defence" within the neighborhood of "Falkland Islands" always construes the British role in providing the Islands with protection. An example is:

(26) "In the first place, the **defence** of the **Falkland Islands**, like that of every other BOT,[15] is Britain's responsibility. A responsibility we are more than glad to take." (Source:

[15] An acronym for the British Overseas Territory.

en.mercopress.com)

Among the 22 co-occurrences of "defence" and "Falkland Islands," 13 of them are instances of the 4-gram "Falkland Islands Defence Force." One example is:

(27) "Since six o'clock that morning he had braved a fierce gun battle between the paltry forces that cost-cutting British politicians had allocated to the islands, and the Argentinian invaders. The small group of 69 Royal Marines, together with the local **Falkland Islands Defence** Force, managed to fend off the first attack on his residence, Government House, in the islands' capital, Port Stanley." (Source: independent.co.uk)

The Falkland Islands Defence Force is a local defence unit comprised of volunteers who work together with the British forces to ensure the stability of the Islands (Foreign & Commonwealth Office 2012: 23). The co-text of all the instances of the 4-gram "Falkland Islands Defence Force" makes direct reference to the British military on the Islands. In Example 27, Britain (signified by "Royal Marines") is depicted as the ally of the Falkland Islands during the fight against Argentina.

All co-occurrences of "invasion," "1982" and "Falkland Islands" (N=6) refer to the Falklands War. It is evident that in the British corpus, agency is assigned to Argentina as far as the invasion of the Islands is concerned. An example is:

(28) "That called for diplomatic relations between Britain and Argentina to be restored after the break caused by Argentina's **invasion** of the **Falkland islands** in **1982**. Relations were renewed in 1989." (Source: dsnews.wordpress.com)

Due to its literal meaning, the word "governor" may call to mind the British influence over the Falkland Islands. However, the pattern exhibited by the concordance lines is more than that. 17 of the 19 co-occurrences of "governor" and "Falkland Islands" in the British corpus are about Sir Rex Hunt, who died in 2012. In all these 17 instances (one being Example 29), his demise, along with the fact that he was the governor of the Falkland Islands when the Falklands War broke out, was mentioned. Thus it can be said that when co-occurring with "Falkland Islands" in the British corpus, the collocate "governor" tends to be associated with the Falklands War, which is a key military event in the history of the Islands.

(29) "Sir Rex Hunt, who has died aged 86, was **Governor** of the **Falkland Islands** when Argentina invaded in 1982." (Source: telegraph.co.uk)

The collocates of "*Islas Malvinas*" in the Argentinian corpus conjure up an opposite image. Figure 17 is a sample of the relevant concordance lines.

Figure 17: Sample concordance of "*recuperación*" [recovery] and "*militar*" [military] when they collocate with "*Islas Malvinas*" in Corpus del Español (Argentina)

1	*de conmemorar se el 30 aniversario de la*	***recuperación** de Nuestras **Islas Malvinas** y con el objeto*
	[to commemorate the 30th anniversary of the	**recovery** of our **Falkland Islands** and with the purpose]
2	*los grandes pilotos que participaron en la*	***Recuperación** de las **Islas Malvinas**. Sera todo un honor*
	[the great pilots that participated in the	**recovery** of the **Falkland Islands**. It will be an honor]
3	*aplaudiendo y apoyando su anuncio de la*	***recuperación** de las **Islas Malvinas**. Luego, de que las Islas*
	[applauding and supporting his announcement of the	**recovery** of the **Falkland Islands**. Then, that the Islands]
4	*reiteraron su rechazo a la presencia*	***militar** británica en las **Islas Malvinas**, Georgias del Sur*
	[reiterated their rejection of the British	**military** presence on the **Falkland Islands**, South Georgia]
5	*el conflicto iniciado en 1833 con la invasión*	***militar** de las **Islas Malvinas**. La Asamblea*
	[the conflict initiated in 1833 with the	**military** invasion of the **Falkland Islands**. The Assembly]
6	*ha establecido una importante base*	***militar** en las **Islas Malvinas** (Mount Pleasent)*
	[has established an important	**military** base on the **Falkland Islands** (Mount Pleasant)]

Among the 24 co-occurrences of "*recuperación*" [recovery] and "*Islas Malvinas*," 13 are instances of the 6-gram "*la recuperación de las Islas Malvinas*" [the recovery of the Falkland Islands] and 6 are instances of the other 6-gram "*la recuperación de nuestras Islas Malvinas*" [the recovery of our Falkland Islands]. Examples are:

(30) "*El 2 de abril la Argentina inicia la operación tendiente a la **recuperación** de las **Islas Malvinas**. La Fuerza Aérea participa en ella y en el posterior conflicto con Gran Bretaña, que se prolonga hasta el 14 de junio*." (Source: interdefensamilitar.com)
[On 2 April, Argentina starts the operation with a view to the **recovery** of the **Falkland Islands**. The Air Force participates in it and in the subsequent conflict with Great Britain which goes on until June 14.]

(31) "*Al finalizar todos los desacuerdos de límites entre Argentina y Chile hoy podemos contar con el apoyo de Chile en la lucha (pacífica) por la **recuperación** de nuestras **Islas Malvinas***." (Source: desarrolloydefensa.blogspot.com)
[After all the border disagreements between Argentina and Chile today we can count on Chile's support in the (peaceful) struggle for the **recovery** of our **Falkland Islands**.]

In Example 30, the Falklands War in 1982 is construed as an event to "recover" the Falkland Islands. This is in stark contrast to the aforementioned image projected in the British corpus. In Example 31, the same "recovery" motif is employed to represent Argentina's attempt to claim sovereignty over the Falkland Islands.

The collocate "*militar*" [military] tends to refer to the British military on the Falkland Islands. Two examples are:

(32) "*El 29 de octubre de 2011, en Asunción, Paraguay, los estados miembros de la UNASUR, … reiteraron su rechazo a la presencia **militar** británica en las **Islas Malvinas**, Georgias del Sur y Sandwich del Sur y los espacios marítimos circundantes*…" (Source: enaun.mrecic.gov.ar)
[On 29 October 2011, in Asunción, Paraguay, the USAN[16] member states … reiterated their rejection of the British **military** presence on the **Falkland Islands**, South Georgia and South Sandwich Islands and the surrounding maritime areas…]

[16] An acronym for the Union of South American Nations (*la Unión de Naciones Suramericanas*).

(33) "*Asimismo, el Canciller Timerman llamó la atención sobre la violación del Reino Unido de las cerca de 40 resoluciones de las Naciones Unidas que convocan al diálogo entre ese país y la Argentina para resolver pacíficamente el conflicto iniciado en 1833 con la invasión* ***militar*** *de las* ***islas Malvinas***." (Source: mrecic.gov.ar)
[Also Chancellor Timerman drew attention to the United Kingdom violation of the nearly 40 United Nations resolutions which call for a dialogue between that country and Argentina to peacefully resolve the conflict that began in 1833 with the **military** invasion of the **Falkland Islands**.]

In Example 32, the British military presence on the Islands is criticized. Example 33 suggests that Britain was originally the attacker more than 150 years ago (i.e., in 1833). There is no mention of the British troops being the protectors. While Argentina is depicted as the invader in the British corpus, Britain takes up this demonized role in the Argentinian corpus.

The examples in this subsection show that a historical event can be given different descriptions which trigger differing connotations. In fact, such discursive practice is not uncommon. A well-known example is the report of what happened when the Japanese army occupied the Chinese city called Nanjing during the Second World War. As Askew (2004: 2) put it, this historical event is labeled "Nanjing Massacre" in the Chinese discourse whereas the Japanese discourse prefers the term "Nanjing Incident." This is reminiscent of the different ways the Falklands War is conceptualized on British and Argentinian websites.

4.4. Positioning of Argentina and Britain

In this subsection, I will examine the collocates of "Falkland Islands"/"*Islas Malvinas*" which denote Argentina and Britain. I will pay specific attention to how these two countries are discursively positioned. The collocates chosen for discussion are "Argentina," "Argentine," "British," "Britain," "*argentinas*" [Argentinian (feminine plural)], "*argentinos*" [Argentinian (masculine plural)], "*argentino*" [Argentinian (masculine singular)] and "*británica*" [British (feminine singular)].

To facilitate my analysis, I utilized *GraphColl* to identify the salient "second-order" collocates. The results are summarized in Table 4.

Table 4: Collocates of "Falkland Islands"/"*Islas Malvinas*" which denote Argentina and Britain

	Collocate[17]	**Salient "second-order" collocate**
Corpus of Global Web-Based English (Great Britain)	Argentina	invaded (N=6)
	Argentine	invasion (N=5)
	British	overseas (N=5), territory (N=7)
Corpus del Español: Web/Dialects (Argentina)	*Argentinas*	*son* [be (third-person plural)] (N=15)
	Argentines	*derechos* [rights] (N=7)
	Argentine	*territorio* [territory] (N=18), *continental* [continental] (N=9)

Table 4 demonstrates once again that in the British corpus, Argentina is positioned as an invader. This is evident in the concordance lines with the "second-order" collocates "invaded" and "invasion." Two

[17] The two collocates "Britain" and "*británica*" [British (feminine singular)] are not included because the "second-order" collocates identified by *GraphColl* are only function words that do not indicate explicitly how Britain is discursively positioned. I decided to examine the concordance lines manually in order to find out meaningful patterns.

examples are:

(34) "The UK refusing to negotiate can be in no way called bullying, it is simply refusing to co-operate which isn't bullying. Neither can the warship be called bullying, its the same patrol the UK has carried out since **Argentina** illegally **invaded** the **Falkland islands** so essentially nothing has changed." (Source: en.mercopress.com)

(35) "THE British Governor of the **Falkland Islands** during the 1982 **Argentine invasion** Sir Rex Hunt has died at the age of 86." (Source: thesun.co.uk)

On the other hand, Britain is positioned as the country with jurisdiction over the Islands. This is supported by the use of the 3-gram "British overseas territory." An example is:

(36) "Look, the situation is like this. The **Falkland Islands** ARE currently a **British Overseas Territory**. That cannot be argued." (Source: en.mercopress.com)

Besides, among the 27 co-occurrences of "Britain" and "Falkland Islands," 12 are instances in which Britain is positioned as being compatible with the Falkland Islands. Three examples are:

(37) "As in **Britain** and the **Falkland Islands**, the Queen is our Sovereign." (Source: en.mercopress.com)

(38) "**Falkland Islands** have agreed with **Britain** on a new Constitution to take affect by January 1 2009, replacing a charter adopted in 1985. The new document approved by Queen Elizabeth 2, formalizes the system of self government on the South Atlantic Archipelago while giving Britain the final say on Foreign Policy, Policing and the Administration of Justice according to a joint statement." (Source: en.mercopress.com)

(39) "Argies contaminate air. Neither **Britain** nor the **Falkland Islands** recognise any dispute. And there is no binding UN resolution that says otherwise." (Source: en.mercopress.com)

In Example 37, the author uses the Queen to establish commonality between Britain and the Falkland Islands. Examples 38 and 39 show a consensus of opinion which Britain and the Falkland Islands have. It should be noted that in Example 39, Argentina is referred to as "Argies"—a somewhat offensive term coined during the Falklands War (Wilton 2012). Also, the word "dispute" here denotes Argentina's claim over the Falkland Islands. From the author's perspective, the claim is subject to rejection from both Britain and the Falkland Islands, which reinforces the argument that Britain and the Falkland Islands are positioned as being on the same wavelength in the British corpus.

The Argentinian corpus displays different patterns of positioning. The collocate "*argentinas*" [Argentinian (feminine plural)] tends to co-occur with "*son*" [be (third-person plural)]. 12 of the 15 co-occurrences are instances of the 5-gram "*las Islas Malvinas son argentinas*" [the Falkland Islands are Argentinian]. One example is:

(40) "*Acá hay argentinos que no olvidan. Porque las **Islas Malvinas** son **argentinas** y los ingleses se tienen que ir*." (Source: tuesdelteatrocolon.wordpress.com)
[Here are Argentinians who do not forget. Because the **Falkland Islands** are **Argentinian** and the English have to go.]

The 5-gram "*las Islas Malvinas son argentinas*" is an open assertion of Argentina's ownership of the Falkland Islands. In line with the findings reported in Subsection 4.1, Argentina is positioned as the owner of the Islands while Britain is an unwelcome guest (viz., "the English have to go").

When collocating with "*Islas Malvinas*," the lexical item "*argentinos*" [Argentinian (masculine plural)] has a tendency to co-occur with "*derechos*" [rights]. All the 7 co-occurrences concern the proposition that Argentina has the rights to the Islands, like Example 41 demonstrates:

(41) "*Los jefes de Estado de la región brindaron hoy un respaldo rotundo a la Argentina sobre sus **derechos argentinos** sobre las **Islas Malvinas** y recordaron 'el permanente interés regional' de que los gobiernos de Argentina y de Gran Bretaña reanuden las negociaciones*." (Source: blogger.loboalpha.com.ar)
[Today the heads of state of the region gave complete support to Argentina on their **Argentinian rights** over the **Falkland Islands** and recalled the 'permanent regional interest' that the governments of Argentina and Great Britain resume the negotiations.]

In Example 41, "*los jefes de Estado de la región*" are the various national representatives of the Union of South American Nations (*la Unión de Naciones Suramericanas*). By incorporating the voices of the people with institutional authority into the positioning of Argentina, the author makes use of what van Leeuwen (2008: 106) called "personal authorization" to legitimize Argentina's entitlement to the Islands.

The lexical item "*argentino*" [Argentinian (masculine singular)], as a collocate of "*Islas Malvinas*," tends to co-occur with "*territorio*" [territory] and/or "*continental*" [continental]. In fact, the 4-gram "*el territorio continental argentino*" [the Argentinian continental territory (mainland)] appears 9 times. One example is:

(42) "*Acuerdo por Canje de Notas del 23 de febrero de 2001: Aplicación de la fórmula de soberanía a la navegación y aeronavegación privadas entre el **territorio continental argentino** y las **Islas Malvinas***." (Source: eaust.mrecic.gov.ar)
[Agreement by Exchange of Notes on 23 February 2001: Application of the sovereignty formula for the private navigation and air navigation between the **Argentinian continental territory (mainland)** and the **Falkland Islands**.]

In Example 42, Argentina is positioned as the mainland ("*el territorio continental argentino*") when its connection with the Falkland Islands is highlighted. It can be argued that the co-occurrences of "*el territorio continental argentino*" and "*Islas Malvinas*" suggest a domestic relationship between Argentina and the Falkland Islands, rather than one involving two nations.

In the Argentinian corpus, Britain is construed negatively as the intruder. Eight of the 18 co-occurrences of "*británica*" [British (feminine singular)] and "*Islas Malvinas*" display an unequivocally bad image of Britain. Two examples are:

(43) "*Dado las tensiones entre los dos gobiernos en relación a la presencia ilegal **británica** en las **islas Malvinas**, Georgias del Sur y Sándwich del Sur, junto a las restricciones de adquisición de equipamiento militar por parte de Argentina en el Reino Unido, genera dudas sobre la situación en relación a la adquisición de repuestos para los citados buques…*" (Source: aviacionargentina.net)
[Given the tensions between the two governments in relation to the illegal **British** presence on the **Falkland Islands**, South Georgia and South Sandwich Islands, together with the restrictions on acquisition of military equipment by Argentina in the United Kingdom, it raises doubts about the situation in relation to the acquisition of spare parts for the aforementioned vessels…]

(44) "*Al conmemorarse 180 años de la ocupación ilegal **británica** de las **Islas Malvinas**, la Representante Permanente de la Argentina entregó al Vicesecretario General copia de la nota de la Presidenta Cristina Fernández de Kirchner dirigida al Primer Ministro del Reino Unido*." (Source: enaun.mrecic.gov.ar)
[At the commemoration of 180 years of the illegal **British** occupation of the **Falkland Islands**, the Permanent Representative of Argentina gave the Assistant Secretary-General a copy of the note from President Cristina Fernández de Kirchner addressed to the Prime Minister of the United Kingdom.]

In both examples, Britain is negatively evaluated. In accordance with the taxonomy of evaluation stipulated by Martin & White (2005: 53), the adjective "*ilegal*" [illegal, unlawful] is a marker of impropriety (viz., "negative social sanction"). Via such evaluative lexis, Britain is positioned in the Argentinian corpus as the illegitimate party on matters related to the Falkland Islands.

5. Conclusion

In the present research, a politically contentious place—the Falkland Islands—was chosen as the subject matter. To investigate how the Islands are "discursively positioned" in British and Argentinian discourses, the British section of the Corpus of Global Web-Based English (GloWbE) and the Argentinian section of the Corpus del Español: Web/Dialects were consulted. In the analysis, I concentrated on the most frequent collocates of the terms "Falkland Islands" and "*Islas Malvinas*" in the two corpora. Concordance lines were checked in order to gain insights into the "discursive positioning" of the Falkland Islands. Further techniques including analysis of collocation networks, semantic prosody and word clusters were employed as well.

The findings have demonstrated that certain collocates are unique to one of the two corpora. These collocates help to position the Falkland Islands in a way which echoes the conventional rhetoric of the British and the Argentinian political leaders. The collocates "government" and "population" (plus the "second-order" collocate "interests") of "Falkland Islands" in the British corpus, coupled with the fact that agency is constantly assigned to the Falkland Islands government, position the Islands as a territory with "self-determination." On the other hand, the collocates "*nuestras*" [our (feminine plural)] (as in the ubiquitous 3-gram "*nuestras Islas Malvinas*"), "*territorio*" [territory] and "*recuperación*" [recovery] of "*Islas Malvinas*" in the Argentinian corpus construe the Falkland Islands as a possession of Argentina. Also, in the Argentinian corpus the collocates "*estadio*" [stadium] and "*aeropuerto*" [airport] are actually names of constructions located in Argentina ("*Estadio Islas Malvinas*" and "*Aeropuerto Internacional Islas Malvinas de Rosario*" [Rosario – Islas Malvinas International Airport]), suggesting Argentina's sovereignty over the Islands. What's more, the contrasting world views with respect to the status of the Falkland Islands are discursively realized in the collocational patterns of the lexical items "sovereignty" and "*soberanía*" [sovereignty]. In the British corpus, "sovereignty" tends to co-occur with "no doubt" or "no negotiations," thus conveying an unambiguously firm stance of the British political institution on maintaining the status quo. In the Argentinian corpus, "*soberanía*" is inclined to collocate with "*argentina*" [Argentinian (feminine singular)]. This results in the 2-gram "*soberanía argentina*," which embodies Argentina's unquestioned assumption about its sovereignty over the Islands.

One interesting pattern which emerges from the Argentinian corpus is the preponderance of the 6-gram "*la Cuestión de las Islas Malvinas*" [the Question of the Falkland Islands] and the 3-gram "*interés hemisférico permanente*" [permanent hemispherical interest]. Coming predominantly from the government websites, the former conceptualizes the dispute over the Falkland Islands as a question. The latter construes the issues related to the Islands as ones which are of perpetual interest to the hemisphere.

Furthermore, examination of the concordance lines has shown that "discursive positioning" is applied to the two political parties (Argentina and Britain) as well. It was found that positioning of these two countries in the corpora reflects the strategy of "positive self-presentation and negative other-presentation" (van Dijk 2011). In the British corpus, the collocates "defence," "force" and "Britain" portray Britain as the protector or a compatible companion of the Islands while the collocates "claim," "invasion," "1982," "Argentina" and "Argentine" are used to demonize Argentina as a problematic country or an invader. In the Argentinian corpus, Britain is positioned as the party that first launched the intrusion many years ago, as is seen from the concordance lines with the collocates "*militar*" [military] and "*británica*" [British (feminine singular)]. With the 5-gram "*las Islas Malvinas son argentinas*" [the Falkland Islands are Argentinian] and the co-occurrences of "*derechos*" [rights] and "*argentinos*" [Argentinian (masculine plural)], Argentina is positioned as the rightful owner of the Falkland Islands. Besides, the cluster "*el territorio continental argentino*" [the Argentinian continental territory (mainland)] appears to indicate an intra-national (rather than an

international) relation between Argentina and the Islands.

Given the size of the two corpora under investigation in this study, the results obtained from the collocation analysis are deemed generalizable. They constitute solid empirical evidence on the "discursive positioning" of the Falkland Islands (as well as Argentina and Britain) in Argentinian and British discourses. In line with what Potter (1996) stated, the current research has shown that the same object or entity can be "categorized" very differently, depending on the ideological positions of the discourse producers. The findings also underpin Bourdieu's argument vis-à-vis the social phenomenon of "classification," viz., "a vision of the world is a division of the world" (1990: 210). Of course, studies based on large reference corpora may be criticized for overlooking the particular contexts in which the concordance lines are located (Kong 2013: 317). I believe that many discourse analysts have encountered the difficulty in keeping a balance between the size of their data and the quantity of attention paid to the contexts of individual discourse events in their analysis. Regarding this issue, there have been no hard and fast rules for researchers. In this study, I have employed several other techniques like collocation networks and semantic prosody to mitigate the effects of relying on concordance lines for data analysis. As I mentioned earlier, the present study is an example of CADS. In my opinion, it can serve as a springboard for future research which focuses on various specific circumstances under which discourses about the Falkland Islands are generated.

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The foregrounding of place in *Trainspotting*: A discourse-stylistic analysis

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Abstract: In this paper, we investigate how place is foregrounded through language in Irvine Welsh's 1993 novel *Trainspotting*. We establish that many of the linguistic features which occur in the novel are associated with and represent Scots, a stigmatised language variety of Scotland. Drawing on Silverstein (2003), Johnstone (2009, 2010, 2013), and Eckert's (2008) work on indexicality, we argue that these linguistic features in *Trainspotting* function as indexical markers connecting the characters and the novel to place, more specifically to Scotland. In the analysis, we explore three channels through which the foregrounding of place is evident. First, the foregrounding of place happens through the sheer volume of nonstandard English associated with Scots throughout the novel in that the extensive appearance of nonstandard English deviates from most novels, and in that the nonstandard variety indexes Scotland. Second, place becomes foregrounded through the discourse surrounding language in the novel; throughout the novel, several characters comment on their own styles of speech and linguistic abilities, which highlights the focus on language and directs the reader's attention hereto. Finally, the foregrounding of place happens through the ideology that favours Standard English over nonstandard English. This channel of foregrounding appears through the characters' ability or inability to style-shift between nonstandard English and Standard English, and the effects of the ability or inability to do so. We argue that the unique nature of the vernacular language used in *Trainspotting* emplaces the characters and novel solidly in Scotland through the indexical nature of language.

Keywords: Stylistics, discourse analysis, foregrounding, place, indexicality, nonstandard English, Standard English, style-shifting.

1. Introduction

In Irvine Welsh's *Trainspotting* (1993), the foregrounding of place through language is central not only to the development of the characters and the plot, but also in discovering the ideological underpinnings which influence Welsh's writing. Not only do Welsh's characters speak nonstandard English, they also narrate in nonstandard English, with most styles of speech carrying indexical markers specific to Scots.

The foregrounding of place happens through several channels: The sheer volume of non-standard language associated with Scots in the novel foregrounds place in that it stands out amongst novels written in Standard English. This foregrounding happens through the use of indexical markers, these being central in connecting the language to Scotland. The discourse surrounding language in the novel, i.e. the characters' meta-comments on their use of language, additionally foregrounds place. Finally, place is foregrounded through the ideology that favours Standard English over nonstandard English as shown through style-shifts and the benefits of being able to detach oneself from local speech variants by style-shifting to Standard English.

In *Trainspotting*, an identification with Scotland is represented and contested through the characters' discourse. The characters' linguistic features are enregistered (following Agha 2003) as a nonstandard language variety and thus linked to a specific place.

The language in *Trainspotting* is a mix of styles, ranging primarily from Scots to Scottish

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English, although other dialects are depicted to a limited extent[3]. Scots and Scottish English are often perceived as constituting a linguistic continuum (Aitken 1984) and, indeed, this is how linguists tend to conceptualise dialects and varieties in general. Lay people, on the other hand, tend to conceptualise dialects as consisting of distinct linguistic features (Hodson 2016: 416). When considering the Scottish dialect continuum, we find Scottish English placed at one end of the continuum and we may define it as "Standard English pronounced with a Scottish accent and with few scotticisms in grammar and vocabulary, e.g. *wee* for 'little'…" (Melchers and Shaw 2003: 63). This variety is consequently often called Standard Scottish English (Melchers and Shaw 2003: 63). Found on the other end of the continuum is Scots, a variety which diverges more from Standard English than Scottish English does, featuring an elaborate and unique vocabulary and grammar, whose properties will be introduced in section 2.4.1. In this article, we choose to view the complex system of languages in Scotland as a dichotomy, setting up a contrast between Standard English (including Standard Scottish English) and nonstandard English. We are well aware that such a dichotomy ignores many accents and dialects on a continuum between Scots and Scottish English, and indeed Scots and Standard English. In between the two opposites is found a rich spectrum of linguistic varieties based on regional or social situations. The use of a nonstandard language variety specific to Scotland assigns the country a voice of its own; it brings attention to linguistic diversity, and allows an ideologically stigmatised variety a window of free expression.

The novel portrays a group of friends immersed in the Edinburgh drug scene in the 1980s; some of these characters try to clean up and get out, despite the allure of the drugs and the influence of friends. The outcome varies for the characters in their personal negotiations for belonging and adaptions to find suitable identities within their locations – this pursuit is clearly visible through their discourse. In this paper, we investigate the foregrounding of place through indexicality in *Trainspotting*, focusing on linguistic features and discursive elements in the novel which connect the characters to Scotland.

2. Foregrounding language varieties and social meaning

In stylistics, foregrounding denotes that something is in the foreground of a text or of speech, i.e. it takes up the position of figure in a figure-ground relation. The term is borrowed from art criticism, but it has become widely used in stylistics as well (Short 1996: 11). To a reader or listener, foregrounded elements in a text or in speech are more perceptually prominent in relation to other elements. Indeed, foregrounding is described by Short (1996) as the psychological effect caused by deviation from an established norm (11). According to Short (1996), the study of deviation is "one of the most fundamental concepts in stylistic analysis" (10). In stylistics, deviation takes two forms: external deviation and internal deviation (Short 1996: 59).

External deviation describes deviation from an established norm found outside of the text, e.g. deviation from the conventions of spelling, genre, lay-out. etc. This means that the use of nonstandard language is a deviation from the standard language norm, seeing as novels are usually written in Standard English, which in turn prompts the expectation that they are written so. Internal deviation is deviation from a norm which is set up in the text itself. In other words, a pattern must be established in the text before internal deviation is possible. In relation to *Trainspotting*, this means that, whilst the use of nonstandard language can be classed as a deviation from an external norm, sections written in Standard English in the novel deviate from the internal norm and can thus be classed as internal deviations. We argue, then, that the extensive use of nonstandard features in *Trainspotting* foregrounds language and language variation generally, but also that it foregrounds the stereotypes and perceptions which people have of speakers of the nonstandard variety in question.

[3] The main characters for the most part use a variety which can be described as a representation of the local vernacular found in Leith, an area to the north of the city of Edinburgh.

The indexing of place through language functions as an additional way in which Scotland is foregrounded in the novel. Scotland is clearly foregrounded because the story takes place in the country, but the foregrounding of place becomes especially prominent through the extensive use of Scots as well as the indexical features of this variety, which include, but are not limited to, place. Indeed, we suggest that these multiple layers of foregrounding nearly transform Scotland to an additional character in the novel. In the sections below, we discuss how language varieties index place as they are invariably linked to geographical location.

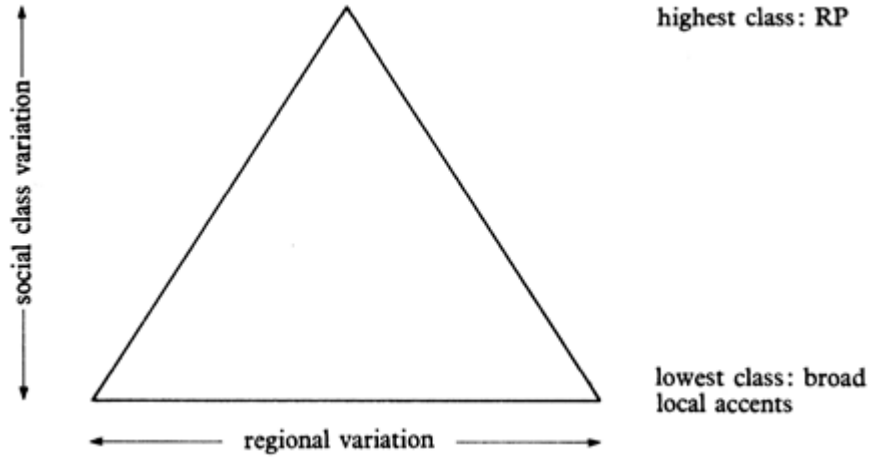
2.1. The ideology behind language variation

By default, a person holds power if he or she speaks the language, or language variety, which is perceived as legitimate. By legitimising a language as the national language in a nation-state, the policy of a linguistic union favours those who already know and speak the official language or dialect, whilst those who speak a local dialect find their competence, linguistic and non-linguistic, devalued and subordinated (Bourdieu 1991: 6). As Eckert and McConnell-Ginet (2003) add,

> While members of professional and elite classes are engaged in globalizing institutions (e.g. education, non-local government, corporations), the lives of laborers, tradespeople, small business people, etc. are embedded in local communities. While the local language represents membership and loyalty to a local community, and to the practices and relationships that make up life in that community, the standard language represents disengagement from the local. (276)

Note that nonstandard varieties are intimately connected to locality and place in the quote above. Trudgill also notes the link between language and place as well as social class and states that, in British society, conservative and rural dialects are associated with groups lowest in the social hierarchy, and that these dialects alter gradually from countryside to countryside in Great Britain (Trudgill 2000: 30). However, speakers of the highest social class typically employ Standard English, which only varies slightly in different parts of the country (Trudgill 2000: 31). Trudgill (2000) proposes a model of social class and language variation in Great Britain (30):

Figure 1: Social and regional accent variation (based on Trudgill 2000: 30. Figure 1).



First, the model identifies the circumstance that the amount of regional variation in English is greater

amongst people of low social status than of high social status. Secondly, the model shows that it is possible to determine a speaker's background based on their accent. Lastly, the model elucidates that individuals in the top strata sound more alike across the country than do people at the bottom. Evidently, language features which are most indicative of location are also those associated with low social status (Kerswill 2009: 359). This means that nonstandard varieties index lower class and regional links, whereas standard varieties index higher class and lack regional links. By extension, then, we argue that the deviation from the Standard language norm foregrounds place, in this case Scotland, signifying a connection with the local perspective.

Individuals may strive to improve their lives by 'moving up the class ladder'; thus, social mobility is found in all societies with social classes (Kerswill 2009: 364). English speakers may feel the need to change their style of speech, because "other people's negative attitudes are too high a price to pay for keeping their working-class accent, and the effort acquiring another accent reaps sufficient awards" (Kerswill 2009: 358). The negative attitudes towards working-class accents persist, and individuals worry that such accents might impose constraints on their social mobility.

The relationship between geography and language variation shows that there is a direct agreement between stratification and levels of language use (Kerswill 2009: 358). The value credited to certain forms of language variation is aligned with the social status of people. Fairclough (2001) asserts that sociolinguists have found "systematic correlations between variations in linguistic form (phonological, morphological, syntactic) and social variables" (7). When, in a culture, a language variety or dialect is standardised, deviation in dialect and vocabulary from this standard mirrors an individual's position in the social hierarchy, and consequently becomes part of that person's cultural habitus (Bourdieu 1991: 1). This linguistic capital is disproportionately distributed among people from dissimilar strata of society; the more linguistic capital a speaker possesses, the more the speaker is able to exploit the system to his or her advantage (Cregan 2008: 13). Thus, a speaker must be aware of these variations and generate discourse that is valued in certain contexts. Notably, nonstandard varieties may enjoy overt prestige in some communities (see Trudgill 1974 for his famous Norwich example), and manipulation of registers can be used to show solidarity as well as authority and power. Unequally distributed cultural capital in connection with linguistic identity is evident throughout *Trainspotting*, in which some of the characters have access to multiple linguistic styles, whereas others are unable to style-shift, and others yet have the power to impose and enforce constraints on this access, or lack thereof. In *Trainspotting*, Welsh's use of nonstandard English is a key aspect of creating a realistic voice for the working-class which the novel represents.

2.2. The indexical nature of language

Silverstein (2003) suggests that considering the concept of *indexical order* aids in an investigation of the ways in which speakers relate linguistic features to socio-cultural values and thus create social identities in interaction. Indexical order is the formulation of the observation that linguistic features have social meaning which is a consequence of the social values expressed and maintained by speakers (Silverstein 2003: 193-194). Silverstein elaborates by adding the notion of 'n + 1st order indexical value' which is defined as a competing structure of value that is characterised as a distinct but overlapping form directly indexing the social meaning in communication. This competition between the two forms can lead to a re-conceptualisation of the meaning of the linguistic feature as the n + 1st order indexical value replaces the n-th order indexical value (Silverstein 2003: 194). Departing from Silverstein's idea of the indexical order, Eckert (2008) introduces *indexical fields* as a base for the interpretation of the meanings of linguistic variables. She defines these *fields* as a

> constellation of ideologically related meanings, any one of which can be activated in the situated use of the variable… and each new activation has the potential to change the field

> by building on ideological connections. Thus, variation constitutes an indexical system that embeds ideology in language and that is in turn part and parcel of the construction of ideology. (Eckert 2008: 454)

When linguistic forms, and whole varieties and registers, have become imbued with social meaning, and indeed index the social before the semantic, they have become enregistered. The process of enregisterment can be described as the "processes through which a linguistic repertoire becomes differentiable within a language as a socially recognized register of forms" (Agha 2003: 231). Johnstone (2009) additionally combines Silverstein's level of indexicality with Agha's enregisterment and describes the different levels of indexicality in the following way:

Table 1: Levels of indexicality and enregisterment of linguistic forms (adapted from Johnstone 2009: 164)

n^{th} order indexicality/first order	A linguistic form the frequency of which patterns according to speakers' socio-demographic background
n+1st order indexicality/second order	A linguistic form which has acquired a social meaning which is governed by ideologies pervasive in the speech community. The linguistic form and associated link are noticed by speakers.
(n+1)+1st order indexicality/third order	A linguistic form which has acquired an additional indexical meaning which is essentially removed from the first (n^{th} level) interpretation. The form is enregistered in the community and linked to a cultural value primarily expressing place.

2.3. Indexing place

A number of sociolinguistic studies investigating the links between language and local identity (i.e. identities linked to place) in both the UK (e.g. Beal 2009) and the US (e.g. Johnstone 2009) have relied on social indexicality and the enregisterment of linguistic forms as explanatory concepts. Johnstone (2010) argues that globalisation tends to lead to increased dialect awareness, a re-indexing of social meaning, and enregisterment of local forms. The main argument is that first and foremost strongly local forms come to index different social meanings; Johnstone refers to this as 'resemioticization'. The local linguistic features become the topic of conversation in the community, and they are used to differentiate members of different speech communities. More importantly, Johnstone argues that the idea of local speech as unique solidifies the links between speech and place (as opposed to gender, class or age) which renders other links, or indexicalities, less accessible.

Thus, as outlined above, processes of enregisterment take place both through discourse about language varieties and the places they are connected to (see Johnstone 2013), and through the consumption of commodities featuring linguistic forms uniquely connected to a specific place (such as t-shirts with dialect written on them – see Johnstone 2009) regardless of whether they in reality are

unique or not. Considering this idea in regard to *Trainspotting* brings forward the idea of the novel itself as a commodity which both strengthens the enregisterment of Scots as well as signalling the enregistered nature of this variety. The enregistered nature of Scots vernacular then also means that place is a social index of the variety[4]. In our reading of the novel, place is then always present; place becomes foregrounded in the novel in the sense that it becomes primary through the use of a nonstandard language variety. Thus, the stylistic choices made in the novel not only foreground Scotland through the setting and sheer volume of nonstandard language, but also through the processes of indexicality and enregisterment outlined above.

2.4 Analysing dialects in literature

Before turning to the analysis of several excerpts from *Trainspotting*, we explore the role which dialects play in literature and attempt not only to exemplify the language situation in Scotland, but also to pinpoint some of the Scots features that Welsh uses in his novel. Some linguists choose to ignore representations of dialect in literature due to the inauthenticity of the attempted representation, claiming that true examples of dialect only exist in the 'real world', whilst others question the very existence of authentic speech (Hodson 2016: 418). When a reader notices representations of linguistic features that are identified as specific to a dialect, "it generates the perception that it must originate from a 'real' speaker" (Hodson 2016: 418). In other words, the reader automatically draws on both cultural and linguistic knowledge about which social characteristics are typical of the speaker of that particular dialect as a means of gathering information about the speaker. Concurrently, readers may be encultured into their understandings of spelling, grammar, and vocabulary; thus, when writing in novels deviates from Standard English, a character's dialect, and an author's spelling, grammar, and vocabulary are seen as 'wrong' (Hodson 2016: 425). Note that cultural knowledge about Standard and nonstandard English is not inherently right or wrong; rather, it is culturally constructed and ideologically bound.

Welsh and other authors who use nonstandard spellings of the English language in their work may deliberately take advantage of real-world language ideologies. In fact, they may disregard orthographic conventions to achieve certain literary effects (Honeybone and Watson 2013: 313). Respellings capturing local pronunciations, also known as 'eye-dialect', have "been claimed to cause readers to stigmatise both the language itself and the person they imagine is responsible for producing it" (Honeybone and Watson 2013: 313). However, writers may use this stigmatisation intentionally to portray particular personalities, and therefore, the intent is not always destructive. In *Trainspotting*, the social identities of the characters are interrelated, and so is their use of language. The individual characters speak in their own unique ways through the employment of nonstandard English and slang. Not only does the reader become connected to the novel's characters through language, but language also allows for an examination of the novel's genre and central idea, namely the conflict between 'voices' represented by the author, narrator, and different characters. It may be noted that these different 'voices' are strongly connected to the various ideological underpinnings which the novel is imbued with. The 'voices' foreground place in that they carry indexical markers of Scotland; they carry linguistic features which are largely identifiable as Scots vernacular. These features, some of which are investigated in the following subsection, do not occur in Standard English, and consequently, they foreground place.

[4] Non-standard language varieties in the UK carry a range of social indices, for instance social class and regionality as also indicated in Figure 1, and the authors acknowledge that these are not only difficult to tease apart but also vary between individuals. The authors wish to underline, however, that the scope of the research presented here is limited to how place is stylistically foregrounded in the novel, thus establishing place as the primary index for the reader.

2.4.1. Scots features

Scots is a West-Germanic language variety spoken primarily in Lowland Scotland (Unger 2010: 100), closely related to English in that Scots and English share Indo-European roots and derive from Old English (Douglas 2009: 29). Indeed, much of the Scots vocabulary is shared with Standard English. Other Scots words may be classified as close cognates, words that Standard English and Scots have in common but with different pronunciations and spellings, whilst others yet are particular to Scots (Eagle 2016: 26). In this paper, we pay attention primarily to the latter two categories in our investigation of indexicality and emplacement. Scots differs from Standard English on a lexical level, morphological and syntactic level, and on a phonological and orthographical level.

In terms of lexis, Scots has a wide variety of words which differ from Standard English. The ones salient to this paper are *wee, ken,* and *likesay*, although the representation of the Scots lexis is certainly not limited to these lexical items in *Trainspotting.* The adjective *wee* means *little*, and although the adjective is widely used in Scottish English as well, this co-occurrence is unproblematic in terms of indexicality and placement as its occurrence is particular to Scotland whether it be in Scots or Scottish English. The verb *ken*, meaning *know*, is distinctively Scots; and apart from being used as a verb, *ken* can additionally function as a focusing device in colloquial speech, a function which is depicted in *Trainspotting* (Scots Online 2015). The Scots adverb *likesay* means *for example* ("Likesae" 2005), but like *ken*, the word is also used as a focusing device in *Trainspotting*.

In terms of syntax and morphology, Scots has many patterns in common with Standard English. One noteworthy difference is the negative suffix *-nae* as in for example *cannae* (*cannot*) and *dinnae* (*don't*) (Unger 2010: 100–101). Phonologically and orthographically, there are several notable differences between Scots and Standard English; those relevant to this paper are described in the following. Resulting from the Scottish English pronunciation of /l/ as dark in all positions, Scots has /l/-vocalisation (Melchers and Shaw 2003: 65), which is generally represented orthographically with <w> as in <aw> in contrast to the Standard English <all> (Jones 2002: 89). Scots moreover differs from Standard English in the pronunciation of various vowels. The MOUTH vowel is pronounced monophthongally as [u] rather than as the diphthong [aʊ] in Standard English. The Scots pronunciation is often orthographically represented by the spelling <oo> as in <oot> and <aboot> instead of the Standard English spellings <out> and <about> (Melchers and Shaw 2003: 67). Likewise, the Scots pronunciation of the LOT vowel differs from Standard English in that the Scots pronunciation is [ɔ] rather than [ɒ], meaning that LOT merges with THOUGHT (Melchers and Shaw 2003: 65 – 66). This deviation from Standard English is orthographically represented in *Trainspotting* as <oa>, meaning for example that the Standard English <lot> becomes <loat>. Scots additionally differs from Standard English in the pronunciation of words such as *do* and *to.* Whereas the vowel is pronounced as [u] in Standard English, Scots speakers pronounce it as the fronted and lowered vowel [e], which is often orthographically represented with the spelling <ae>, e.g. <dae> and <tae> instead of <do> and <to> (Jones 2002: 88).

Another notable difference between Standard English and Scots is the personal pronouns in the first and second person: The first person singular subject can be spelled <ah> in contrast to the Standard English <I> ("A pers. pron." 2004), whilst the second person singular subject is spelled <ye> ("Ye pron., v." 2004). The main argument for the relevance of investigating foregrounding in place through indexical markers in the novel is that the novel carries many linguistic features which are largely specific to Scots; this will be explicated in the analysis.

2.5 Socio-cultural and ideological aspects of language in Scotland

Language variations associated with Scots are some of the most unique and deviating variations from Standard English; Scottish English, Scottish Gaelic, and Scots are all recognised language varieties in Scotland, and each variety includes several dialects (Melchers and Shaw 2003: 61). In recent years,

Scottish English in the spoken mode has become distinguished from Standard English primarily based on pronunciation, but various vocabulary features, idioms, and grammatical features can also be replicated in writing (Douglas 2009: 34). Scottish English is in varying degrees influenced by Scots, resulting in phonological compromises and lexical transfers, and has now become the accepted norm in schools and the distinct speech of the professional class in Scotland (McClure 1994: 79-80).

Historically, speakers of Scots have struggled for recognition. Many consider Scots a dialect or a vernacular variety of English and regard Scottish English as having the most prestigious status, whilst others contest this perspective. Regardless of the somewhat complex and unclear language situation in Scotland, a language label permanently reflects a linguistic reality for a group of speakers, which results in ideological consequences. As previously stated, Welsh not only introduces a nonstandard language variety to such an extent that it becomes a distinctiveness, a character, with its own function, but he also creates a realistic voice for the working-class in Scotland. As Horton (2001) notes, "Trainspotting tells a story that is culturally and historically specific, one that recognizes the ways in which identity is constructed out of multiple and competing discourses, including masculinity, nationhood, class, family and youth culture" (232). By portraying a working-class community in the geographical region of Edinburgh, Welsh depicts the economic and cultural shifts of the Thatcher era.

Margaret Thatcher, the British Prime Minister at the time during which *Trainspotting* is set, provoked strong opinions in Scotland in the 1980s, and she still does today (Kerr 2015). Thatcher was perceived as anti-Scottish and, consequently, she became strongly disliked amongst working-class communities not only in Scotland but also in the rest of Great Britain (Kerr 2015). Thatcher's conservative politics stood for privatisation of industry and public services, and advocated for the free market; "[a]s an ideology, Thatcherism sought to discredit notions of class, arguing that the goal of society was to maximize economic efficiency – individuals being free to pursue their own selfish ends, change in social values, breakdown of community" (McGuire 2010: 20). Many of these political initiatives were regarded as specific attacks on the working-class communities not only in Scotland but also throughout Great Britain.

In *Trainspotting*, Welsh depicts not only a displacement and a breakdown of a working-class community, but also an end to working-class identity, exploring the void left behind by the fading traditional notions of communities and class (Horton 2001: 221). Welsh portrays what may be termed 'the ugly side' of the working-class culture in Thatcher's Great Britain by describing "a community of dependency - welfare-dependency, drug-dependency, money-dependency - which is the mirror image of the society of isolated, atomized individuals of modern capitalism" (Craig 1998: 97). Literary critics characterise *Trainspotting* as both working-class fiction as well as a fundamental departure from working-class fiction (McGuire 2010: 21). Welsh does not take his point of departure in a factory worker's life or a bus driver's life; Renton and most of his friends have either never worked or only been in short-term employment.

An important theme to consider in *Trainspotting*, related to language politics, is Welsh's portrayal of the "ambiguous relationship between Scottish history and narratives of colonialism" (McGuire 2010: 23). The aspect of post-colonialism provides a suitable context for understanding part of *Trainspotting*'s influence and charm, "both in terms of its subversion of Standard English as well as the cultural imperialism it implies and the hybrid existences of characters living . . . border lives that require a 'new art of the present' and a proliferation of 'englishes'" (Morace 2001: 22). Welsh displays this hybridity through Renton, who defines himself neither as Scottish nor British, but there is also a display of nationalism, chiefly presented by Begbie, who represents Scots national pride for better or worse.

The problematic position of psychological benefit from independent nationhood on one side and, on the other, relying on support and jobs resulting from being a part of the United Kingdom is reflected in the ongoing language debate in Scotland. Owing to the complex and blurred language

situation as to whether Scots is a language or a dialect, Scots is trapped in a somewhat confused identity mirroring the peculiar political, cultural, and social position of the country itself. Scotland's special status illustrates that people of Scotland are aware of their distinct character of speech and writing; there is a long and respected tradition for academic linguistic study of Scots, societies dedicated to further Scots as a language, and there is an ever-growing corpus of written material in Scots (Crystal 2003: 328). Scottish culture is also reflected in the institutionalised social structure, the Scottish home rule, although this happened after Welsh wrote *Trainspotting*. Scotland now has its own parliament, which oversees education, transportation, and the power to introduce new taxes, though subject to approval of the British government. Despite these national reinforcements, and a distinct language loyalty, Scots has not been recognised as a language of prestige and power, as it has no official mandate. For the scope and ease of this paper, Scots is not termed a dialect or a language (no political or ill will intended). Instead, we utilise the dichotomy of nonstandard and Standard English.

3. Analysis: Identifying place in *Trainspotting*

The focus of this analysis is to investigate the channels in which the foregrounding of place is central to the development of the characters' identities in *Trainspotting* as well as to examine the discursive elements in the novel which connect to a certain place, namely Scotland. In the following, we argue that place and nonstandardness are foregrounded by the sheer volume of nonstandard language occurring on the pages in *Trainspotting*. The discourse surrounding language in the novel as well as the uniquely Scot vernacular forms which strongly index Scotland are impossible to ignore. Welsh ensures that the reader takes an active part in the construction of meaning in the novel firstly by utilising a language variety which, for a Standard English speaker, is difficult to comprehend and, secondly, by challenging the formal device of narrative voices.

Another way in which place is foregrounded is through the characters' meta-discourse about personal language use and their abilities to style-shift or make conscious shifts in register. Through the characters' use of style-shifting, Welsh comments on the language ideology at play, illuminating what certain characters gain from mastering this ability. We commence our analysis by locating Scots features in the novel represented in three characters' language: Renton, Spud, and Begbie's.

3.1. The use of nonstandard features in Trainspotting

The language in *Trainspotting* is not only recognisable as nonstandard; the occurrence of linguistic features associated with Scots index a specific place, namely Scotland. This foregrounding of place via indexical markers is evident in Renton, Spud, and Begbie's speech and internal monologues. Renton's internal monologue contains several indexical markers as seen in the following excerpt from the novel:

> The Magistrate lets oot a sharp exhalation. It isnae a brilliant job the cunt's goat, whin ye think aboot it. It must git pretty tiresome dealin wi radges aw day. Still, ah bet the poppy's fuckin good, n naebody's asking the cunt tae dae it. He should try tae be a wee bit mair professional, a bit mair pragmatic, rather than showin his annoyance so much. (Welsh 2013: 207)

Renton's internal monologue clearly occurs in nonstandard English as evidenced by the /l/-vocalised utterance <aw> corresponding to Standard English <all>, and the nonstandard pronunciations of vowels represented in the spellings <aboot> instead of <about>; <tae> and <dae> instead of the Standard English <to> and <do>; and <goat> rather than <got>. The Scots negative marker <nae> as the suffix in <isnae>, and the first person singular subject <ah> are also recognisably Scots features.

Notice also the adjective *wee*, which is widely recognised as specific to Scottish vernaculars.

Begbie's internal monologue furthermore contributes to the volume of nonstandard language in the novel: "Ah'm ootay here. Fuckin sharpish, ah sais, no lookin roond. Whair the fuck's they soacks… everything takes twice as fuckin long whin yir hungover n ah kin dae withoot this cunt nippin ma fuckin heid" (Welsh 2013: 146). The quote features various words with nonstandard spellings, e.g. the verb <dae> in place of the Standard English spelling <do>; the respellings <ootay>, <roond>, and <withoot>, representing the Scots pronunciation [u] in contrast to the Standard English pronunciation [aʊ]; and <soacks> rather than <socks>, representative of the Scots pronunciation of the LOT vowel. As in Renton's internal monologue, the first person singular subject is spelled <ah> rather than <I>.

Finally, Spud's speech also carries many linguistic features specific to Scots, as the following excerpt from his direct speech exemplifies: "That's spot on man . . . eh . . . ye goat it, likesay" (Welsh 2013: 208). The occurrence of the focusing device *likesay*, along with the nonstandard pronunciation of the LOT vowel as represented orthographically in the verb <goat> as opposed to the Standard English spelling <got>, and the second person singular subject <ye> instead of <you> once again index place. Noticeably, the reoccurrence of the same words with the same spellings across the characters' speech and internal monologues, e.g. <tae>, <goat>, and <ye> substantiate the foregrounding of place. Drawing on Silverstein's (2003) work on indexicality as well as Kerswill's (2009) work on the connection between language variation and geographical placement, we argue that the nonstandard language carrying indexical markers index Scotland. All linguistic features described above function as external deviations from an established norm, that of Standard English writing. The majority of the novel is written in a nonstandard English variety specific to Scotland, and the sheer volume of nonstandard English thus further foregrounds place. In the following, we investigate the discourse surrounding language in *Trainspotting* and argue that this acts as an additional channel in which firstly nonstandardness and secondly place is foregrounded.

3.2 The discourse surrounding language in Trainspotting

The chapter titled "Speedy Recruitment" (Welsh 2013: 82-88) features the characters Renton and Spud prior to, during, and after their separate job interviews. Having been referred to a potential employer by the Department of Employment's Jobcentre, neither Renton nor Spud seek to be hired; rather, they prefer remaining unemployed in order to continue receiving 'giro' from the government. Before their interviews, Renton recommends to Spud that he act in a certain way in order to seem convincing in the interview: "what ye huv tae dae is tae act enthusiastic, but still fuck up the interview" (Welsh 2013: 82). Although Renton does not explicitly comment on language use, the reader may infer, based on Renton's interview, that Renton implicitly encourages Spud to speak Standard English; that he associates enthusiasm and correctness with Standard English. This inference is drawn from the fact that Renton employs Standard English in his interview in order to appear as a viable candidate for the job before he eventually sabotages his interview by mentioning his heroin habit: "I've had a long-standing problem with heroin addiction. I've been trying to combat this, but it has curtailed my employment activities…" (Welsh 2013: 85). Note that Renton's speech is written in Standard English; this style is representative of the entire conversation which Renton and the interviewer conduct.

Contrary to Renton, Spud does not shift to Standard English in his interview. Rather, he speaks in his usual nonstandard style. Spud is linguistically recognisable through his incessant idiolectal use of the focusing devices *likesay* and *ken*, features which are strongly associated with Scots. Equal to his pronunciation and his vocabulary, Spud appears incapable of speaking without these devices, as seen in the following example: "The poppy, likesay, eh . . . the bread, the dosh n that. Ken?" (Welsh 2013: 87). He comments on his own inability in his internal monologue during the interview, "Ah'll huv tae stoap sayin 'ken' sae much. These dudes might think ah'm a sortay pleb" (Welsh 2013: 87),

illustrating that he is aware that there is a connection between being a *pleb* and the way he speaks, but only to the degree that his use of *ken* is the nonstandard or informal feature of his speech. As such, Spud's comment elucidates that his speech carries a social class index in addition to the index of place and, to him, the index of class or level of education may very well be primary. His comment furthermore reflects his awareness of the underlying issues in terms of cultural power between Standard English and nonstandard English. Drawing on Johnstone (2010), Spud's awareness of the gap between Standard English and his local linguistic features differentiates him, and his community, from other speech communities. Consequently, not only is his speech nonstandard, and thus 'different', but it is very clearly a local vernacular which indexes Scotland and working-class speech. The use of *ken* is a prime example of social indexing, which Spud also comments on himself. The idea that local speech is unique or different solidifies the links between speech and place. In this way, Welsh cues in on the importance of language in the novel. This focus on language is also highlighted by the character Begbie.

The chapter "Inter Shitty" (Welsh 2013: 139-151) revolves around Begbie and Renton. Narrated by Begbie, the last half of the chapter follows Renton and Begbie on a train ride from Edinburgh to London, during which the pair of Scots encounter several individuals with styles of speech different from theirs:

> Begbie: – No fuckin shy, they British Rail cunts, eh?" *ah sais, nudging the burd next tae us.*
> Stranger: – Pardon? *it sais tae us, sortay soundin likes, 'pardawn' ken?*
> Begbie: – Whair's it yis come fae then?
> Stranger: – Sorry, I can't really understand you. *These foreign cunts've goat trouble wi the Queen's fuckin English, ken. Ye huv tae speak louder, slower, n likesay mair posh, fir the cunts tae understand ye.*
> (Welsh 2013: 146, speaker information, italics, and layout added)

Note that Begbie's internal monologue is represented in italics. When the Canadian woman informs Begbie that she cannot understand his speech, Begbie becomes irritated. In his frustration, Begbie, in his internal monologue, declares that he believes his speech to be the Queen's English, possibly expressing that he views his own language variety to be as prestigious as the Queen's, or perhaps that he believes that he is not at fault if others cannot understand him. Begbie internally mocks the foreigner by asserting that he must speak louder, slower, and 'more posh' to be understood by her, and thus his thoughts and speech reveal that he identifies Standard English as 'talking posh'. Whilst he believes his speech to be the Queen's English, although his internal comment might be ironic, Begbie's trail of thought nonetheless reveals that he is aware that his English is not 'posh'.

Both Spud and Begbie are aware of their language use, but in two different ways: whereas Spud comments on his need to correct his own language, specifically to reduce his incessant use of *ken*, Begbie does not see anything wrong with his language use; his variety of English is as good as any variety, in his opinion. Their comments on language show that Begbie and Spud are conscious about their own language, but they are either unable (Spud) or unwilling (Begbie) to style-shift to gain advantages and status. Renton, on the other hand, style-shifts because he has cracked the 'cultural code' of language ideology, and he even tries to teach Spud how to master this ability. In this manner, place is foregrounded in the novel in that the nonstandard variety used by both Spud and Begbie transmits indexical markers of Scots, whereas the nonstandard variety becomes foregrounded in Renton's ability to style-shift.

3.3 The foregrounding of place through ideology

The final way in which place is foregrounded relates to the ideological underpinnings of the discourse in *Trainspotting*. We have established that Renton, Spud, and Begbie possess a linguistic awareness in that they reflect on their own use of language; Spud even exhibits an awareness of the stereotypical connection between the way he speaks and being a *pleb*. In the chapter *Courting Disaster*, Renton acts upon his linguistic awareness and shifts his style of speech to Standard English in the face of an authority.

Following a legal dispute, Renton and Spud find themselves in court, accused of stealing books. Not only does the chapter illustrate the differences between Renton and Spud's general and linguistic abilities, the situation also demonstrates the consequences of these differences. To understand the consequences, we must however initiate this investigation of foregrounding with an identification of the differences between Renton and Spud's speech. Upon being addressed by the Magistrate, who asks Renton if he intended to sell the stolen books, Renton responds with "no, your honour. They were for reading" (Welsh 2013: 207), and when the Magistrate questions Renton's claimed interested in Kierkegaard, Renton responds with "I'm interested in his concepts of subjectivity and truth" (Welsh 2013: 207-208). These excerpts of Renton's direct speech are completely absent of indexical markers and occur in Standard English. The contrast between this specific excerpt of direct speech and Renton's usual style of speech is particularly evident in the Standard English spelling of the negative marker <no>, and the spelling of the first person singular pronoun <I> in 'I'm' rather than the Scots spelling <ah>. Throughout his entire conversation with the Magistrate, Renton employs Standard English. This appearance of Standard English amidst an otherwise overwhelming amount of nonstandard English serves as a case of internal deviation in that the volume of nonstandard language secures this variety as the norm. This stylistic device has the same effect as external deviation: the internal deviation foregrounds the employment of nonstandard speech associated with Scots in the presence of the foregrounding of Standard English.

Contrary to Renton, Spud addresses the Magistrate in his usual nonstandard style of speech, as seen in the example previously investigated in subsection 3.1, in which we identified Scots words and spellings, meaning that they index Scotland: "That's spot on man . . . eh . . . ye goat it, likesay" (Welsh 2013: 208). Following Renton and Spud's separate explanations of the events, the Magistrate calls Spud a "habitual thief" (Welsh 2013: 208), whereas he deems Renton to be a "different matter" (Welsh 2013: 209). At the end of the court hearing, Spud is sentenced to prison whilst Renton's escapes with a much milder punishment. The significant difference between Renton and Spud's punishments is somewhat surprising seeing as they were, as far as we, as readers, can deduce from the chapter, equally responsible for their crime. Although their individual punishments may be traced to their individual overall conduct during the court hearing, the reader is led to believe that Renton's mild punishment is at least partly grounded in his linguistic ability to style-shift; to employ Standard English for his own benefit. This interpretation of the events is closely tied together with the ideology that Standard English is favourable to nonstandard English, in that the Magistrate favours Renton to Spud due to Renton's style of speech. In this instance, then, nonstandardness is foregrounded in Renton's ability to style-shift, and in what he achieves through this ability; because the nonstandard variety used by Spud, and also by Renton in his internal monologue, it may be noted, carries indexical markers of Scots, place is yet again foregrounded in the novel.

4. Discussion and conclusion

In the analysis, we set out to investigate how place is foregrounded in *Trainspotting* through different channels, namely through the volume of a nonstandard language variety associated with Scotland; the discourse surrounding language in the novel; and through the ideology at play which emerges through style-shifting and the benefits of being able to style-shift.

We have established through an investigation of lexis, syntax and morphology, and orthography

and phonology that a significant amount of the writing employed in *Trainspotting* represents Scots. The linguistic features which represent Scots include the focusing device *ken*, the preposition *tae* and the negative marker *nae* as in *cannae*, and because they are recognisably associated with Scots, they foreground Scotland. Place is additionally foregrounded through the characters' meta-awareness and comments on their own language use as seen in Begbie's comment on 'the Queen's English' and Spud's thoughts on his own language at his job interview.

Concerning the third channel through which foregrounding of place is evident, Renton and Spud's different punishments for the crime which they were equally responsible for committing foregrounds the difference between Renton's employment of Standard English and Spud's nonstandard style of speech. The main reason that this foregrounds place is that Spud's style of speech carries indexical markers specific to Scots. Renton's ability to style-shift, and the benefits he gains from this ability, measured against Spud's local speech, contributes to a stigmatisation of Scots vernacular. Notably, the foregrounding of place happens in two steps in this channel: First, nonstandard language is foregrounded in that Spud's employment of nonstandard speech contributes to his punishment whereas Renton's use of Standard English saves him from prison and, second, because, as we have shown, the nonstandard speech employed is very much recognisable as Scots and thus clearly linked to Scotland.

Besides employing a vocabulary and orthography associated with Scots, *Trainspotting* draws on its own linguistic system, since, in several instances, Welsh has created his own particular orthography for the novel. We reason that *Trainspotting* is written in a mixture of Scots and a Scottish English dialect represented on the page by nonstandard spellings. We conclude this based on the presence of various Scots features, and on the fact that although English orthography is standardised, and has been for centuries, variation is still possible. Indeed, the common view of Scots and Scottish English as constituting a linguistic continuum supports the idea that the different language varieties on the continuum are easily intermixed. We additionally conclude that Welsh's use of nonstandard spellings, representing the phonology of a nonstandard variety, is intentional. His orthographic variation is a judicious decision, and it offers the potential for orthography to convey a deeper social meaning (following Sebba (2007) and (2009) who argues that orthographic practices indeed reflect social meaning). Welsh utilises the accepted phonological spellings of Standard English in an alternative manner to denote pronunciations which are prevalent in the area he wishes to portray.

By using a nonstandard language variety to an extent that it almost overpowers the 'norm' of the standard variety, Welsh comments on the linguistic inheritance of his characters, illustrating how one is forced to feel in one language and to reason and to write in another if one is able. In this manner, Welsh succeeds in portraying the language of a locale as a whole in contrast to the surrounding society by use of nonstandard English, not only in direct speech as most often seen in literature connected to dialect, but also in internal monologues accessed through first-person points of view. Simultaneously, he portrays his characters individually by creating variances within the apparent sameness of his linguistic system. These variances work as signposts which help the reader distinguish between the different characters, whilst concurrently shaping these characters' identities. These linguistic features convey personal identity, interrelationships, and standpoints on one level; on another level, they display the ideological battle between Standard English and nonstandard English. The characters' speech patterns may either be marked or unmarked choices, depending on the author's intentions, expressing solidarity or underlining authority towards other characters and towards society, e.g. Scottish language policy, as a whole.

Another aspect of Welsh's use of nonstandard English is that readers might connect the orthography with Scotland and also with language features associated with the working-class speakers which Welsh presents, although notably the orthography is, to some extent, merely 'eye-dialect' (as defined in Honeybone and Watson 2013: 313). As Hodson (2016) notes, for readers

familiar with the represented regional variety, in this case a nonstandard form of English associated with Scotland, the regional variety "signals highly specific information about social and geographical identity" (426). Welsh thereby empowers an un(der)represented group in society by letting the working-class speak (Morace 2001: 26).

By intentionally employing an extensive amount of nonstandard English, Welsh creates a surprising depiction of Standard English as being the deviant norm, and thus Standard English becomes the nonstandard variety. In other words, *Trainspotting*'s nonstandard language becomes a "hybrid linguistic form that marginalizes the standard English on which it depends" (Morace 2001: 27). This effect is connected to Short's (1996) notion of internal deviation: in the novel, nonstandard English is used to the extent that it becomes the norm, and when Standard English does appear on the page, it internally deviates from the internal norm.

Through the employment of nonstandard English in *Trainspotting*, Welsh expects the reader to draw on his or her social and linguistic knowledge to link specific linguistic features with certain language varieties and again with specific social characteristics believed to be typical of the speaker of the represented language variety. The social identities of the characters are connected to their ability to style-shift and to their mastering of Standard English. These abilities mirror their social, cultural, and economic background, exemplified by the status Renton upholds through his ability to style-shift compared to the positions offered to Begbie and Spud, who are both portrayed as less fortunate linguistically and, on account of such misfortune, socially, when faced with formal contexts. Welsh illustrates how the characters operate with greater benefit if they are able to adjust their speech to the social context.

To utilise Eckert and McConnell-Ginet's (2003) supposition, emphasising that members of the local community remain embedded in and loyal to their community, Begbie and Spud represent a national and local perspective on life respectively, maintaining status quo. Begbie is proud of his position, whilst Spud has no means, no wish, nor the ability to change his lifestyle. These life positions are depicted in their nonstandard language, and the positions fit Trudgill's (2000) ideas about regional variation in English being greater amongst people of low social status than of high social status. Eckert and McConnell-Ginet (2003) furthermore state that members of the elite classes by default engage in globalising institutions, e.g. educational institutions, and Trudgill (2000) asserts that speakers of the highest social class employ Standard English, which is nearly devoid of regional variation. Consequently, the standard language represents a detachment from the local perspective. Through style-shifting, Renton climbs the social ladder, and he elevates himself from his local community in an effort to escape his situation, attaining a global perspective on life and the opportunities such an existence will afford him.

Welsh offers no simple narrative solution to the oppression Renton and his friends face, only an emphasis on the status quo and the implicit need for change. *Trainspotting* as a localised Scottish story challenges traditional notions of nationalist literature. The novel foregrounds locality through the use of Scots, Scottish specificity, reference to Scottish beliefs and attitudes, and points of cultural and geographical Scottish references. By addressing local Scottish issues and concerns, Welsh stimulates a fascination within his readership for the lives of unfamiliar people and the places which these people inhabit; he seeks a readership that is willing to engage critically with the flaws and complications of Scottish life. Conversely, this spectacle is represented as a commodity for consumption by a readership fascinated with Scottish life but also with people at the bottom of society.

The use of a nonstandard language variety may be seen as a reaction to the loss of national stability in the eighties and nineties in Europe due to globalisation. Globalisation has created an increased interest in regional cultures by "asserting an identity independent of the centre's mainstream culture" (Stedman 1997: 82). By inserting 'outsiders', such as speakers of Scots, into his novel, Welsh upholds the fact that Standard English is merely one language variety amongst many, and he thereby proposes a transformation in language structures formerly determined by colonial and imperialist

hierarchies. In this manner, Welsh's use of Scots vernacular, regardless of its genuineness, establishes a renewed understanding of a Scottish nation and of Scotland as a place.

The volume and unique nature of the vernacular language used in *Trainspotting* not only foregrounds place through various means in the novel but adds an additional layer to the reader's perception of the characters. The use of the vernacular here not only brings some realism to the characters (as also mentioned by Hodson 2016) but in fact emplaces the characters solidly in Scotland, and it is tempting to suggest that Scotland becomes a character of its own through the indexicality of language.

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What can Google Trends data tell us about dialect labels: An exploratory study

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Abstract: The aim of this article is twofold: firstly, it sets out to explore the usefulness of Google Trends to the study of language and the perception of variants and, secondly, it investigates the social realities of dialect labels as reflected in searches on the Internet search engine Google. Google Trends is an online tool which is freely available and allows you to map the search volume of search terms across time and space, and also see which other related searches Google users performed within the specified time period or area. In this way, Google Trends can perhaps help us shed light on what it is Google users are curious about or interested in when they search for words such as *Geordie*, *Scouse* and *Cockney* – is it the dialects which the labels denote or is it something else? The study thus takes as its primary interest the application of the Google Trends search tool to the study of folk perceptions of dialect labels and, as a secondary aim, if this can be used to uncover what these dialect labels denote to lay people. With regard to the first aim, the study found that using Google Trends data can be useful in the early stages of perceptual dialectology studies of dialects and dialect labels. With regard to the second aim, the main finding of the study was that there are vast differences between the three dialect labels investigated here, both in terms of sheer search volume over time but also with regard to the collocates with which they are associated. Explanations for some of the patterns of search volume over time and the differences between the three dialect labels are sought by considering the impact of popular culture and TV shows.

Key words: Dialect labels; Geordie; Scouse; Cockney; Google Trends; perceptual dialectology; social reality; folk linguistics; cultural prominence

1. Introduction[2]

Cramer & Montgomery (2016: xiiv) argue that perceptual dialectology sees *place* as coloured by non-linguists' social realities. This means that place is not merely a geographical factor when it comes to the perception of different varieties; rather we find close links between place and factors such as language use and identity.

Social reality is a sociological term which reflects the theory that our perceptions of reality are shaped by social interactions (from how we are raised to how we talk about things and the people we surround ourselves with). Initially proposed by Berger and Luckmann in 1966 in their seminal book, *The social construction of reality*, the term has proven influential in social constructivism and beyond. In terms of perceptual dialectology, the notion of social reality supports our investigation of *place* as a subjective entity, the perception of which is coloured and shaped not so much by geography or political issues but rather by a more complex range of phenomena affecting speakers and hearers in different and unique ways.

Research from the UK in the area of perceptual dialectology (most notably by Chris Montgomery) has shown that urban areas are particularly prominent in the perceptual map of the country (Montgomery 2007, 2016; Montgomery & Beal 2011). As suggested by Cramer & Montgomery (2016: xiv), this could be tied to the importance of large urban centres in the seemingly growing development of supra-regional linguistic variants (as investigated extensively by Paul Kerswill, [e.g. Kerswill 2003] but see also Watt 2002). Much of the research carried out in this vein is, not surprisingly, concerned with the perception of different dialect areas. The study presented here,

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however, is not concerned with the perception of geographical areas or linguistic varieties as such but rather with the perceptions of dialect names (or dialect labels, Montgomery 2016), here *Geordie*, *Scouse* and *Cockney*[3]. Specifically, this study asks whether the names of dialects are used exclusively to denote linguistic varieties or if they are also used to denote more than simply language.

Studies in perceptual dialectology and folk linguistics are commonly interested in tapping into non-linguists' perceptions of speakers of certain varieties or the areas where non-linguists believe certain varieties are spoken (see more below). However, this study is more concerned with what the labels *Geordie, Scouse* and *Cockney* (rather than the varieties they describe) denote to non-linguists. In order to investigate this, data from Google Trends (a corpus of Google searches with information about time, location and related searches) will be analysed. Google Trends provides detailed information about which search terms users use and it logs a variety of information about the users, such as location, when the search was performed and which other related searches the users performed. This means that it is possible to use the data to map which words or terms are most frequently linked (and, in our case, which are most frequently linked with Geordie, Scouse and Cockney) as well as if there are any differences over time and in different locations. This type of data has not been extensively explored in the field of quantitative sociolinguistics and, as such, this investigation also functions as a pilot study exploring the range of the data as well as investigating the usefulness of it to sociolinguistic and perceptual dialectological study.

2. The social construction of dialects

Perceptual dialectology, a branch of folk linguistics, is interested in the opinions about aspects of language held by laypeople, i.e. non-linguists. The seminal work of Dennis Preston within this branch of linguistics has very much shaped the field of current perceptual dialectology, also known as *folk linguistics.* In particular, his 1993 paper entitled "The Uses of Folk Linguistics" gives an introduction to some of the empirical methods employed within his field; map-drawing, imitation, attitude surveys, and applied discourse analysis. Furthermore, his introduction to the *Handbook of Perceptual Dialectology* (1999) also further establishes the relevance of this field to sociolinguistic inquiry.

In other words, perceptual dialectology is not concerned with unearthing language patterns and rules as such, but rather with uncovering what people *believe* are patterns which describe language in use. And just like our perception of reality is coloured by our social histories and experiences, so are our perceptions of language varieties. In this way, what (lay)people believe about language is also shaped by their previous experiences and social encounters. Included in these are also the discourses which surround particular varieties and language variation in general which is why laypeople's ideas about language and variation "can be consequential in the study of patterns of linguistic variation and change" (Johnstone 2013:107), especially when it comes to the study of the dissemination of language ideologies.

2.1 The emplacement of 'ways of doing things'

Johnstone (2013) provides a discourse analytical approach to the enregisterment (Agha 2003) of features of Pittsburghese. Johnstone shows how the personal narrative is one way in which particular features of Pittsburgh English are interpreted as indexes of localness (Silverstein 2003) but also, and equally important, how these indices are disseminated through these personal narratives. Johnstone notes that, in contrast to standard or prestige varieties such as RP, "[r]egional varieties are sets of forms that are enregistered according to a different schema (or set of cultural values), one which links variation in speech with place"[4] (2013:115). In addition, something which is also highlighted by Auer

[3] Search terms (dialect labels) are italicised, reference to the actual speech varieties are not italicised.

[4] This key aspect of sociolinguistic study is also discussed in more detail in Auer et al. (2013: 1-17).

et al. (2013:5), regional varieties index "more than geographical meaning; it almost inevitably implies a social evaluation of the speaker". What this means is that, when we encounter someone, we immediately try to place them geographically and socially (on the basis of our ethnolinguistic knowledge) and thus we cannot escape the link between language and space as we always become emplaced and emplace others. However, as we have seen, place is not the only index carried by language and we can perhaps extend this to include other social evaluations and stereotypes linked to place (for a comprehensive account of this from an exemplar theoretical and socio-cognitive perspective, see Kristiansen 2008). Johnstone touches on this when she talks about "ways of doing things associated with places" (Johnstone 2013:107), i.e. it is perhaps not only language variation (way of speaking) which is linked to place but also other socio-cultural behaviours. For our purposes here, this would mean Geordie is a way of speaking associated with Newcastle upon Tyne, Scouse is a way of speaking associated with Liverpool and Cockney is a way of speaking associated with the East End of London. If we expand the index (in Johnstone's terminology) to encompass more than simply 'ways of speaking', then perhaps 'ways of doing things in Newcastle' would include other behavioural patterns (such as going out without a jacket or coat, even in winter). Thus, by extension, the people who 'speak in the Newcastle way' also do other things 'the Newcastle way', and thus speaking Geordie comes to index more than simply speaking a certain way and being from Newcastle simply by association. The perceptions of 'ways of doing things in Newcastle' become inextricably linked with the location of Newcastle upon Tyne and are strengthened through social interactions which confirm them. It is clear that these additional indexes (and even the primary link between geographical place and regional variety) fall into the category of 'folk perceptions', i.e. they are as such unsubstantiated (by empirical evidence). However, the idea of them exists and this is perpetuated through discourse (private as well as in the mainstream media) and thus they exist and are real to laypeople, however farfetched and unsubstantiated in 'reality'(see also Anderson (2006) for a thorough introduction to the 'imagined' aspect of communities and Johnstone (2010) for an application of this to Pittsburgh English).

2.2 The perceptual prominence of Geordie, Scouse and Cockney

Montgomery (2016) discusses the perceptual prominence of dialect areas surrounding large urban centres in Great Britain and focuses on the emergence of *Manc*, the variety connected with Manchester. After investigating recognition rates for a variety of different UK dialect areas (both urban and regional), he introduces the term *cultural prominence* as a way of accounting for the very high recognition rates of Scouse, Geordie, Brummie (Birmingham), Cockney and Manc. Montgomery states that cultural prominence "is related to metalinguistic knowledge and refers to the boosting effect that the media or other mechanisms might have on the way in which a location is perceived" (Montgomery 2016: 199). Cultural prominence thus brings certain areas closer "through increased exposure" (Montgomery 2016). Cultural prominence (denoted *cultural salience* in Montgomery & Beal 2011) has also been studied by Johnstone for Pittsburghese (Johnstone 2009, 2011) and Beal for Geordie (2009), and it is closely linked to enregisterment (Agha 2003) in the way that for a dialect to be talked about and linked to a place, particular features of the variety will have to be enregistered and thus become identified as unique to the location in question (regardless of whether or not they are, in fact, unique). The role of the media is further emphasised by Stuart-Smith (2011), who also argues that exposure in the media will influence not only the awareness of varieties but also the ideologies which surround them. Bearing in mind that perceptual dialectology is interested in the perceptions of varieties by laypeople, it is easy to see how increased focus (in the media, in discourse) on certain varieties and certain features as linked to certain places can lead to increased recognition by laypeople and thus an experience of the place in question 'moving closer', i.e. becoming perceptually prominent.

The three varieties covered in this paper are all varieties found in large urban centres in England and I will briefly introduce them below. The following sections focus on describing the dialect areas in terms of geographical placement and the etymology of the dialect labels but not the linguistic features of the individual dialects. I do, however, include insights from Montgomery (2012) with regard to the recognition rates of the three varieties, results from a 2013 online poll by ComRes[5] for *ITV Tonight* about perceptions of regional British varieties with regard to friendliness and intelligence, and also examples of stereotypes connected with the three varieties as contributed by users of the online forum *Yahoo! Answers*[6]. Finally, I also include examples from contemporary popular culture of where the dialects can be encountered (e.g. TV-series) both because of Montgomery's *cultural prominence* (based in part on increased exposure by the media) and because these become relevant in the analysis later on.

2.2.1 Geordie

The Geordie variety is found in the area in and around Newcastle upon Tyne in northeast England, situated on the north bank of the river Tyne. According to the *Oxford English Dictionary* (OED), the British colloquial use of the word *Geordie* to denote "a native or inhabitant of Tyneside" is first recorded in 1860, however, the use of the word to denote "the dialect or accent of people from Tyneside" is first recorded in 1928 although there is an entry from 1903 listed under the adjectival use of the word where it modifies the word "accents" (OED, *Geordie*). The OED also has a commentary on North-east English dialects by Adam Mearns (Mearns, *no date*), who discusses both the different explanations for how the term Geordie came to denote the variety and inhabitants of Newcastle but also *who* can actually be called Geordies: to people from Newcastle it applies strictly to them, but to outsiders it can apply to people from the whole of the Northeast (see also Durkin 2015).

In addition to the meanings related to Newcastle inhabitants and language variety, archaic and rare uses include coal-miners, a coal-mining lamp (invented by George Stephenson), a sailor from the northeast and a gold guinea coin. With regard to the study carried out below, it is important to note that the label *Geordie* can denote both the language variety itself as well as a person speaking the variety and/or from Newcastle upon Tyne (and indeed the whole of the northeast area). Furthermore, the word can be used both as a noun and as an adjective (OED, *Geordie*).In his 2012 paper, Chris Montgomery summarises two studies of recognition rates of different British varieties. He collected data in 2004 and 2009 across different locations in the north of England and the Scottish-English border region. Here, I have summarised the recognition rates for the Geordie variety for 348 English respondents (Carlisle, Crewe, Hull, Brampton, and Hexham). Montgomery collected data by using the draw-a-map task developed by Preston and the recognition rates are thus an expression of which varieties respondents know and can link to a certain area. The Geordie dialect is a highly recognised variety and appears in the top 3 in all locations and has an average recognition rate of 63% (an average score of the recognition rates given in Montgomery 2012 for the locations mentioned above).

In the 2013 ComRes poll, 56% of respondents found the Geordie variety to be friendly (13% found it not friendly). 19% of respondents found it to sound intelligent and 26% found it to sound not intelligent.

Finally, in a thread from 2008[7], *Yahoo! Answers* user *Cassie*♥ asked the question "Stereotyping People From Newcastle. What stereotypes do you give to worr geordies? ?". *Cassie*♥'s own opinion

[5] ComRes interviewed 2,006 GB adults between 2 and 4 August online. Data were weighted to be representative of all GB adults aged 18+. ComRes is a member of the British Polling Council.

[6] It was possible to find threads about this very topic so these opinions were not elicited by the author.

[7] https://uk.answers.yahoo.com/question/index?qid=20080912083633AAYzE56&page=1

is that common stereotypes include that "we are all chavs with 14 children by the age of 25 And that we are all violent, arrogent and sound very german when we talk fast…". The contribution voted 'best answer' is from *Harvester69* who says "thought it was all brown ale, women with bricks in their handbags & why-i-man but no doubt I'm wrong. as for no coat[8], thats a northern thing even in the rain & snow". User *JaxA* states that they find Geordies to be "Witty, friendly, with an unintelligible accent, till you get used to it. Also, with a strong tendency to stagger around Whitley Bay on January evenings with hardly any clothes on. And lot's of bright orange make-up. Good mates though, and great work-mates. Trustworty". User *Rauls Ghost* links Geordies with "Women who are good in a fight" and user *D B* thinks of "dead sexy men with voices that make you melt". A few users also refer to representations of Geordies in the media (the teen TV series *Byker Grove* (1989-2006), the TV comedy-drama *Auf Wiedersehen, Pet* (ITV 1983-86, BBC One 2002-04) and the comic strip *Viz*).

As we will see in the Google Trends output, the popular reality TV series *Geordie Shore*, broadcast in the UK on MTV, illustrates the cultural prominence of Geordie and the impact of broadcast media in disseminating a specific image of those who speak this variety.

Image 1: *Geordie Shore* cast members, season 1

(Image from MTV.co.uk)

Geordie Shore was first broadcast in May 2011 and is still running at time of writing (February 2017). According to metro.co.uk, the first episode was watched by over 1.3 million people across different platforms (Hooton 2011). The show follows eight young men and women (all from the Northeast although not all from Newcastle) who have to live together in a shared house in Newcastle. Their day-to-day life revolves around going out, getting drunk, arguing, falling in love, having sex, and so on. Some seasons have seen the housemates (who sometimes vary) go abroad to e.g. Australia and Mexico where they carry on their adventures in a similar manner (Duke 2015). The show divided opinions when it first aired (and continues to do so) and Duke (2015) calls it "real TV marmite" (subheading) and states that some viewers "branded the cast a disgrace to Newcastle" (line 17).

[8] This refers to comments made by other users who all mention that young people go out with no coats on when they go out drinking and partying.

2.2.2 Scouse

The Scouse variety is found in the Liverpool area of North-West England. Liverpool is situated on the eastern bank of the river Mersey which runs out into Liverpool Bay. According to the OED, *Scouse* is a slang term used to describe "a native or inhabitant of Liverpool" (the first record being from 1945) as well as "the dialect of English spoken in Liverpool" with the first record being from 1963. However, the very first entry in the OED for *scouse* (no capital 's') is for the dish called *scouse*, a kind of stew also called *lobscouse.* It is apparent from the 1945 record that the term *Scouse* is used to denote inhabitants from Liverpool exactly because they eat *scouse* (OED, *scouse*). The OED also lists the term *Scouser* as being a slang term for a person not only from Liverpool but also from Merseyside (OED, *Scouser*). The first record for *Scouser* is from *The Times* in 1959 where we actually see an example of the link between *Scouser,* Liverpool and the distinct variety of English: "Their [*sc.* Liverpool workers'] catarrhal speech would identify them as 'Scousers' wherever English is recognized" [addition in original]. Interestingly, the OED has no additional commentary section on Scouse or Merseyside speech. For the purposes of the study reported below, it is indeed important to bear in mind that the term *Scouse* can refer to a type of stew (associated with Liverpool), a language variety and an inhabitant of Liverpool and, perhaps, Merseyside.

The studies reported in Montgomery (2012) reveal that Scouse is another highly recognised variety and it features in the top 3 with an overall recognition rate of 64%. The ComRes regional accent survey reveals that 42 % of Brits perceive speakers of this variety to be friendly (26% not friendly) and 15% found it to sound intelligent (37% rated it 'not intelligent').

Yahoo! Answers user *Jbrie* asked "What are the typical stereotypes about Liverpudlians (people from Liverpool, UK)?"[9] in 2011, and the comments on this thread reveal that Scousers are stereotypically thought of as being "rude noisey scruffy and very very generous, kind helpful and often wisecracking because they like to think they are comedians" (contributed by user *Scouse*). User *TSK* states that "Some ARE scallies and rogues, but most are fine. They dress up to go to Tescos. They have style!... It is so NOT typically ENGLISH. It is unique and that is the charm of the place!". In 2009, a now anonymous user asked "What stereotypes do you have of people from liverpool ?"[10] and in this thread we first of all find a contribution from user *Scouse* who states the following as a response to some of the other comments made on the thread:

> Yes I do often begin a sentence with our or R but it usually goes on to refer to a member of the family or our dog or maybe, our house, our street, our church etc. I am not a Catholic,a window cleaner, pick pocket, burglar, car thief etc. nor have Ispent timee as a guest of Her Majesty, my worst crimes are motoring offences worth 3 points at a time over 9 years

In this thread, we also find references to representations of Scousers from the media, mainly to the characters known as *The Scousers* which featured in *Harry Enfield's Television Programme* on the BBC which ran in the 1990s. *The Scousers* made the catchphrase "Calm down, calm down!" famous and sported a distinct look (shell suits, short curly hair, large moustaches).

As this will become important in our interpretation of the Google Trends data, it should be mentioned that Liverpool at one point also had a (scripted) reality TV series detailing the glamorous lives of a handful of local inhabitants called *Desperate Scousewives.* This show, however, did not become a success and was aired for only one season (eight episodes starting in November 2011 and ending in January 2012, according to IMDb.com).

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[9] https://answers.yahoo.com/question/index?qid=20110320221912AA8QYR7

[10] https://uk.answers.yahoo.com/question/index?qid=20090522054514AArnDfM&page=1

2.2.3 Cockney

The Cockney variety of English is usually associated with London's East End. According to the OED (OED, *cockney*), the term *Cockney* was first used to refer specifically to "a person born in the city of London" in 1600 and the "the dialect or accent of the London cockney or of those from the East End of London generally" in 1890. As an adjective, the first entry with the meaning "pertaining to or characteristic of the London Cockney" is from 1632. The OED also lists a range of other rare or obsolete meanings of the word *cockney*, but it seems that current usage is now limited to referring to either the variety or the speakers of the variety. Here, the OED again offers a more elaborate commentary (Green, *no date*), detailing both the definition of Cockney but also the related *Cockney rhyming slang* which he introduces in the following way: "If there is a stereotype of what the world sees as 'typically Cockney' then it is undoubtedly rhyming slang." He concludes by noting that other language varieties are now also found in London: Mockney, Estuary English and Multi-Ethnic London English, so while Cockney remains very much a variety enregistered as pertaining to London, it is not the only one. As we can see from the above, *Cockney* can thus also be used to refer to both the language variety but also to its speakers.

The studies reported in Montgomery (2012) also found Cockney to be a well-known variety across the 5 locations. Indeed, it features in the top 5 with a recognition rate of 43%[11]. The 2013 ComRes survey asked participants about "London (Cockney)" and 49% of respondents found the variety to sound friendly (19% not friendly). 18% of respondents found it to sound intelligent and 32% of respondents indicated that they found speakers of this variety to sound not intelligent.

The stereotypes of Cockneys mentioned in a *Yahoo! Answers* thread from 2010 started by user *Hannah S*, who asked "What are your stereotypes of Cockneys and Yorkshiremen?"[12], show that some of the common stereotypes include "salesmen, del boy type" (contributed by a now anonymous user) and user *Frustrated* adds that they think of the following:

> characters on Eastenders like Shane Richie, who played Alfie Moon, Mike Reid and current characters like Barbara Windsor, Dot Cotton, Charlie Slater, Mo and Stacey. We have the characteristic dropping of consonants and the rather slovenly pronunciation with the rhyming slang, which is typical of the Cockney. You might get the feeling that they might be 'wide boys' and you might not want to trust them too far.

With regard to Cockney in broadcast media, one famous example is the BBC soap TV series, *EastEnders* (which was also referenced in the comments on *Yahoo! Answers*). The show first aired in February 1985 and it is still being broadcast at time of writing. It has remained a very popular TV show in the UK and has won several awards (IMDb, *EastEnders*).

3. The Google Trends corpus and data extraction

This section briefly introduces the online corpus and data extraction tool called Google Trends (found at www.google.com/trends) and also outlines which features have been used in the present study and how the data output was extracted.

3.1 Google Trends and its functions

Google Trends is a free and publicly accessible corpus which consists of a random sample of all google searches from January 2004 until now (Google Trends even offers real-time data). The Google Trends webpage (www.google.com/trends/explore) offers a range of tools to explore popular search

[11] Montgomery's studies also feature a London variety, but it is unclear what the two labels refer to exactly. As the present study is focused strictly on the dialect labels themselves, the London label will not be considered here.

[12] https://uk.answers.yahoo.com/question/index?qid=20100115015545AAWFbcC&page=1

terms and topics, define your own search queries (delimiting topic or term, location and time) and see related searches (within your specified time period and location). The different functions are described on the page itself, but more information can also be found in the support pages (https://support.google.com) and in Rogers (2016). The dataset is anonymized, aggregated and categorised into group search topics. In this study, I will not consider the 'topic' or 'category' functions as the focus here is on the exact search terms *Geordie, Scouse* and *Cockney,* their popularity over time, their popularity across locations and, most importantly, the related search terms. The data available are also normalised and indexed out of 100. This has important implications for how the output of the searches is presented; first of all, the data is presented as a proportion of all Google searches on all topics (in your specified location and time period). This is useful as it allows you to easily compare search term search volumes over time without adjusting for overall or total search volume (as Google Trends has already done that for you). Secondly, the index from 0-100 means that it is easy to compare search volume across time and locations; a score of 100 indicates the maximum search interest and a score of 50, for instance, then describes a search volume which is half the size of the maximum search interest.

The online tool presents the results of your search queries in neat, interactive graphs (showing volume of searches over time) and maps (showing in which areas or locations the search query was the most popular). You are also able to download a .csv file with the normalised data (values 0-100 and distributed either on weeks or locations depending on your focus) as well as the lists of top related search queries (which are also allocated a value from 0-100). This allows researchers to carry out further statistical analyses and visualisations using a range of programmes. Finally, you are able to enter up to five search terms into Google Trends and the tool will then map all search terms onto the same graphs and maps (for 'interest over time' and 'interest by region'). This allows for very quick (although perhaps superficial) comparisons and you are able to download .csv files which contain the comparative data.

3.2 Data extraction

For this study, I extracted a range of output using the tools available for the three separate terms *Geordie, Scouse* and *Cockney* as well as a comparison search of all three terms. As mentioned above, I searched for these as 'search terms' and not 'topics' as I was interested in searches for these exact words (searching for 'topics' allows you to search across languages, i.e. a search for the topic 'English grammar' will also include searches for 'engelsk grammatik' (in Danish) and similar in other natural languages). The time period specified was from January 2004 (which is the earliest available data) until time of writing (late January 2017), i.e. a span of 13 years.

For each dialect name and the comparison, I then extracted output based on three locations: worldwide, UK and England. It should be said that most of the searches indeed came from the UK (this is clear from the worldwide search) and that UK searches are responsible for most of the patterning in the worldwide output. Within the UK, surprisingly, it was not always England which accounted for the majority of the searches. This was visible in the UK output. However, as all of the dialect names refer to English dialects (as opposed to Scottish, Welsh or Northern Irish), it would perhaps be interesting to see *where* in England people might be searching for these names; would it be people residing in the area which the dialect name covers or outside? The comparison search as such did not provide new results but it did create graphical output which made comparisons across the three search terms easier.

Each search also generated a list of related search queries which can be sorted according to two metrics; 'rising' and 'top'. Related search queries are simply queries which users who searched for the original term, for instance *Geordie,* also searched for. The 'rising' search queries are related search terms which show the largest increase in search frequency whereas the 'top' search queries are indeed

just the most popular (again indexed by a value of 0-100) related search terms. This study looks only at the 'top' related search queries as these show us which aspects of *Geordie*, *Scouse* and *Cockney*, respectively, the users are interested in.

4. Analysing Google Trends output

In this section, I will provide an overview of the output from Google Trends. As such, the online tools have already sorted and analysed the raw data for us, and thus the kinds of analyses carried out here can hardly be said to be quantitative, although they do rely on the numbers returned by Google Trends (as outlined above). I will treat each dialect term separately, starting with the worldwide results and 'zooming in' on first the UK and then England. I offer summarising and comparative remarks at the end of this section.

4.1 Geordie

When looking at the worldwide 'interest over time' (see Figure 1 below from Google Trends), we notice a sharp increase in search queries in 2011. Looking at the numbers from 2011 in more detail[13], we see the following development (Table 1 below).

Figure 1: Worldwide interest over time, Geordie

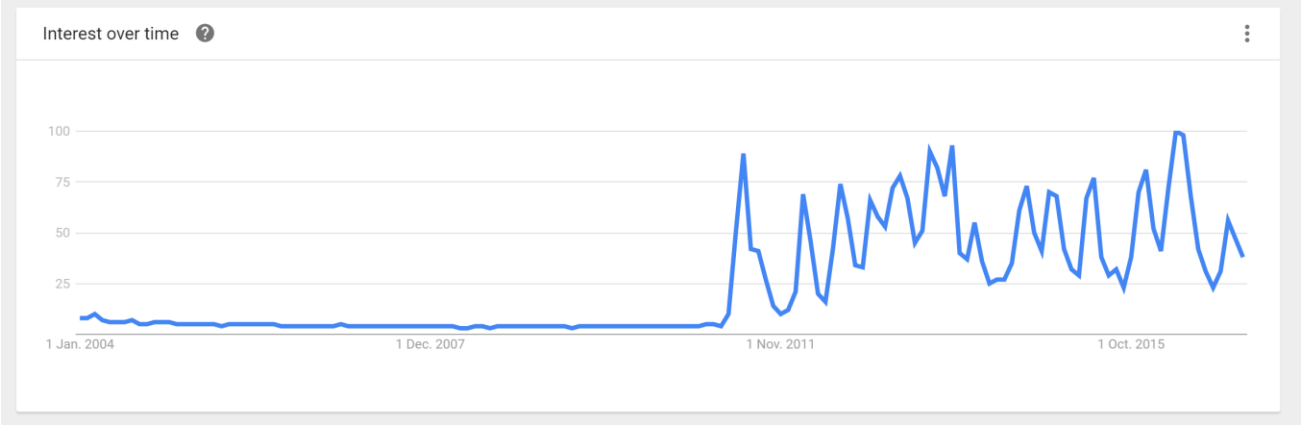


Table 1: Excerpt of index values for worldwide interest over time, Geordie

2011	**Jan**	**Feb**	**March**	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**
Index value	5	5	4	10	51	89	42	41	27	14	10	12

A likely explanation for the sudden spike would be the release of *Geordie Shore*, the TV reality series introduced above which first aired 24 May 2011 in the UK. At time of writing, the last episode to be aired was season 14, episode 10 which aired on 20 December 2016 (IMDb, *Geordie Shore*). Indeed, if we map the spikes in the Google Trends data with the release dates for the 14 seasons of *Geordie Shore*, we see a clear connection as shown in the table below. The search volume index values given in brackets indicate the value for the preceding and following months.

[13] This can be done either online by holding the cursor over the graph or by looking at the downloaded .csv file which lists the index values month by month.

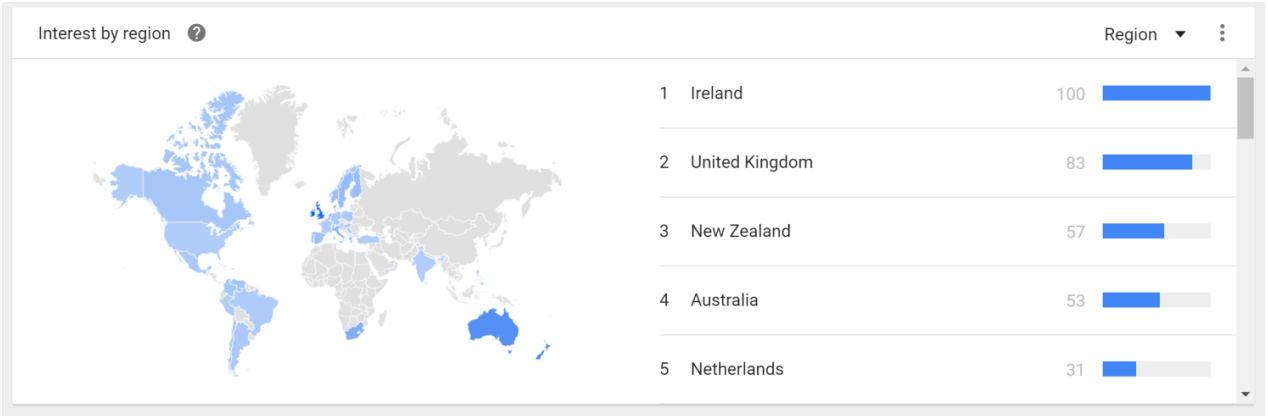
Table 2: *Geordie Shore* season dates and worldwide search volume

Timeline	Search volume index	GS season start date
May 2011	(10) 51 (89)	Season 1, 24 May 2011
June 2011	(51) 89 (42)	
Feb 2012	(21) 69 (46)	Season 2, 31 Jan 2012
June 2012	(16) 42 (74)	Season 3, 26 June 2012
July 2012	(42) 74 (57)	
Nov 2012	(33) 66 (58)	Season 4, 6 Nov 2012
Feb 2013	(53) 72 (78)	Season 5, 19 Feb 2013
March 2013	(72) 78 (67)	
July 2013	(51) 90 (82)	Season 6, 9 July 2013
Aug 2013	(90) 82 (68)	
Oct 2013	(68) 93 (40)	Season 7, 17 Sep 2013 *
July 2014	(35) 61 (73)	Season 8, 22 July 2014
Aug 2014	(61) 73 (50)	
Nov 2014	(41) 70 (68)	Season 9, 28 Oct 2014
April 2015	(29) 67 (77)	Season 10, 7 April 2015
May 2015	(67) 77 (38)	
Nov 2015	(38) 70 (81)	Season 11, 20 Oct 2015
Dec 2015	(70) 81 (52)	
March 2016	(41) 72 (100)	Season 12, 16 Mar 2016 (the season ended 3 May) Season 13, 10 May 2016
April 2016	(72) 100 (98)	
May 2016	(100) 98 (668)	
Nov 2016	(31) 56 (47)	Season 14, 25 Oct 2016

* Season 7 ended 22 Oct with a very popular character, Charlotte (Image 1, front row centre), leaving the house.

Figure 2 below indicates that Ireland is the region (Google's terminology) with the highest amount of search volume followed by the UK (notice the index values at the far right). Looking at the top 5 countries, we can notice that all but one (The Netherlands at number 5) are English-speaking countries. *Geordie Shore* has, however, also been aired on MTV Netherlands.

Figure 2: Worldwide interest by region, Geordie



It is worth bearing in mind here that the index values represent proportional values such that a higher value means a higher proportion of all queries in that location and NOT a higher absolute query count. This means that a smaller country (such as Northern Ireland) where, say, 10% of all search queries are for *Geordie* will get twice the index value of a very large country (such as England) where 5% of the search queries are for *Geordie* even though in absolute terms, the actual search volume is larger in the larger country. A factor which may influence this distribution is that the demographic most likely to watch and be interested in *Geordie Shore* is also the demographic which spends most time online and is likely to carry out the bulk of search queries on Google (across all topics).

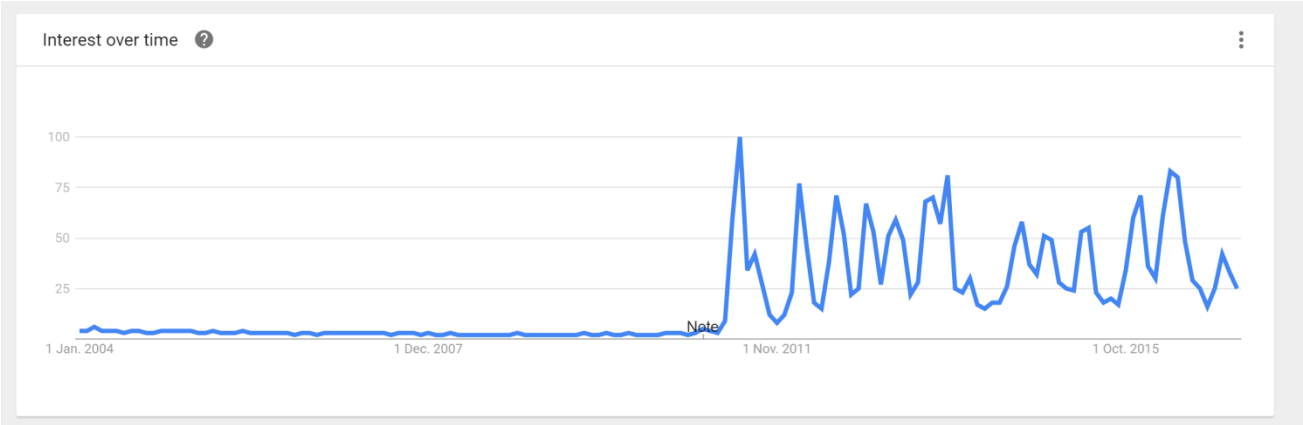
Finally, the top 5 related search queries worldwide confirm the interest in *Geordie Shore* as shown below in Table 3. 'Charlotte' is a cast member on *Geordie Shore*.

Table 3: Worldwide top related search queries, Geordie

Top related queries	**Index value**
geordie shore	100
geordie shore watch	10
geordie shore online	10
Charlotte	10
charlotte Geordie	5

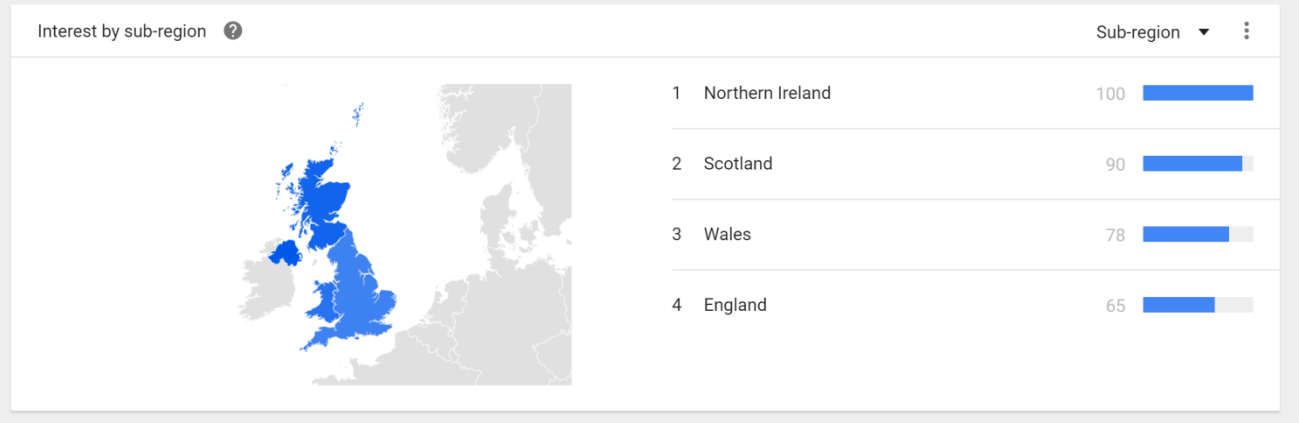
Looking only at UK results, we see a similar spike in searches around 2011 (see Figure 3). The 'note' which we see around January 2011 flags up the fact that Google improved their geographical assignment from 1 January 2011.

Figure 3: UK interest over time, Geordie



Within the UK, we see that the highest search volume for *Geordie* is from Northern Ireland with Scotland and Wales also surpassing England in search volume which is, perhaps, surprising (Figure 4).

Figure 4: UK interest by sub-region, Geordie



Again it is worth bearing in mind how the index values we see are calculated and the fact that they represent proportional values in relation to the overall search activity in each location.

Looking at the top 5 related searches, we see a similar picture to the worldwide results (below in Table 4).

Table 4: UK top related search queries, Geordie

Top related queries	**Index value**
geordie shore	100
geordie shore watch	15
geordie shore online	15
geordie shore watch online	10
charlotte	5

Finally, zooming in on the search queries within England only, we see that the same pattern forms with regard to 'interest over time' (in Figure 5). Looking at the volume of searches performed in different locations (cities) across England, perhaps not surprisingly, we find that the top 5 locations are all within the Northeast (Figure 6).

Figure 5: England interest over time, Geordie

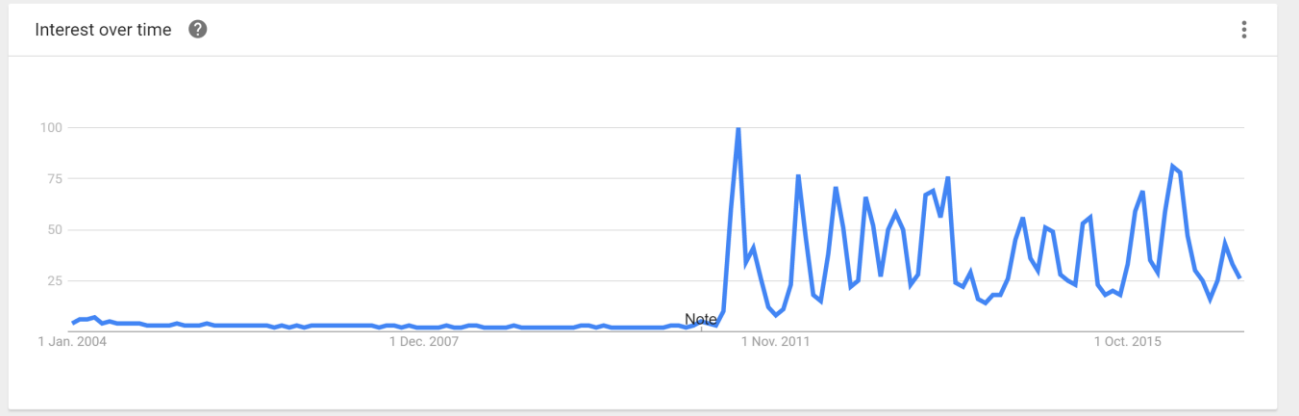
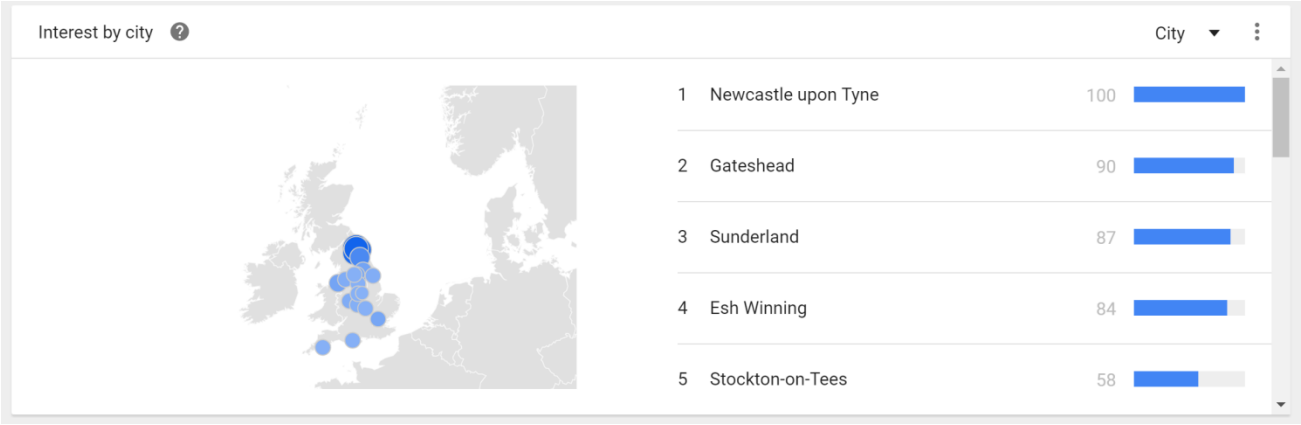


Figure 6: England interest by city, Geordie



Gateshead is located across from Newcastle on the southern bank of the river Tyne. Sunderland is approx. 20km south of Newcastle and within the metropolitan county of Tyne & Wear. Esh Winning and Stockton-on-Tees are both located within County Durham (the county just south of Tyne & Wear). The first non-Northeast location on the list is Liverpool at no. 6 with an index value of 35.

The top related search queries remain more or less unchanged as we can see below in Table 5.

Table 5: England top related search queries, Geordie

Top related queries	**Index value**
geordie shore	100
watch geordie shore	15
geordie shore online	15
watch geordie shore online	10
charlotte geordie shore	5

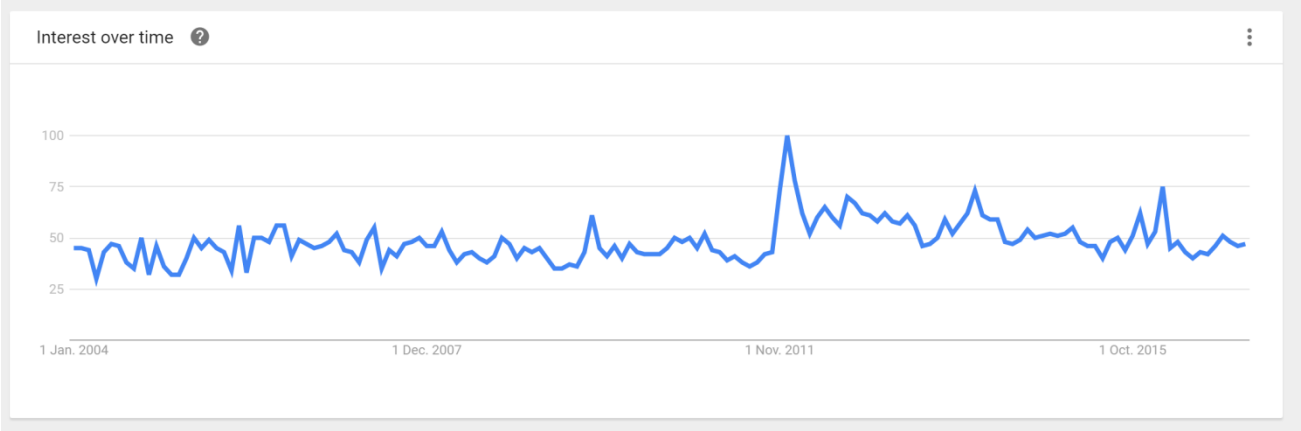
These results suggest that interest in Geordie (as expressed via Google searches) is linked to *Geordie Shore*. These results also provide a good example of how Google Trends as a search engine can be used for exploratory research. Future studies could be advanced further by combining these initial probes with other types of data such as interviews.

With regard to what the dialect label itself correlates with (as expressed in the search activities of Google users), we see that it is not strictly the Geordie language variety but rather a whole host of socio-cultural values connected with the TV program, such as partying, drinking, having sex, and a care-free lifestyle. However, the Geordie dialect (and other, northeast regional varieties) does of course feature in the TV show and the housemates even make up their own words (e.g. *tash on*, a phrasal verb which means to kiss someone).

4.2. Scouse

The worldwide searches for *Scouse* show a steadier distribution over time, although there is a spike in 2011 again.

Figure 7: Worldwide interest over time, Scouse



If we examine the index values around December 2011, we see the following:

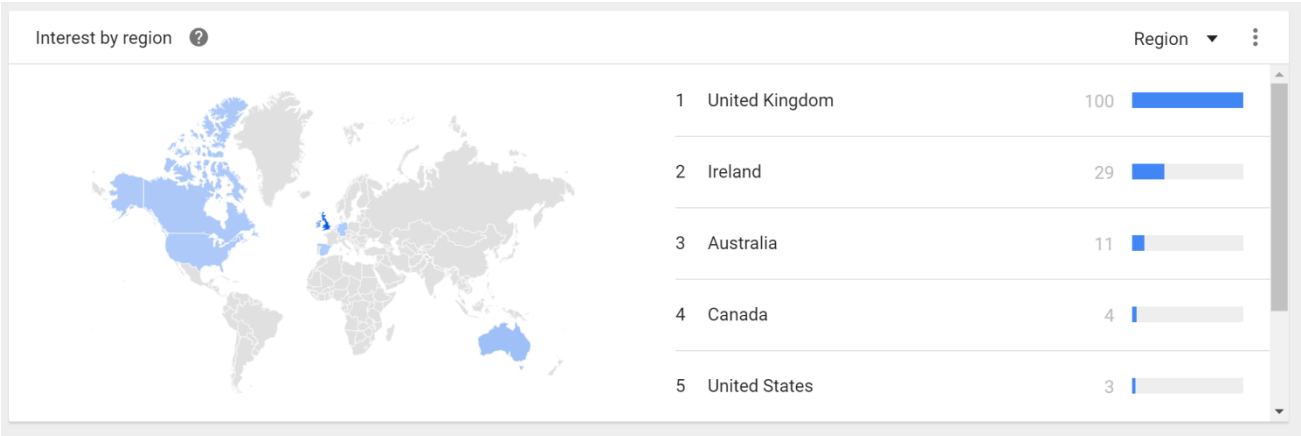
Table 6: Excerpt of index values for worldwide interest over time, Scouse

2011	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**2012**	**Jan**	**Feb**	**March**	**April**	**May**
Index value	36	38	42	43	73	100		78	62	52	60	65

Again, if we look to popular culture we can find a possible explanation for this increase: the scripted reality TV show *Desperate Scousewives* which aired in the UK (on E4) for the first time 28 November 2011. This program only ran for one season with 8 episodes (the final episode aired January 2012).

If we look at how the search queries are distributed across regions worldwide, we see the following (Figure 8):

Figure 8: Worldwide interest by region, Scouse



As we can see from the top 5 regions on the right hand side, the UK is well ahead of the others on the list. These findings show that interest via Google searches in the term *Scouse* is indeed largest in the UK and, to an extent, Ireland. The table below shows the top five related search queries worldwide and this specifies in which connection users search for Scouse.

Table 7: Worldwide top related search queries, Scouse

Top related queries	**Index value**
liverpool scouse	100
scouse brow	95
Liverpool	95
scouse accent	70
scouse recipe	45

As we can see from the index values, the top three related search queries are all quite popular. These three link Scouse, firstly, to Liverpool and, secondly, to the term 'Scouse brows' – a name used to denote a certain way of styling one's eyebrows using makeup (see image below). In fact, the 'Scouse brow' originated on *Desperate Scousewives* (Cochrane 2016, Telegraph 2012) and also became a go-to style for Liverpool-based celebrities such as Coleen Rooney. In a poll reported in the Mail Online (Winter 2014), this particular style of brows were, however, voted the "worst beauty crime" and indeed Kirwin (2016) reports, in the *Liverpool Echo*, on how to get the "Un-Scouse brow".

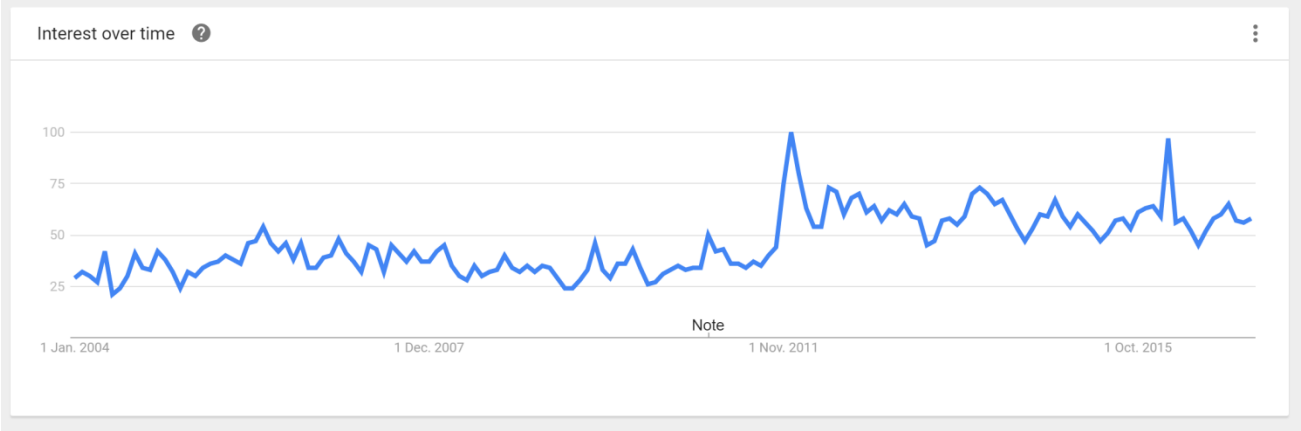
Image 2: The Scouse brow

(Image from *Desperate Scousewives*, *E4*)

We do also see a specification of Scouse as an accent in the fourth place on the list but, as such, Scouse seems to be first and foremost linked to Liverpool, i.e. representing a strong local index without specifying a linguistic variety. 'Scouse recipe' refers to the recipe for the traditional stew, *lobscouse*.

If we narrow our search and look only at the UK, the interest over time is quite similar to the worldwide interest, although we do have a second spike occurring in February 2016 with an index value of 97.

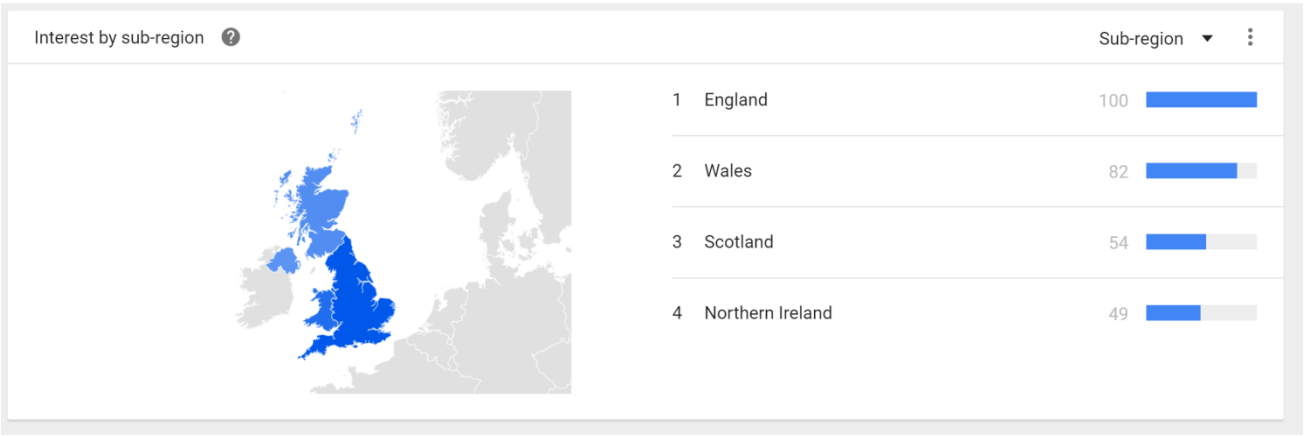
Figure 9: UK interest over time, Scouse



The second spike is very sudden and short (January 2016 has a value of 59, March 2016 has a value of 56). If 'zooming in' on the dates, Google Trends reveals that the spike actually occurred on 12 Feb. It is unclear, however, what may have caused this particular spike. The top related search terms for February 2016 are 'Scouse brow' (with a value of 100) and 'scouse recipe' (with a value of 10) (the third on the list is 'what is a scouse brow' also with a score of 10).

When we look at just the UK, we see that the largest interest in Scouse is found in England.

Figure 10: UK interest by sub-region, Scouse



Considering the geographical location of Liverpool, it would perhaps make sense that the largest interest is found in England and closely followed by Wales as Liverpool is located only around 20km from the Welsh border.

The top 5 related searches in the UK were quite similar to those seen in Table 7 above.

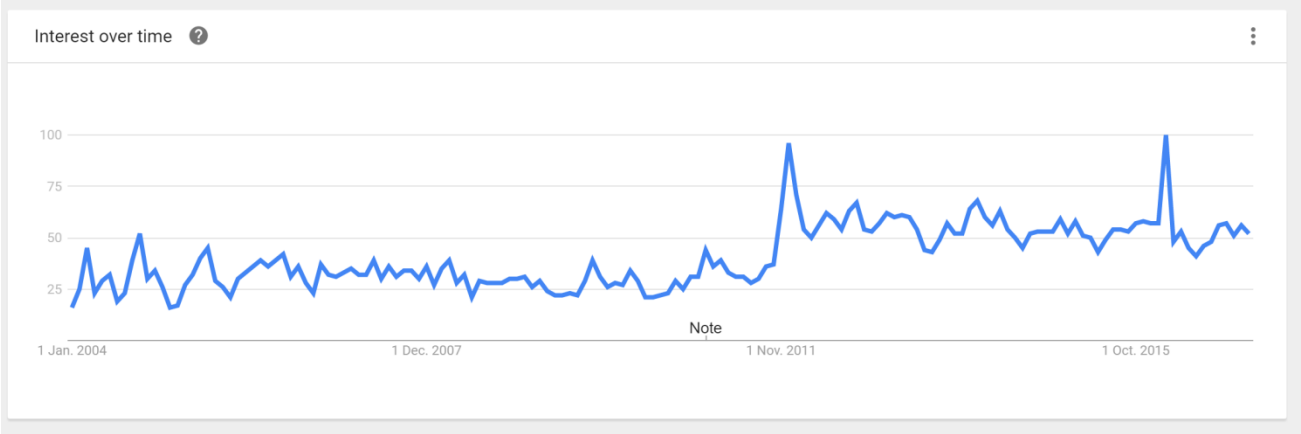
Table 8: UK top related search queries, Scouse

Top related queries	**Index value**
liverpool	100
liverpool scouse	95
scouse brow	85
scouse accent	45
scouse house	40

Again we see an interest in the city of Liverpool and the 'Scouse brow'. 'Scouse house' refers to a type of house music.

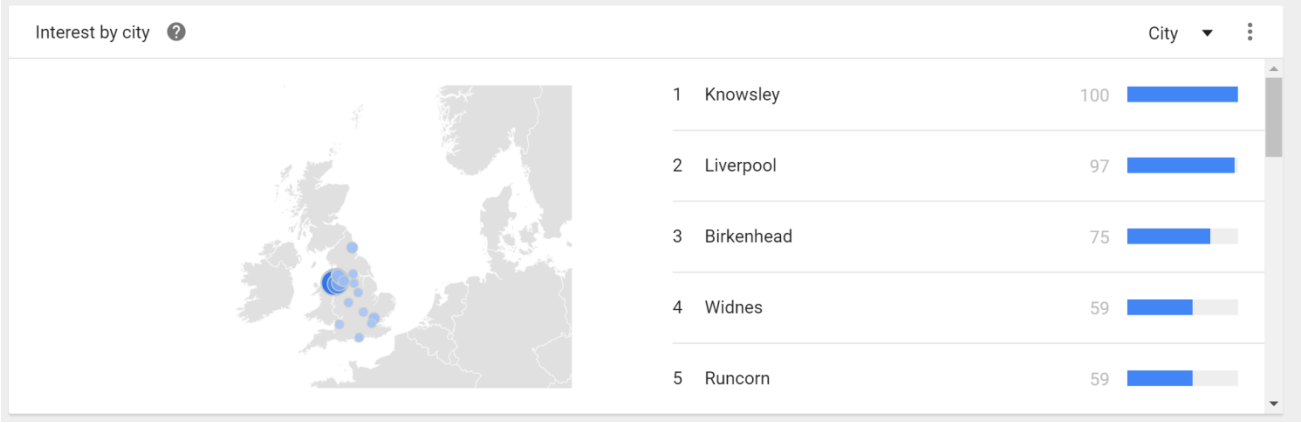
The English only interest over time reveals a similar pattern, again, although here we can clearly see the two spikes in December 2011 and February 2016. Looking in detail at the related searches etc. only for February 2016, similar results to those reported above for the UK are revealed.

Figure 11: England interest over time, Scouse



If we look at the interest as distributed on cities in England, we see the following:

Figure 12: England interest by city, Scouse



Knowsley is a borough on Merseyside, the village of Knowsley is located approximately 15km from Liverpool. Birkenhead is situated across the river Mersey, only approximately 5km from Liverpool. Widnes is located in the county of Cheshire, approximately 20km east of Liverpool with Runcorn situated on the opposite bank of the river Mersey. Thus we can see that all of the top 5 locations are very close to Liverpool.

The top 5 related search queries in England are shown in the table below and here we again find that the highest index values are achieved by search terms relating to the city of Liverpool and the 'Scouse brow'.

Table 9: England top related search queries, Scouse

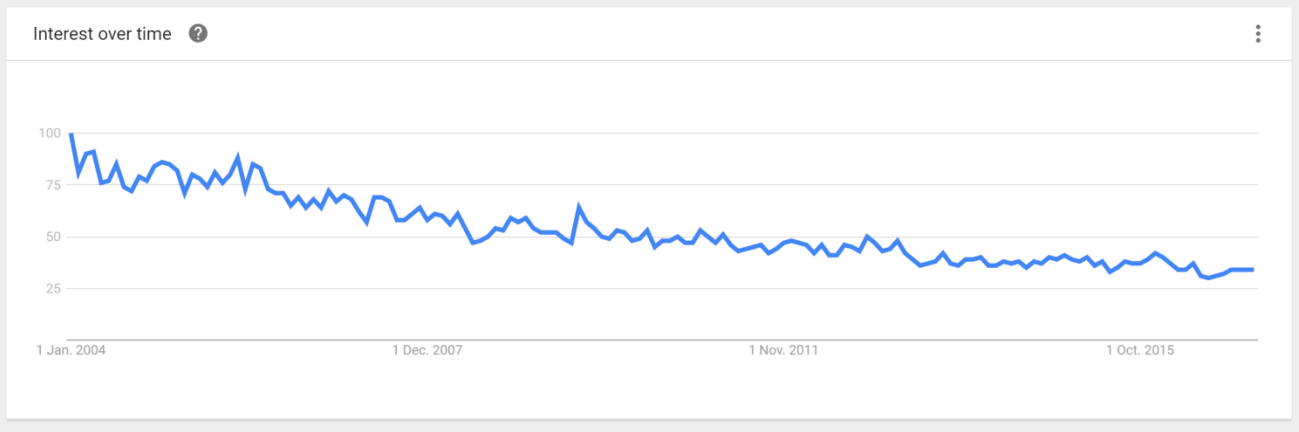
Top related queries	**Index value**
liverpool	100
scouse brow	95
scouse accent	45
scouse house	45
Accent	45

To sum up on the findings for the dialect label *Scouse*, we saw that the media and popular culture again were large influences on the search queries which Google users have entered. As opposed to the findings for Geordie, which were completely dictated by *Geordie Shore*, we did also see an interest in Liverpool as a place or town.

4.3. Cockney

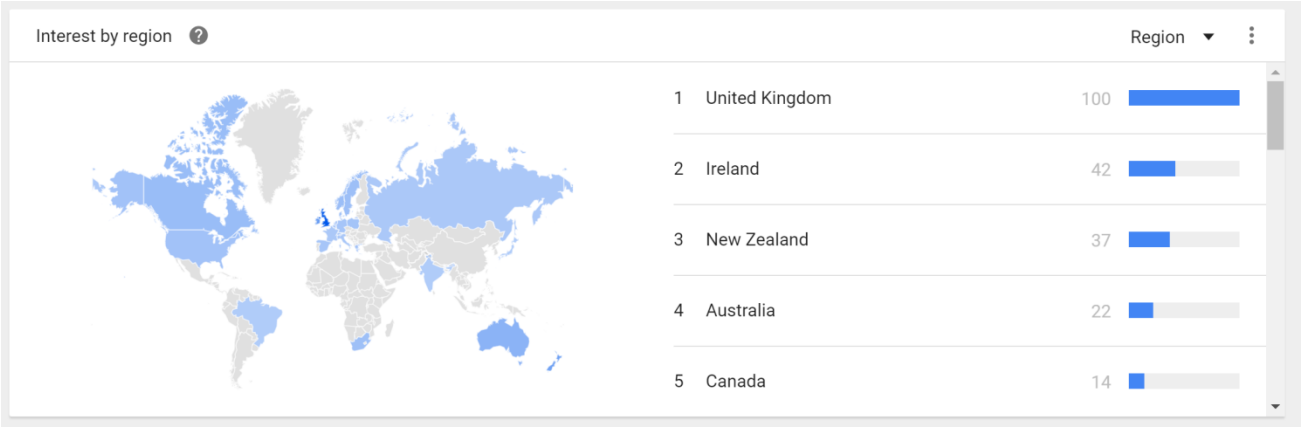
Looking at Cockney, we can see that the worldwide interest over time (Figure 13) shows a decline; the highest index value of 100 is found in January 2004. Also, we have no large spikes like we saw for both Geordie and Scouse.

Figure 13: Worldwide interest over time, Cockney



Looking at the worldwide interest by region, the following distribution occurs:

Figure 14: Worldwide interest by region, Cockney



We see that the highest search volume came from the United Kingdom (100) followed by Ireland with an index value of only 42.

The top 5 related searches worldwide are shown in the table below.

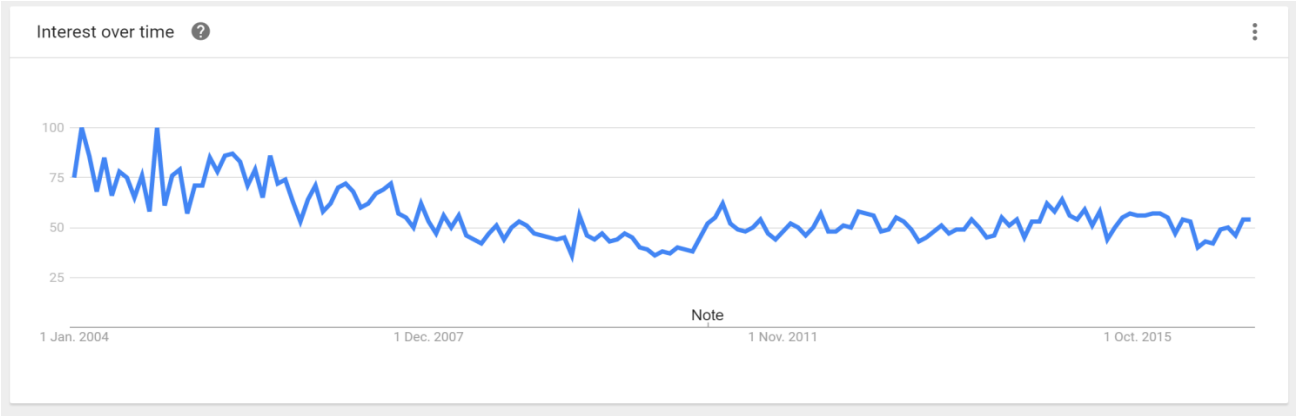
Table 10: Worldwide top related search queries

Top related queries	**Index value**
cockney slang	100
Slang	100
cockney rhyming	65
rhyming slang	65
the cockney	20

When looking at the top 5 related searches worldwide for Cockney, we immediately see that they are different from those of Geordie and Scouse in the sense that they are exclusively occupied with language.

Zooming in on only the UK, we see that the interest over time looks similar to the worldwide pattern in that it is generally also decreasing, although we can also notice two spikes on the left-hand side of the graph. The two spikes occur in February and December 2004 (both have an index value of 100).

Figure 15: UK interest over time, Cockney



Both of these spikes are quite small and short as we can see from the table below.

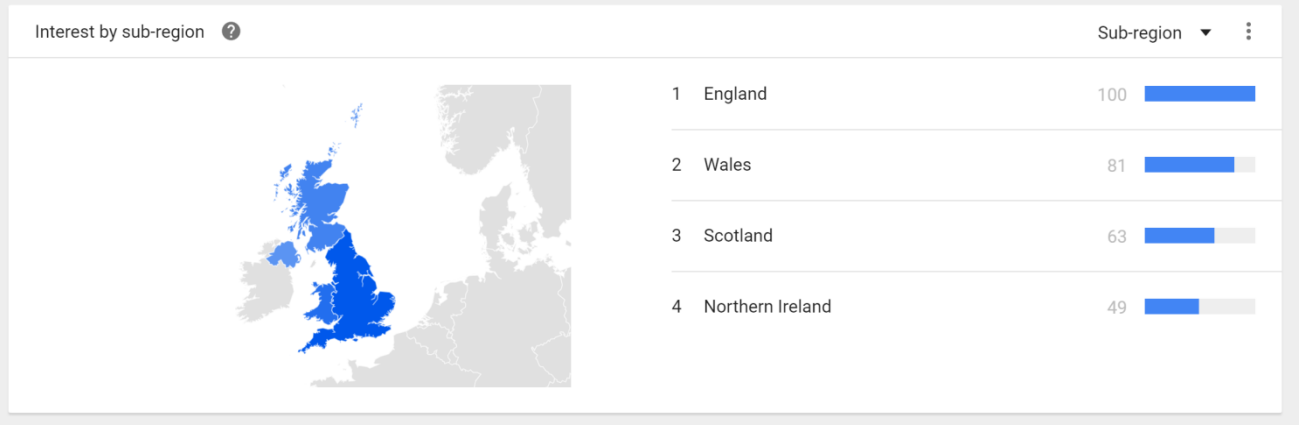
Table 11: Excerpt of index values for UK interest over time, Cockney

2004	**Jan**	**Feb**	**March**		**Nov**	**Dec**	**2005**	**Jan**
Index value	75	100	86		58	100		61

It is unclear what may have caused these spikes. The top related search term for February 2004 is 'Cockney rhyming slang' with an index value of 100 (Google Trends lists just the one). The region with the most activity is Wales with a value of 100 (followed by Scotland with a value of 57) and the bulk of the searches were performed on 29 February which has a value of 100. The December spike shows very similar patterning with regard to sub-region and related queries although here, the searches seem to be more evenly distributed with highs on 10 December (100), 21 December (96) and 28 December (88).

Looking at the four 'sub-regions' in the UK, we see that the highest proportional search interest is from England if we look across the full time range.

Figure 16: UK interest by sub-regions, Cockney



The top 5 related search queries within the UK are very similar indeed to those given above in Table 9 for the worldwide results. The main difference is really that all five related queries have index values of 65 and above.

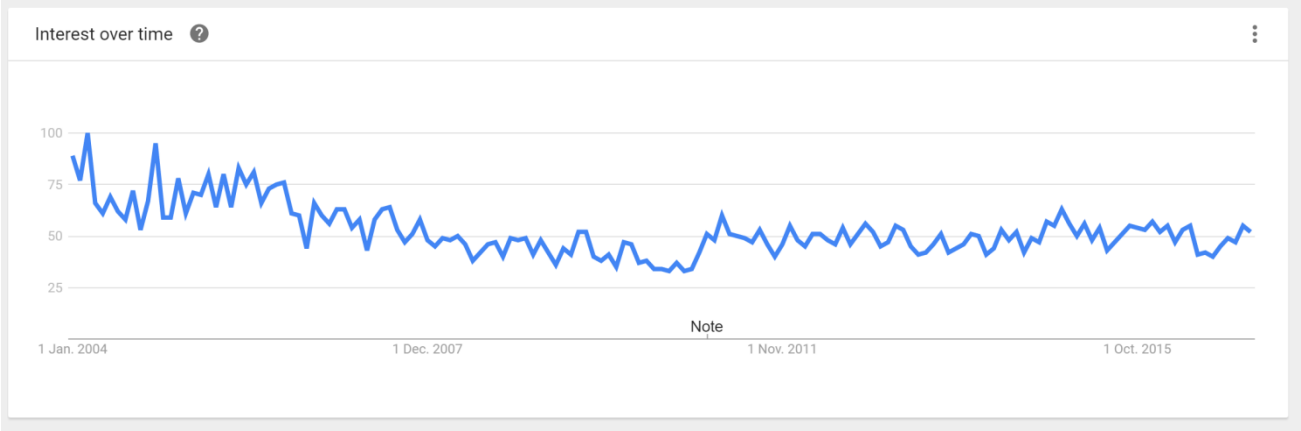
Table 12: UK top related search queries, Cockney

Top related queries	**Index value**
Slang	100
cockney slang	100
cockney rhyming	70
cockney rhyming slang	65
rhyming slang	65

If we look at the Google searches carried out in England only, we see that the interest over time is similar to the UK-wide interest and we also see the two peaks although these occur in March 2004

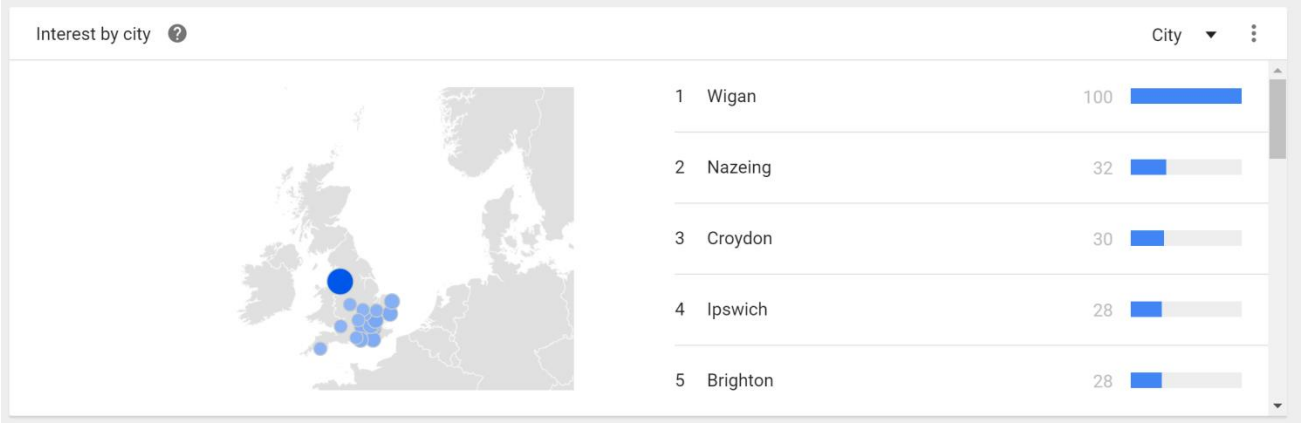
(index value = 100) and December 2004 (95) in the English-only data. Zooming in on these two time periods reveals similar patterns and search terms as the above and thus we get no clues as to what may have caused these spikes.

Figure 17: England interest over time, Cockney



When we look at the search volume distribution across England, we see the following:

Figure 18: England interest by city, Cockney



Wigan, which is a town in the Greater Manchester area, surprisingly has an index value of 100 with the rest of the top 5 cities lagging behind with values of 28-32. The other four locations mentioned here are all in the south of England within a 100km radius of central London (Nazeing in Essex is 30km north of London; Croydon is a town in South London which is approximately 25km from central London; Ipswich in Suffolk is approximately 100km Northeast of London; and Brighton in the county of East Sussex on the south coast is approximately 75km south of London).

The top 5 related search queries in England are shown in Table 13 below.

Table 13: England top related search queries, Cockney

Top related queries	**Index value**
cockney slang	100
Slang	100
cockney rhyming	65
cockney rhyming slang	65
rhyming slang	65

As we can see, very little has changed here, both in regard to the actual search queries but also with regard to the index values.

As we can see from the above search patterns for Cockney, across all three geographical locations (worldwide, UK and England) we find an interest only in Cockney as a language variety and a clear link to Cockney rhyming slang. We see no overt link with location or place (although this is implicit as Cockney of course indexes the London East End) and no clear link with any popular culture references.

4.4 Comparison

In this section, I will only comment on the comparison of 'interest over time' and 'interest by region' as based on worldwide, UK and England data. The reason for this is that Google Trends does not (and cannot) compare the related searches and thus the only 'new' output is found in these two categories. As is clear from the graph below, the search index values for Geordie remain the same and the values for *Scouse* and *Cockney*, respectively, are calculated in relation to this. What we can see here in Figure 20 below is that the search volume for *Geordie* is so high that the searches for *Scouse* and *Cockney* pale into insignificance – the differences in search volume for these two are evened out when calculated against the search volume for *Geordie*. We can see that the *Scouse* spike in December 2011 which was linked to *Desperate Scousewives* above has all but disappeared.

Figure 19: Comparison colour key:

Figure 20: Worldwide 'interest over time' comparison

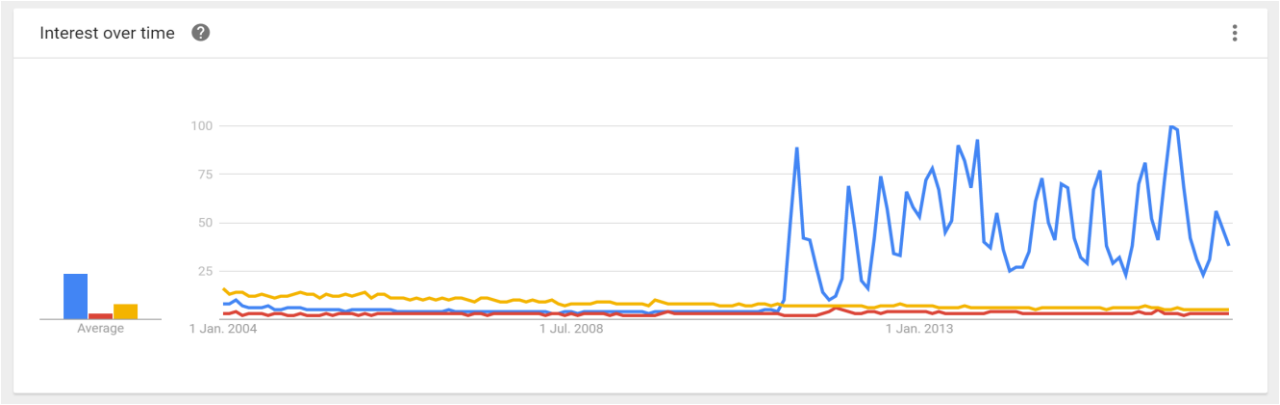
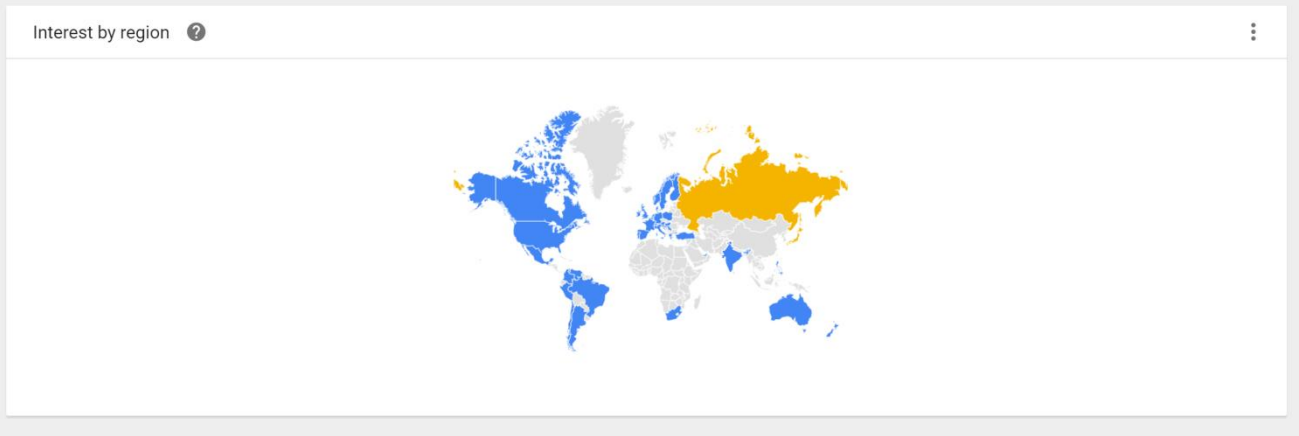


Figure 21: Worldwide 'interest by region' comparison



As we can see in the map above, Russia is yellow here, which indicates that Cockney was the most popular search term (as opposed to Geordie). The search index values confirm this as Cockney receives a value of 1 whereas Scouse and Geordie both score 0.

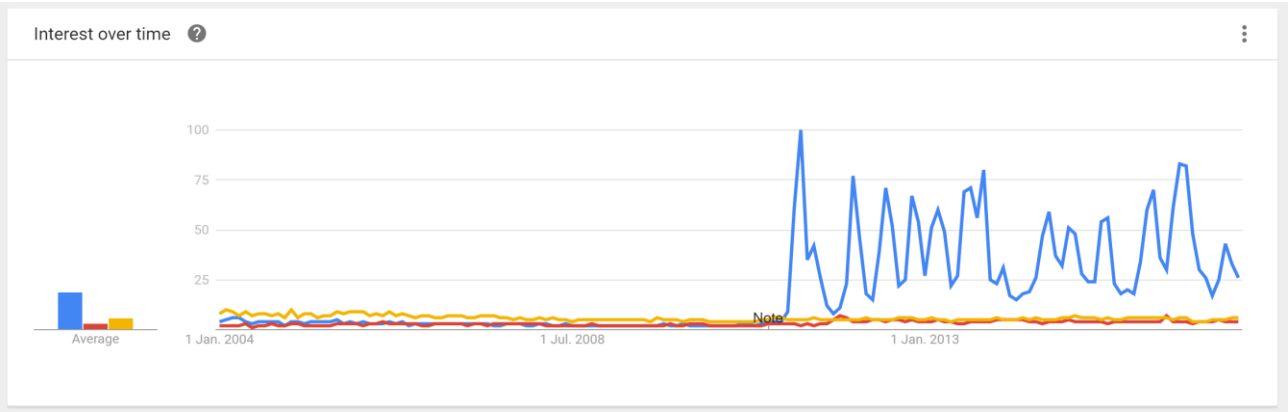
Table 14: Worldwide comparison of search index values

Country	**Geordie index value**	**Scouse index value**	**Cockney index value**
Ireland	100	3	6
United Kingdom	83	10	14
New Zealand	57	0	5
Australia	53	1	3
Netherlands	31	0	1

In the table above, the index values are calculated as proportional to the highest Geordie search index (we can see that the index values for Geordie are the same as given in Figure 2). This also shows us that Geordie is a much more popular thing to search for than Scouse or Cockney.

If we turn our attention to a comparison of the search volumes in the UK only, a similar pattern emerges.

Figure 22: UK 'interest over time', comparison



The figure below shows the search volume as dispersed across the four sub-regions of the UK. As we can see, Geordie is the most popular.

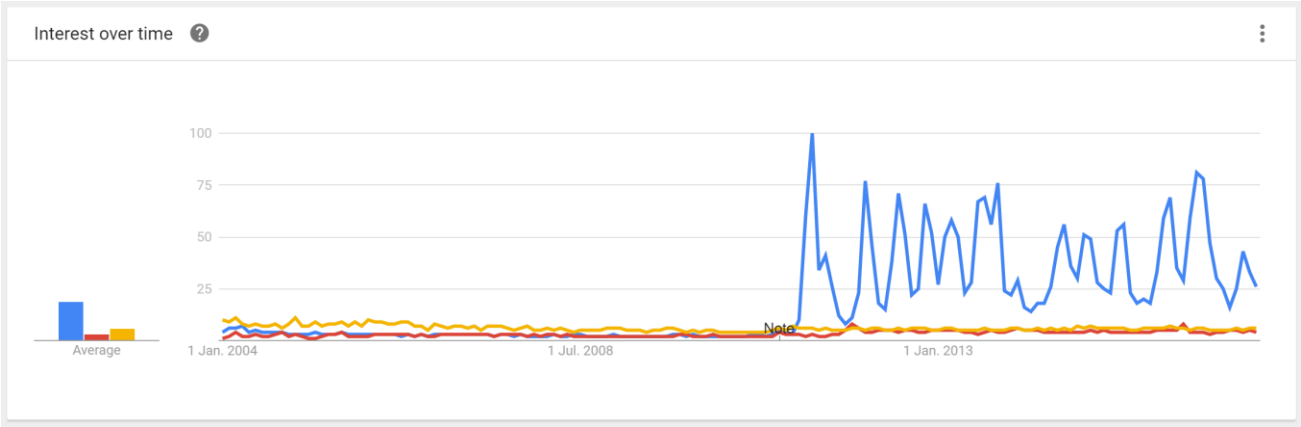
Figure 23: UK 'interest by sub-region', comparison

Table 15: UK comparison of search index values

Country	Geordie index value	Scouse index value	Cockney index value
Northern Ireland	100	4	6
Scotland	90	5	7
Wales	78	7	10
England	65	9	12

Again, the table above shows the index values as proportions of the Geordie score. What we see here, then, in addition to the distribution on the 4 sub-regions, is also that the proportional search volume for Geordie is a lot higher than for the other two (we also saw this on the 'interest over time'). If we look only at England, we see a similar scenario:

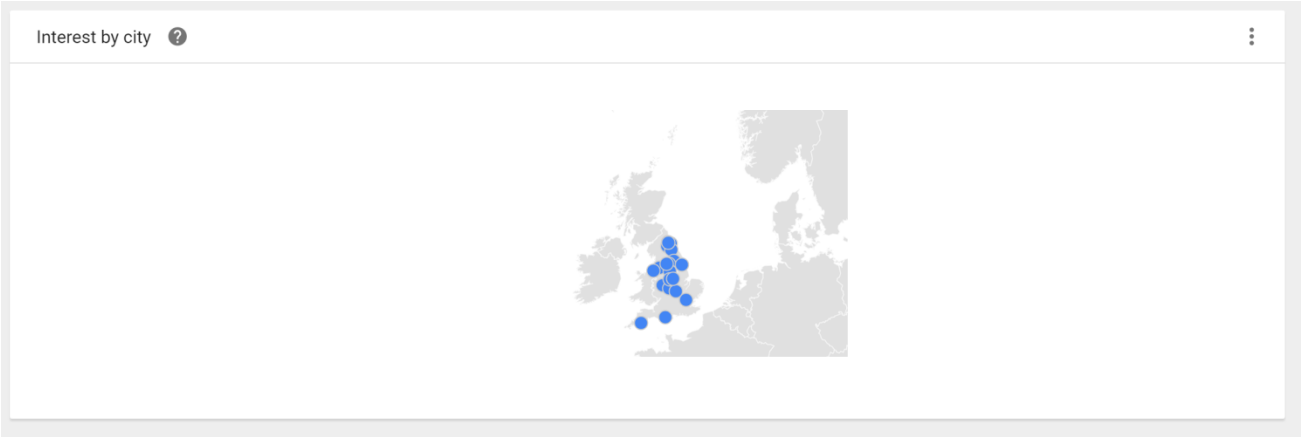
Figure 24: England 'interest over time', comparison



If we break down the search volume on cities, we see how the Google Trends data and the way it is

calculated falls short.

Figure 25: England ‘interest by city’, comparison



This becomes even clearer in the table below where the search index values are listed.

Table 16: Search index values comparison across cities

City	**Geordie**	**Scouse**	**Cockney**
Newcastle upon Tyne	100	3	4
Gateshead	90	5	4
Sunderland	87	3	5
Esh Winning	84	3	3
Stockton-on-Tees	58	3	4

As we can see from the table, the search index values are matched against that of Geordie which means that Google Trends lists the locations where Geordie was most popular (the same which were also featured in Figure 6) and gives the proportional values for Scouse and Cockney. The only thing which this underlines is indeed that Geordie was the most popular search term in these exact locations in the specified time period.

5. Discussion and conclusion

This study set out to investigate two different things: first of all it sat out to explore the usefulness of Google Trends to perceptual dialectology studies, secondly, it investigated the social realities of dialect labels as reflected in Google searches.

We saw in the theory section that Johnstone (2013) argues that dialects and dialect areas are indeed socially constructed through discourse. Montgomery (2016) elaborates and adds that cultural prominence (created through media exposure), as opposed to geographical proximity, not only influences recognition rates but also helps to establish a variety as existing (and being linked with a particular place) in the first place. The output from Google Trends shows us that all three dialect labels are prominent but that *Geordie* by far is the most searched for, albeit only through the link with *Geordie Shore*. And while the Geordie dialect is an established and well-known variety in the UK (Beal 2009, Montgomery 2012), its cultural prominence must have been raised by the exposure

through *Geordie Shore*, a show set in Newcastle[14] featuring cast members from the wider Tyneside area[15] who are speakers of a language variety most viewers would probably class as Geordie. But it is not only the language variety on its own which might have been made more prominent by the show; also Newcastle as a city, the party lifestyle which the cast members engage in, and their preoccupation which appearance are all part of what is culturally linked to the label *Geordie.* This is what I referred to in section 2.1 as "expanding the index".

The output from Google Trends showed us clear differences between the search volume and also related search terms for the three varieties. If we view Google searches as expressions of interest or, perhaps, curiosity, we can interpret the output from Google Trends as a way of finding out what Google users are curious about and interested in at different points in time, across different locations. The Google Trends maps, which we saw above, then show us *where* people have an interest in Geordie, Scouse and Cockney and the related searches show us more specifically *what* users are interested in when searching for these particular labels.

Users who googled *Geordie* were exclusively interested in *Geordie Shore*, whereas users who googled *Scouse* were interested in Liverpool and eyebrows, and users who googled *Cockney* were interested in the particular language variety. Thus, it is only for the search term *Cockney* where we see the primary field of interest being language. For *Scouse,* the main interest is place and, second, fashion and lifestyle. For *Geordie*, the primary interest is exclusively *Geordie Shore* and its cast members even when looking across the entire data range, from 2004 onwards. So, for *Geordie*, *Geordie Shore* has indeed put the language label on the map. *Scouse* searches were also influenced by popular culture as we saw in the spike which occurred around the release of *Desperate Scousewives.* Cockney, though, remains fairly stable across the time period and shows only links with language.

The data available through Google Trends is of a secondary nature and this makes it difficult to base any firm conclusions on it (in terms of causation) without additional and supplementary data such as interviews or questionnaires, for instance. Thus, we can only establish possible correlations between search terms (here dialect labels) and the returned output (here denotations). With this in mind, however, we can perhaps suggest that the label *Geordie,* on a perceptual level, correlates with what can be associated with *Geordie Shore*: language variety, place (Newcastle upon Tyne), behaviour (drinking, having sex), personal grooming and fashion (fake tan, fake lashes, short skirts, high heels, muscular build). *Scouse*, then, correlates with what can be associated with Liverpool, including the language variety but also a certain personal grooming trend for females. *Cockney*, finally, seems to have no other correlations than strictly language and, more specifically, rhyming slang. The very high interest in *Geordie,* which we saw was actually an interest in *Geordie Shore,* is thus also an expression of a prominent cultural presence – a presence which trumps that of *Scouse* and *Cockney*.

With regard to the usefulness of the Google Trends online corpus and search index to linguistic study, we saw that while it offers a range of possibilities and levels of detail, the presentation of data in index values (and not raw frequencies) is both a blessing (it makes for very easy comparisons) and a curse (it obscures details). Most importantly, it takes away a lot of control from the researcher and some of the empirical considerations and decisions we, as linguists, might make are no longer possible. As such, the intuitive interface and polished output definitely have appeal but they also mean that researches cannot get their hands properly into the data. It is not possible to "see behind the screen" so, as such, it is not easy to even assess what we are missing out on. This is also the main reason for why I suggest using Google Trends in the exploratory phase of any linguistic study (perceptual or otherwise). For instance, for a study in to the dialect labels covered here, the next step could be a perceptual dialectology map project in which participants provide descriptors to

[14] Most of the seasons are set in Newcastle although the cast members have also travelled to Spain and Australia.
[15] Holly Hagan (Image 1, front row, far right), a cast member 2011-2016, is originally from Teesside.

correspond with labels.

As such, the Google Trends provides a quick and easy insight into some perceptual aspects of dialect study, but it soon becomes evident that the tool is simply not fine-grained enough to be able to stand alone. This could, perhaps, be remedied by access to non-aggregated data. Furthermore, the output from Google Trends is also anonymised, meaning that we have very little information about the people who are searching for specific terms. As we saw above, we can see their location and the time period for their search, but we have no other demographic data available. It is not certain how much other data Google actually stores, but sharing this type of information obviously also has ethical consequences, so it is unlikely that this information would be made publicly available.

Google Trends does offer another tool, which has not been explored in this study[16]: Google Correlate (www.google.com/trends/correlate). This tool aims to find searches and search patterns which correlate with real-world trends. It is possible to look at patterns either across US states or across time series (either weekly or monthly). Google Correlate is still in an experimental phase and can, obviously, only detect correlations, not causations. If one is interested in looking at patterns across US states and matching search term queries with real-world events (which was also attempted here) this may be a useful tool in future when further developed.

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[16] An initial probe was conducted but no correlations returned due to the low search volume for some of the dialect labels.

viewing-figures-in-three-years-21912/]
IMDb, *Desperate Scousewives* [http://www.imdb.com/title/tt2123470/]
IMDb, *EastEnders* [http://www.imdb.com/title/tt0088512/]
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The Twitter Age: Communication across genders in the Arabian Gulf

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Abstract: During the last decade, different platforms of social media have become the most crucial vehicles for communication, especially among teenagers. The rapid changes and enhancements in technology have gone hand in hand with a major shift in young people's language and communication. Studies conducted in this field have highlighted gender differences in terms of each gender's participation in social media, whether in quality or quantity. They have also proved that women's participation still mirrors what is happening in their daily social lives; and regardless of the culture in which the communication is taking place, social media is yet another male-dominated arena. This paper will highlight the differences between genders in their computer-mediated communication (social media) in the Arabian Gulf. It will focus on the discourse management skills and politeness strategies used by both genders. The paper will use critical discourse analysis as the method of analysis, since the negotiation between genders can also be seen as a negotiation of power. It will analyze Arabic data taken from Twitter, one of the most commonly used social media platforms, with the aim of locating the language used by the Arabian Gulf youth and seeing whether it fits the international paradigm or has its own distinct characteristics. The main hypothesis is that women's language in the Gulf actually mirrors the unique status of women there, in such a way that power features, the so-called men's language features, are more commonly used by women than men.

Key words: Social media, discourse analysis, gender, critical discourse analysis.

1. Introduction

The study of language and gender is marked by Lakoff's article, "Language and Woman's Place" (1975) and the theory of dominance in which she argued "that women have a different way of speaking from men- that is a way of speaking that both reflects and gives rise to a subordinate position in society" (Perovic 2012:42-43). This theory made researchers look for characteristics that commonly differentiate men's speech from women's in different settings (e.g. workplace, court, classroom…). This led them to agree that in most of these settings, men's talk seemed more competitive and argumentative, voiced stronger views, and was usually longer than their female counterparts'; further, men "… are most comfortable with referential or information-oriented talk" (Holmes 1992:132). In contrast, the primary function of women's contributions is 'interpersonal and social,' or facilitative; and women also generally contribute less in formal and public discussions (Holmes 1992: 131-133).

The creation of Facebook in 2004, followed by Twitter and many other forms of social media, marked an expansion of the so-called public sphere. Twitter "experienced explosive growth between 2007 and 2009 and [has] grown exponentially since then" (Junco & Chickering 2010: 13). The difference between Twitter and other social media platforms is the number of features that allow its users to form various communities revolving around a 'tweet' rather than a person or a network (Brock, 2012: 530). Indeed, the use of "@" "enabled direct conversations by reinforcing addressivity" (Brock 2012: 531) and made users "more likely to provide information for others, and more likely to exhort others to do something" (Honeycutt & Herring 2009 in Brock 2012: 530). In addition, Twitter has the ability to capture current events through trending topics and the use of the hashtag, which was intended to create 'topical coherence' (Brock 2012: 538).

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In this paper, the goal is to investigate Arabic language use on Twitter and its reflections of gender in the Arabian Gulf area, particularly communication across genders in Twitter and their use of discourse markers especially while debating socially sensitive issues. The paper will also shed light on computer-mediated discourse in the area, in order to investigate whether there are any special communication characteristics that might be more associated with Twitter users in the Gulf in comparison to the rest of the world. The main hypothesis is that women's language in the Gulf actually mirrors the unique status of women there in such a way that power features, or the so-called men's language features, are more commonly used by women than men.

The main questions that this research attempts to answer are:

1) What are the characteristics of men's and women's language use in the Gulf?

2) Are the language features referred to in international research applicable to communication across genders in the Arabian Gulf countries? Also, are there any features that are specifically used by Arabian Gulf tweeters?

3) How is the negotiation of power in language use manifested in the region's computer-mediated discourse (CMD)?

2. Literature review

2.1 CMD as a public sphere

Computer-mediated communication is defined as the "communication that takes place between human beings via the instrumentality of computers" (Herring 1996 in Murray 2000: 398-399). Meanwhile, computer-mediated discourse is defined as text-based communication which is "produced when human beings interact with one another by transmitting messages via networked computers" (Herring 2004: 216).

Both computer-mediated communication and more specifically the use of social media have changed the norms of communication internationally, creating an increasing interest in this field of study. This is true for a number of reasons. The first reason was stated clearly by Herring; according to her, "computer-mediated text is not only observable, it is persistent and self-preserving, an ideal medium in which to mine language for the insights it can provide into social structures and mental states" (Herring 2004: 216). Van Deursen et al. confirm that "…what people do online increasingly reflects traditional media in society and known economic, social, and cultural relationships that exist offline, including inequalities" (Van Deursen et al., 2015: 259). Research has proved that online activities might also reflect socio-demographic variables and individual differences such as gender, age, and education (Van Deursen et al. 2015: 261).

Another reason for this increased study of CMD is the fact that it raised many debates about the issue of 'anonymity' or 'pseudonymity'. Researchers believe that CMD grants its users a certain degree of anonymity, since it does not provide any "audio-visual cues to a person's identity" (Talbot 2007: 117). This anonymity includes anonymity in gender, age, ethnicity, and social class (Herring 2004: 216). Consequently, CMD allows speakers to communicate more freely and share opinions they may not feel comfortable sharing in face-to-face communication. Furthermore, it lets researchers predict that this invisibility would "…encourage anti-normative, aggressive, uninhibited behavior termed 'flaming' through a corresponding reduction in self-focus" (Joinson 2001: 177).

The virtual anonymity granted through computer-mediated communication has given rise to a number of phenomena – which will be discussed later in more detail - through which communicators

exercised, or not, their power. Among these phenomena is the rise of online aggression. According to McClintock, "the opportunity for anonymity online can encourage people to believe that there are fewer consequences for their actions… (This) lack of accountability can foster criminal behavior online, as well as instances of deceptive self-presentation" (McClintock 2015: 45). In addition, communicators may opt for lurking (depending on whether the virtual conversation was monitored by a moderator or not), the use of silence in discussions, and flaming in different forms (Talbot 2007: 119-124).

Research has identified other negative consequences of online anonymity; these are the concepts of 'flaming', 'trolling' and 'doxing'. According to Van der Nagel,

> flaming refers to hostile comments that often involve profanity and personal attacks… trolling involves posting content designed to incite an emotional reaction in its audience… (whereas) doxing involves groups of anonymous or pseudonymous users researching an individual and then publishing identifiable facts about that person (Van der Nagel 2015).

Another theme that may intersect with these concepts is politeness. According to Herring:

> Women are more likely to thank, appreciate, and apologize, and to be upset by violations of politeness; they more often challenge offenders who violate on-line rules of conduct… In contrast, men generally appear to be less concerned with politeness; they issue bald face-threatening acts such as unmitigated criticisms and insults, violate on-line rules of conduct, tolerate or even enjoy "flaming," and tend to be more concerned about threats to freedom of expression than with attending to others' social "face" (Herring 2005:207-208).

Despite that, some researchers, like Linda McDowell, believe "…that while public spaces are often coded as dangerous for women, they have also 'paradoxically…been significant locations on women's escape from male domination'" (Maher & Hoon 2008: 205-206).

2.2 The negotiation of power across genders

The importance of language features and gender was highlighted in Lakoff's (1975) article "Language and Woman's Place". The article claims that men use language features that indicate their power and reflect their naturally-acquired social status in comparison to women's. This hierarchy can be seen through women's use of "…hedges, qualifiers, intensifiers, tag questions and polite forms" (Guiller & Durndell 2006: 369) which reflect women's "absence of power springing from a negative attitude that women have about themselves" (Perovic 2012: 43). The repetitive use of these features makes women sound more hesitant, less confident, and, consequently, less powerful.

Since that original publication, a number of studies have been published which examine gender, language, and computer-mediated discourse as a public sphere that may reflect the negotiation of power across genders. Despite the claim that computer-mediated discourse provided its users a level of anonymity which potentially "neutralizes distinctions of gender" (Herring 1994: 1), studies have showcased a clear distinction between the two genders in terms of their styles of communication. The literature indicates that female postings displayed

> …features of attenuation, such as hedging, apologizing, asking questions and a personal

> orientation, revealing thoughts and feelings and interacting with and supporting others… (whereas) male postings were longer and/or more frequent and the male style was described as adversarial, with language features such as strong assertions, self-promotion, humor, rhetorical questions, sarcasm and flaming (Herring 1993 in Guiller & Durndell 2006: 369).

Meanwhile, Savicki and Kelley confirmed in their findings that male-only groups "…used less individually oriented language and more coarse language directed towards the content of the task. In contrast, the female-only groups used the most individually oriented language and used no coarse language" (Savicki & Kelley 2000: 821). Female-only groups used the self-disclosing first person ('I', 'me', 'my') significantly more than male groups or mixed groups. The researchers also looked into encouraging high communication style (HCS) which includes high opinion and high coalition with others in the group and low flaming. They concluded that "women appeared flexible enough to adopt a computer-mediated communication pattern not necessarily consistent with their usual style of communication while men were unable or unwilling to adopt the HCS style" (Savicki & Kelley 2000: 823) which they attributed to the men's inability to comply with the instructions given to them (Savicki & Kelley 2000: 823-824).

The literature also indicates that men's speech and writing seems to have common characteristics. These include that men "… speak (or write) more often, speak for longer turns, interrupt more, are more hostile in tone, are more likely to be responded to, are more likely to be responded to respectfully, and are more likely to respond to women in a challenging way" (Polletta & Chen 2013: 294).

Other researchers take different stances when it comes to notions of power and gender. Among them is Tannen who

> …argued that girls and boys live in different subcultures analogue to the distinct subcultures associated with those from different class or ethnic backgrounds… (and) that men are indeed dominant, but that is not their intention, only the communicative goals and their realizations are different: men seek status, women seek rapport and relationships (Perovic 2012: 45).

According to her, communication between men and women can be viewed as cross-cultural communication. Beyond all this, Thorne, Kramarae and Henley (1983) urged researchers "…to take into consideration the context in which the differences emerged- who was talking to whom, for what purposes, and in what setting" (Thorne, Kramarae & Henley 1983 in Perovic 2012: 45).

The study of language and gender and, more specifically, power across genders in the Gulf region is an area that has remained unresearched. This emphasizes how pertinent this current research is in terms of understanding the linguistic behavior of the society. Another challenge, which the researcher faced, is the difference between the Gulf dialect and social structure compared to the Egyptian and Moroccan dialects which have been, relatively speaking, more explored.

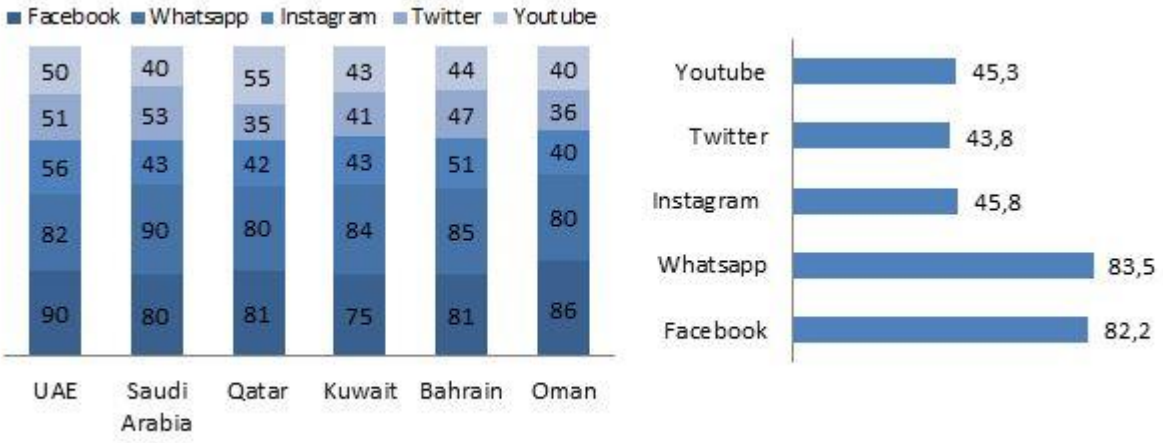
2.3 Computer-mediated discourse and gender: the case of the Arabian Gulf

The Gulf area has witnessed a major shift in the mediums and norms of communication over the last decade, especially since the Arab Spring. According to Internet World Stats, there are an estimated 123,172,132 internet users in the Middle East, and the six Gulf countries represent 29.5% of the overall internet usage in the Middle East (Saudi Arabia 17.9%, UAE 7.2%, Kuwait 2.6%, Oman 2.1%, Qatar, 1.6% and Bahrain 1.1%).[2]

[2] Statistics according to http://www.internetworldstats.com/stats5.htm, as of November 2016.

Whatsapp and Facebook are the most used social media channels in the Gulf countries (Arab Social Media Report 2015:21), followed by Instagram, YouTube, and Twitter. Saudi Arabia (53%) and the UAE (51%) seem to have the strongest preference for using Twitter versus other channels of social media. All six Gulf countries are among the top eight Arab countries in terms of current Twitter subscription rates, with the UAE (53%) and Saudi Arabia (51%) as the highest of all (Arab Social Media Report 2015:34).

Figure 1: The Use of Social Media across the Arabian Gulf Countries
(Arab Social Media Report 2015).



This region uses social media as the new public sphere. According to El-Sayed et al., "social media usage shifted from social to political and recently, it has evolved to become mother of modification of businesses, social set ups, civil and political" [sic] (El-Sayed et al 2015: 429).

Another factor that may have impacted the public sphere is women's accelerated participation in the workforce. The Gulf area has experienced a top-down movement to empower women to move "into the public sphere… (which) has contributed to their politicization and mobilization" (DeVriese 2013: 122), thus placing women at the front lines of decision-making and leadership roles in these countries. A good example of this movement is what is happening in the United Arab Emirates. According to the report published in 2012 on "Emirati Women Perspectives on Work and Political Participation",

> The status of Emirati women in the workforce has witnessed a significant increase, and currently their participation reached a 66% of the government's workforce [sic], 30% being in senior positions, 15% in technical jobs (medicine, nursing and pharmacy) and the rest in armed forces, customs and police, additionally they now account for 37.5% of the banking sector (Emirati Women Perspectives on Work and Political Participation 2012: 4).

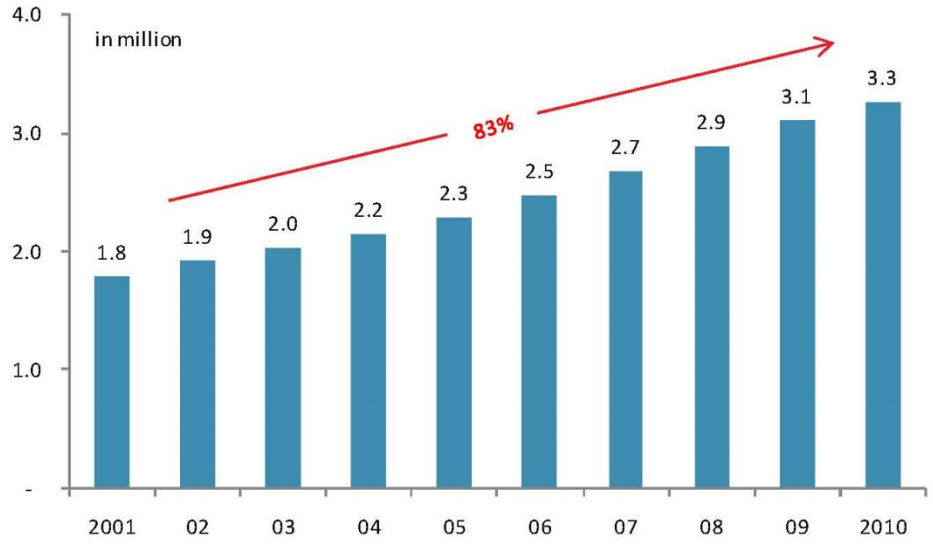
This has been complemented by the twenty-nine women in the UAE's foreign diplomatic delegations (MOFA Brief 2016: 4), women holding judicial and ministrial positions in the cabinet, and partially-elected female representatives on the Federal National Council. According to El-Sayed et al.:

> …Emirate empowerment of women is visible through (the) UAE Federal National

> Council as there is (a) significantly higher number of women participants in every year of (the) council's election. When the council was established it included 8 women only, but currently, the number has risen to 85 out of 469 (El-Sayed et al. 2015: 430).

All of those positions of influence allow women to actively use "…social media to advocate for and push controversial issues on the public agenda" (DeVriese 2013: 122).

Figure 2: Female Labor Force in the GCC (2001-10)
(GCC Women: Challenging the Status Quo 2012:7)



This phenomenon is not limited to the UAE and has been seen across all the Gulf countries. According to a report titled "GCC Women: Challenging the Status Quo", "Approximately 1.5 million women in the GCC joined the labor force during 2001–10" (2012: 7) (See Fig. 2). This can be considered a substantial shift in women's roles and contributions despite the challenges that may still exist.

3. Data collection and methodology

The data for this study revolved around six hashtags and twelve tweets in Arabic. The dialect used by the tweeters indicate that they are all from the Arabian Gulf region. The hashtags were selected from topics considered to be controversial in the Gulf area which could have led to a debate or argument depending on the participants' nationalities, genders, or economic statuses. The topics are: 1. Women, 2. Women's employment, 3. Education, 4. Sponsored scholarship students abroad, 5. Marrying at an old age (gender unspecified) and 6. Spinsters. The researcher noted each tweet, the apparent gender of the tweet's initiator[3], the hashtag used in each tweet, and the apparent gender of all those who responded to it. The researcher did not verify the identity of the participants as that was not within the scope of the research, instead relying on the name and display picture used by each tweeter.[4]

Overall 195 responses were recorded totaling 2300 words in Arabic.[5] Both the transcription and the translation of the tweets and all responses quoted in this research were done by the researcher.

The analysis was conducted manually at three different levels: First was a quantitative analysis

[3] Gender was determined based on the nickname and/or the display image used for the account. None of the tweeters' identities were verified.

[4] Nicknames in Arabic.

[5] The word count is based on the Arabic data set.

that considered the gender of the tweeters in both the main tweet and the responses. Whether the choice of topic and the gender of the tweeter had any impact on the overall participation across genders was also considered.

Second, a qualitative pragmatic analysis was performed to investigate the discourse markers used by each gender. The choice of these features was based on the literature and what have been identified as common language uses across both genders (Savicki & Kelley 2000:820) and Lakoff (2004: 49, 79, 189, 257). The researcher was also interested in analyzing the hashtag topic choices in relation to gender and the participants' responses, as well as features that reflected discourse management and conflict management strategies that were used by the participants (see Table 1). All these markers were manually identified in the Arabic data due to the nature of the Arabic language and the fact that the data is in Gulf Arabic rather than standard Arabic.

Table 1: Discourse markers
(* Adopted from Savicki & Kelley (2000: 820) and Lakoff (2004: 49, 79, 189, 257))

DISCOURSE MARKERS		
Marker	**Definition***	**Example in Arabic (if any)[5]**
Topic/Hashtag Choice	Gender of the main tweeter in relation to the topic	--
Participation/Membership	Number of respondents per hashtag (#)	--
Self-disclosure	Use of 'I', 'my'	أبي، أنا، رأيي
Length of Turns	Length of the post	--
Super Polite Forms	Extremely polite language forms	أشكرك
Tag/Rhetorical Questions	Stating a claim, midway between an outright statement and a yes-no question	إذا هو البحث عن الأضعف والتطبيق عليه
Hedges	Expressing extreme uncertainty (i.e. I think, I guess, I might…)	ربما، أتوقع، قد، أحس
Intensifiers	The use of the intensive 'so' or any equivalent form	--
Coalition	The degree of agreement or disagreement with a person or a statement (NA, mild, strong)	فعلا، صحيح، أمين، عندك حق، صدقت
Flames	Argumentativeness (positive, neutral, hostile), the use of coarse/abusive language and/or tension	غصبن عليكم، والله لتيقين على هالحال، المنافقين، المتخلفين
Ridicule of Others	Using sarcastic language or making fun	يا متعلمة يا بتاعت الثقافة، المصيبة أنك ماخذ في نفسك مقلب، اكتشفت انك بزر
Apologies	Implied or direct apology	
Challenges	The presence of a challenge or dare	أقول الحب غيرها لو انت صادق، انت تضحك على نفسك
Facilitative Language	Facilitate the conversation	طيب.. ما هو مقترحك

The third section containing the results sheds light on the overall behavior of both genders considering both the above-mentioned markers and the frequency of their use.

4. Results and discussion

4.1 Tweets vs. gender

Out of the twelve tweets, 85% of them were initiated by male tweeters and not more than 15% by female tweeters. The responses, however, were distributed nearly equally between female tweeters (44%) and male tweeters (56%) (see Fig. 3 & 4). This might indicate that male tweeters are more comfortable raising or flagging an issue or observation than women, while also indicating that women are as comfortable as men in responding to and vocalizing their opinions and points of view on a subject. Although men dominated the responses, female participation seemed to occur qualitatively in very close proximity to the males' tweets which might be attributed to what has been described as 'virtual anonymity' (Talbot 2007: 119-124) or to the sociocultural changes that the Gulf region has been experiencing.

Figure 3: Tweeters' Gender

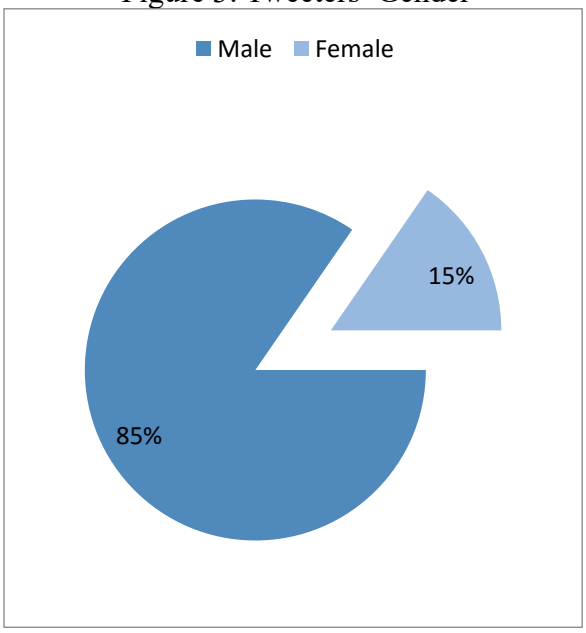
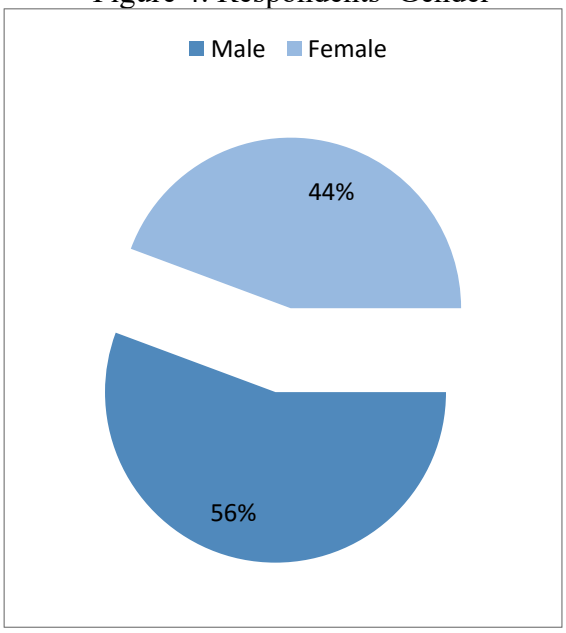
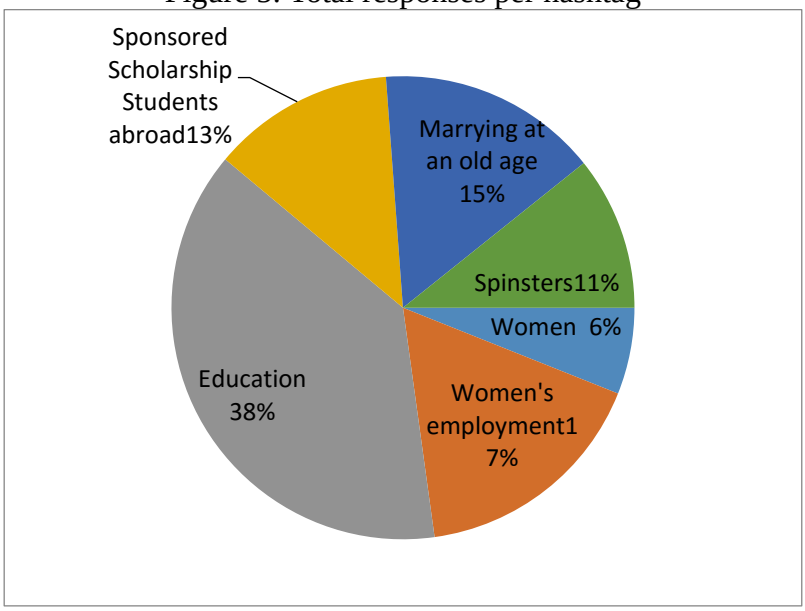


Figure 4: Respondents' Gender



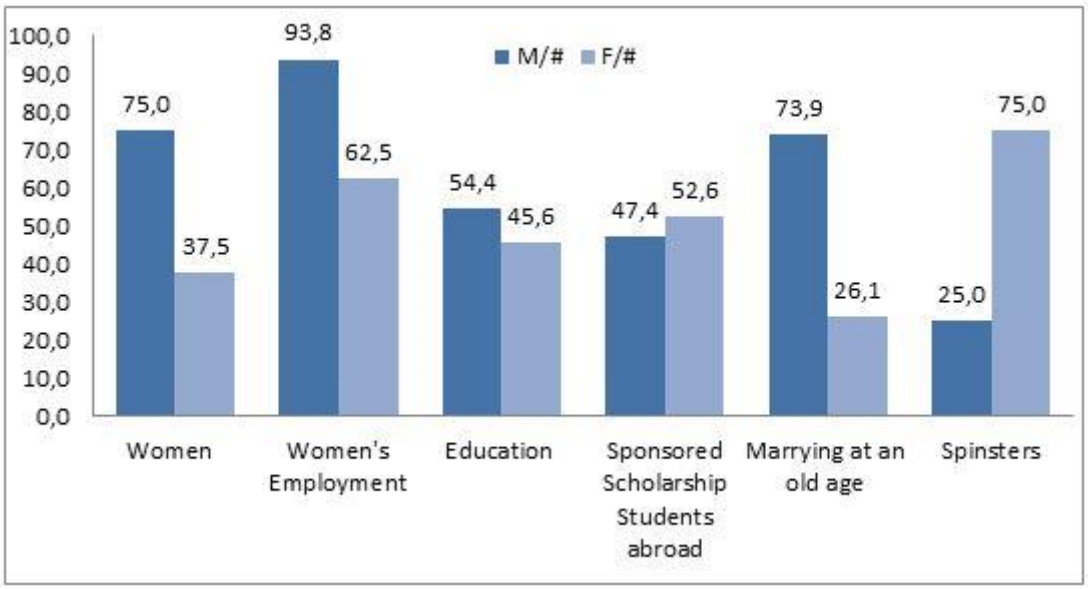
Looking closely at the hashtags included in this data, it can be observed that 38% of the responses were posted in response to the 'Education' hashtag, while 'Women's employment' came second (17%), third 'Marrying at an old age' (15%), fourth the hashtag 'Sponsored scholarship students abroad' (13%), fifth 'Spinsters' (11%), and finally 'Women' (6%) (see Fig. 5).

Figure 5: Total responses per hashtag



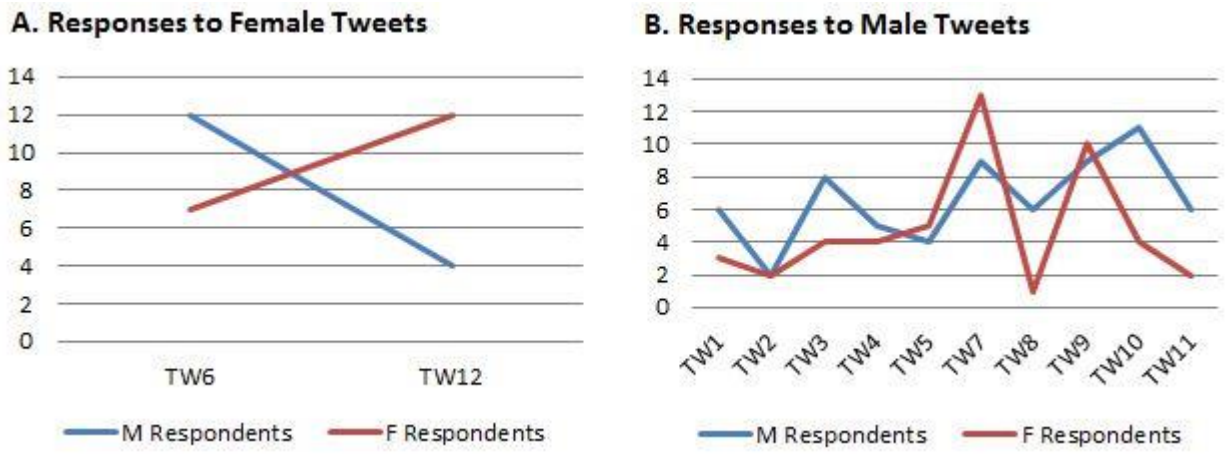
As per the results, the hashtags that more often captured the interest of male tweeters were 'women's employment' (93.8%), 'women' (75%) and 'marrying at an old age' (73.9%), while the least interesting to men were 'spinsters' (25%) and 'sponsored scholarship students abroad' (47.4%). Meanwhile, the female respondents were most interested in 'spinsters' (75%), 'women's employment' (62.5%), and 'sponsored scholarship students' (52.6%). For women, the least interesting topics from this group of hashtags were 'marrying at an old age' (26.1%) and 'women' (37.5%) (see Fig. 6). Although most of the hashtags chosen were related to women, women's employment was the only topic that was appealing to both genders which corresponds with the earlier literature. Although a dramatic rise in women's employment has occurred in many of the Gulf countries, it is still considered a pressing issue in certain countries such as Saudi Arabia. This might explain the tweeters' interest in the topic.

Figure 6: Male and Female Responses per Hashtag



The gender of the original tweeter was also examined to see whether it could be a factor in determining the number of respondents. The data proves both that there is no correlation between the gender of the initial tweeter and the genders of the respondents, and that all respondents were actually reacting to the hashtag or the tweet in isolation from any other variable (see Fig. 7). Both tweets represented in Figure 7A were posted by female tweeters, and the responses to each tweet varied across genders. The same can be said about Figure 7B which represents male tweets: each gender had its peaks and valleys. This might be an indication that Twitter as a form of computer-mediated public sphere was a space that allowed both genders to share their opinions and to be unintimidated despite whatever support or hostility they received from other tweeters.

Figure 7:



4.2 Qualitative analysis

In this section, the communication patterns across genders were scrutinized for each hashtag, highlighting their use according to the parameters set forth in Table 1.

1) # Women:

Under this hashtag, the selected data included only one tweet. The hashtag, which was tweeted by a male tweeter, states:

TW1:

#المرأة وهي صائمه تبدأ من الظهر بتحضير ما لذ وطاب، تتحمل درجة حرارة الصيف وحرارة الفرن وهي لا تفكر إلا في ملء كرشة الهيس الأربد.

A #woman starts by noon, prepares the best dishes while fasting, handles the heat of the summer, and the heat of the stove, not thinking about anything other than filling the lazy lion's stomach.[6]

Although the hashtag might have social value and can be considered an attempt to shed light on the role of women taking care of their families, it also maintains men's status and power within the household in its reference to the 'lion.' Men's participation in this hashtag represented around 66% of the overall participation. Their participation varied from ridiculing the original tweet by questioning the tweeter's word usage, to questioning women's contributions, or even writing sarcastic

comments that defended men's contributions or diminished women's contributions as simply part of nature. Two other male contributions displayed mild to full agreement with the tweet using theological/religious references to highlight the virtues of women's deeds when it comes to supporting their families stating:

...فلها اجر تفطير الصائم...
"She will receive the reward from God for providing food to a fasting person,"

and

ومع هذا ان شاء الله مأجورة
"By God's will, she will be rewarded."

Meanwhile, other tweeters diminished the woman's role or considered her work as part of her natural role, and they added a statement that questioned the motive behind the posting of this tweet and considered it an attempt to provoke women against their husbands as in the following examples:

MT5:
لا تخببوا النساء على أزواجهم
Don't steer women against their husbands.

MT6:
كل من الطرفين ياخذ نصيبه... التخشيش بين الطرفين ماله داعي
Each one of them takes his share, there is no need to steer things between them.

Female responses also varied. One of them also ridiculed the tweeter's reference to the 'lazy lion'; the second agreed and stated that 'regardless of a woman's efforts, women will continue to receive negative comments'. The third female response made the only facilitative contribution, adding to the positive image of women represented in the tweet and ending with a reference to the religious value of this contribution as she states:

FT3:

هي تعد سفرة لعائلتها بكل حب وتنتظر منهم فقط تقديرا لهذا الجهد بشكر باللسان ونظرة امتنان بالعين وهي في ذلك بمنزلة المجاهدين

She prepares a meal for her family with love and does not expect more than a 'thank you' or a happy look of gratitude in return for this effort, and in doing that she is equivalent to someone who fights under the name of God.

Although it is unclear whether or not the original tweeter was conscious of his support for men's power in this tweet,[6] none of the respondents actually referred to that power. What they focused on

[6] This might be questioned, as the popular meaning of this expression does not have a positive connotation. However, the researcher cannot be sure whether the tweeter knew the actual meaning of the expression or was using it as a sarcastic expression.

instead was showing the naturalness of women's contributions versus men's contributions, or commenting on the expression used since it is uncommon and might have a negative connotation.

Another uncommon use of language was the references that were made by both genders to religion providing women with emotional support through referring to their good deeds and the rewards they will receive from God. Based on researchers' observations, such references are something that might be expected in women's discourse more than in men's (Herring 1993 in Guiller and Durndell 2006).

2) # Women's Employment

There were three tweets under this hashtag; all were posted by male tweeters, as follows:

TW2:

من تريد العيش بكرامة، تكون إمرأة كفو ربه بيت يعتمد عليها وقتها زوجها حيتمسك فيها وما رح يطلّقها

Whoever wants to live in dignity have to be a reliable housewife; only then would her husband hold on to her and not divorce her.

TW3:

ما الذي حدث عندنا وتطلب توظيف المرأة في أعمال الرجال؟ هل عاتينا نقصا في الأيدي العاملة كما حدث في أوروبا؟ لم يحدث، نصف شبابنا عاطلون

What is happening? And how come women are being employed in men's positions? Are we short of manpower just like Europe? I don't think so, half of our men are unemployed.

TW4:

قيادة المرأة للسيارة حرام لئلا يتحرش بها الرجل. عمل المرأة حرام لئلا يتحرش بها الرجل، ووو... دائما المشكلة في الرجل والذي يعاقب هو المرأة!

For a woman to drive is forbidden (in religion) so that men won't harass her. For a woman to work is forbidden (in religion) so that men won't harass her, etc. The problem is always in men, and women end up being punished for it!

The statements made through these tweets vary in their positions towards women's employment. Whereas the first two are clearly opposing the idea, the third is actively defending it. Beyond that, while the last two tweets are drawn from social realities or perceptions of these realities, the first seems to be a personal opinion or perception presented as a generalized fact. This might align with the findings of Holmes, who states that "men… are most comfortable with referential or information-oriented talk…" (Holmes 1992: 132).

In response, a couple of male respondents disagreed with the generalization made in the first tweet; one of them described the tweeter as *'ignorant'* for making such a generalization. However, both agreed with the principle idea of the tweet. Meanwhile, the last tweeter agreed with the tweet and supported his argument using hostile language:

MT1:

كلامك صحيح الأسباب قد تختلف، أوقات يكون الرجل حقير وأوقات تكون البنت واطية

What you are saying is true, but the reasons might vary. Sometimes the man might be a bastard, and other times the woman might be a slut.

Meanwhile, the female respondents opted for defending the position of women. One of them attacked the tweeter's argument and the fact that he puts the blame on women 'as the sole party responsible for all divorce cases.' Another one shed light on the circumstances that may surround women. Both contributions were phrased in a way that would solicit an extended debate.

FT1:

انت بكذا حطيت الزوجة هي سبب الطلاق!!

By saying so, you are considering the wife as the reason behind the divorce!!

FT2:

ربما تكون المرأة كفو ولكن تحدث ظروف لا نعلمها لا تعممي عزيزتي

The woman might be a good person, but there might be circumstances which we might not know, so do not generalize, my dear.

They were also polite in presenting their opposition to the tweeter's views, focusing on logical arguments and using politeness markers such as the usage of the word 'dear' to refer to a male tweeter. This communication behavior supports the findings in the literature (Herrings 2005; Herring 1993 in Guiller and Durndell).

Most of the responses to the second tweet evolved very similarly, with the exception of the first one. The first response ridiculed men's future in the labor market, which the tweeter suggested might shift to professions in housekeeping, in babysitting or even as hair dressers, while the rest, whether in support of or opposition to the tweet, discussed the issue from an ideological point of view (i.e. as an example of a Western mindset or an imitation of the West). They used hostile language to describe those from the Gulf community who adopt such an ideology and described them as 'hypocrites المنافقين' 'the liberal dogsالكلاب اللبرالية ,' 'those with an ill heartقلوب مريضة ,' 'detached from our societies المنسلخين عن مجتمعنا,' and 'callers for sins يدعون إلى الرذيلة .' Most of these descriptions came in response to a moderate male tweeter who stated:

MT4:

مراقبة الأسواق في زمن عمر بن الخطاب كانت إمرأة وتكلم الرجال ولم ينكر أحد على سيدنا عمر... ماذا تغير الآن

The job of a market watchman was given to a woman during Umar ibn al-Khattab's[8] time, and she used to speak to men, and no one objected or condemned it at the time… so what has changed now?

Surprisingly, the female tweeters, representing only four respondents, also supported the tweet. Two contributed to the argument, asking rhetorical questions that questioned the motives behind such decisions, while the other two expressed their opinions by using self-disclosure. One of these two expressed strong disagreement with women's employment stating 'anti-feminist' views that led the researcher to question the actual gender of the tweeter as she states:

FT4:
لم أجد فتاة جادة في العمل إلا من رحم ربي، إما أن تتبادل أطراف الحديث مع زميلها أو تستعرض عيناها المليئة بالكحل أو تضع رجلها عالمكتب
I have not seen a serious woman in the workplace -except for the very few chosen by God- they are either chatting with their male co-workers, or showing off their eyes with heavy eyeliner, or putting their feet on the desk.

In the third tweet under this hashtag, only one male speaker replied using factual knowledge to support the tweet, stating:

MT1:
محمود سعود لم يفتي بأنه حرام والألباني رحمه الله أجازها وضحك على من يمنعها ولا يجوز لأحد أن يحرمها
Mahmood Saood did not rule (in religion) opposing driving for women, and Al-Albani[9] – may his soul rest in peace- stated that it is accepted in religion (halal) and in fact laughed at those who said otherwise, therefore no one has the right to say that it is forbidden in Islamic law.

Two of the respondents asked rhetorical questions, with one being sarcastic while the other drew the conclusion, *"So they are looking for the weakest and applying their rules to them. إذا هو البحث عن الأضعف والتطبيق عليه"*. The last two tweeters used a more hostile approach to address the issue, by attacking each other personally, stating:

MT4:
مافيه قانون يمنع المرأة من القيادة ولكن هل تقبل انت ان زوجتك ولا اختك تطلع بدون محرم لها؟
There is no law that forbids women from driving, but would you accept your wife or your sister's going out without a guardian?

MT5:
بالنسبة للمرأة في المجتمع السعودي تعمل وممكن تكون زوجتك هي اللي تصرف عليك عشان كذا صار عندك فراغ كبير.
As for women in the Saudi community, many are working women; and, in fact, it might be that your wife is working to spend her salary on you - that's why you have a lot of free time on your hands.

Although the tweeters' responses had initially started with facts and information that could have led to a solid argument, both tweeters decided to escalate this argument and make it personal despite the observation the researcher made about the tweeters' distancing themselves by avoiding the use of 'I'. In this instance, the use of 'you' and the reference to the recipient's 'wife/sister' indirectly forced the recipient of this message to respond and to make it equally personal.[7]

On the other hand, all the comments that were posted by women were in favor of the tweet and

[7] In Middle Eastern culture, particularly in tribal communities, references to one's mother, wife, or sister in public is considered a reference to a man's honor. Despite the fact that this mindset might have started to disappear, in this context, mentioning them was done deliberately; culturally, it can be considered an example of flaming.

gave their opinions of men, using expressions such as, 'bad manners,سوء خلق', 'called for a war of favoritism,يخوضون حرب احتساب ', 'sick souls of some males that are not real men الخلل في النفوس المريضة من الذكور وليس الرجال ,' or of the status of women by saying things like, "sometimes I feel that there are no women except in Saudi. مرات أحس ان مافي حريم إلا بالسعودية". Only one of the respondents contributed with advice for men to work on developing themselves as individuals. This instance can be seen as another attempt to show solidarity and give emotional support, something that was referred to previously from the literature. Another observation that can be made is that men in this tweet concentrated on the religious/legal aspect of the issue, while the female respondents concentrated on men versus women, their mentalities, and their perceptions of what they do or should do within the community.

3) # Education

In this data, four tweets that came under the 'Education' hashtag were analyzed. The number of male and female responses to the tweets under this hashtag were almost equally distributed (55.44% M, 44.6% F).

TW5:

بيل جيتس: "القضاء على شلل الأطفال، أسهل من إصلاح #التعليم الأمريكي

Bill Gates: Eradicating polio is easier than fixing American education.

Although the original tweet, Bill Gates' statement, was ridiculing the American educational system using self-disclosure to express his opinion, all the comments posted by male tweeters reflected their agreement, facilitating or contributing to the discussion. On the other hand, female tweeters were divided equally between those who made fun of their own educational systems and those who contributed to the discussion with a plan that would solve the problem.

TW6:

4000 طلب تقاعد لوزارة #التعليم

4000 retirement applications received by the Ministry of Education

The second tweet (TW6) got very strong reactions from both male and female tweeters. Of the male tweeters, 50% used sarcastic language, mostly to ridicule the female participants, but also to ridicule each other and even the status of educational employment. Their sarcastic comments varied in their hostility but were elevated when referring to the other gender, as in the following examples:

MT4:

الله وأكبر، المتردية والنطيحة يتحدثون في أمور العامة

God help us, the bottom of the society is discussing the public's issues.[11]

MT5:

تكفين لا تتهورين وتناقشين هههههه

Please don't be reckless and discuss this issue [laugh]

MT12:

أنت أكبر قطعة شحم فاسدة ومهترئة لذلك لا تتكلمين عن العفن وانت أساسه

You are a big, rotten chunk of fat, please don't talk about mold while you are the source of it.

Conversely, the other male tweeters contributed with comments that would encourage others to continue the discussion. Some of them were in agreement, and some in disagreement, while one remained neutral and did not specify his position. Similar reactions were seen among the female tweeters who all ridiculed each other or the status quo. Even those who participated in the discussion with facilitative statements were sarcastic or even challenging at times, as in the examples below:

FT6:

يا متعلمة يا بتاعت الثقافة

Miss, educated and a know-it-all…

FT1:

والله انك انتي اللي مهترئة أخلاقيا

I swear you are the one whose morals are shabby.

FT2:

...تعبنا من تسلط الوجوه الكاحلة

... we are tired of those ugly faces trying to force their opinions.

TW7:

الزي المدرسي المعتمد للطالبات في جميع المراحل الدراسية اعتبارا من العام الدراسي القادم

The newly approved school uniform for the next academic year

TW7 also received different reactions across genders. Two of the male tweeters ridiculed the decision of the Ministry of Education, while four posted facilitative statements that could contribute to and expand the discussion. However, these statements were used for various purposes; some were informative, while others criticized or attacked either the decision to change school uniforms or the design of the new uniforms. The concept of East versus West was also mentioned by the male tweeters. Finally, one tweeter decided to change the subject, and another one challenged a third one.

Disagreements with the decision about school uniforms were expressed directly by the female tweeters. The six female tweeters of the thirteen participants disagreed openly with either the decision or the designs, with some of them using sarcastic or hostile language to express their disagreement, as in, '*Rotten and ugly cloths,معفن ولبس خايس*', *'Instead of focusing on the interest of the students, they are worrying about their uniforms, may the Ministry perish. تاركين مصلحة الطلاب وشايلين هم لبسه، أمحق وزارة'*. The other female tweeters used facilitative language either to inform or to solicit more information.

TW8:

نحن في عصر وزمن إن أردنا العزة بحق فعلينا أن نستثمر في #التعليم أضعاف ما نستثمر في السلاح، #التعليم الممتاز يبني

In order to achieve glory in this era, we have to invest in education multiple times more than what we invest in weapons; a good education builds...

In the fourth tweet (TW8), the tweeters varied in their responses. Two tweeters expressed their agreement; one totally disagreed with the tweet in non-hostile language, while the last two male tweeters, in addition to the only female tweeter who participated, changed the subject. The male tweeters discussed the usefulness of learning languages, and the female tweeter spoke about 'respect for teachers'.

4) # Sponsored Scholarship Students abroad
The only tweet found under this hashtag is:

TW9:
ربي ارزقني قدرة #المبتعثين وا#لمبتعثات السعوديين في التأقلم بين البيئتين والتغيير اللحظي حال وصولهم لبلدهم
God grant me the ability of male and female scholarship-sponsored students abroad to instantly adjust to change and to the different environment as they get back to their home country.

Most of the male tweeters took the opportunity to magnify the different mentalities they see within the country and to shed light on the fact that the speaker is feeling this way because he is 'open minded,' unlike many others. The overall tone used by this category of people was neutral to mild in terms of hostility, as some of them used words like 'un-shamed people,الناس مفاصيخ وقلة حياء', 'Whether you like it or not,غصبن عليهم' and 'their mental and psychological issues.عقدهم النفسية والعصبية'. One of the tweeters contributed to the discussion, saying, "I expect that if the companions in the cave[8] were among us, and God took their souls and brought them back to life again, they wouldn't see any difference.أتوقع لو أن أهل الكهف منا فأماتهم الله ثم بعثهم فينا من جديد لما لاحظوا اختلافا". This was the only self-disclosure statement that might be seen as a sarcastic criticism of the situation within the community.

Two of the male tweeters responded to the female tweeters. One of them limited his response to a laugh and a 'thank you' in French, while the other ridiculed the female tweeter's comments and the experience she may have had.

FT3:
يارجال ليا اربع ايام في السعودية... شريط يتكرر كل يوم
you know what, this is my fourth day in Saudi and it feels like a broken record

MT5:
إذا انت اربع أيام وتعيش نفس الشريط، أعرفلك كوري يدور له سعودية، بس يبغاها مطوعة عشان توه اسلم
you have been here for just four days and it's a broken record?! You know what, I know a Korean guy looking for a bride, but he wants her to be religious as he has just converted.

The argument raised here is unrelated to the topic discussed, and it makes several presuppositions. First, it assumes that the female tweeter is not married; second, that she could not find a husband; and third, that she is not culturally attuned and would accept marrying a non-Saudi. The speaker also made sure that he maintains face in his comment by mentioning the Korean's religion, since making such a suggestion might lead others to shame him or even attack him for not showing respect to his religion or culture.

About six out of the ten female tweeters supported the tweet and the person who posted it, by either praying for him, telling him that they were happy to share their experiences, or telling him that they were experiencing the same issue. Only two female tweeters responded to a male's comment under the same tweet. The first was aggressive in her response to a male tweeter saying, *"as long as you are alive, may God get me out of here sooner rather than later."* Meanwhile, the other asked

[8] The reference made here is to story of the companions in the cave in Surat Al Kahf in the Quran (Griffith 2008: 109-38).

another female tweeter a rhetorical question that sounded like a potential attempt to ridicule her.

There was also one tweet from each gender's exchange, in which the tweeter used self-disclosure to express feelings of longing towards their home country.

5) # Marrying at an old age:

The responses to this hashtag were mostly from men (73.9%) while female hashtags represented 26.1%. The data encompassed two tweets that used this hashtag; both were posted by male tweeters.

TW10:

ياخي ادفع كل هالفلوس كني أنا بستانس لحالي هي بعد بتستانس بيصير عندها زوج وعيال وبيت وبتركب قدام بالسيارة ليه ما تدفع مثلي

I should pay all this money as if I am the only one who'll enjoy marriage, she will also enjoy having a husband, kids, home and will get to sit in the front seat of my car, why doesn't she pay like me?

The males' responses to this first tweet (TW10) varied in their position. One agreed with the tweet; the second ridiculed the tweeter and used hostile words that questioned the tweeter's manhood or described him as being childish, while the third asked a rhetorical question, *"What if someone does not have money, what should he do?"* The fourth responded with, *"they should not get married."*
Most of the female tweeters responded with laughter or words that expressed disbelief, while one female tweeter responded with a direct hostile attack on men, stating:

FT2:

مالت عليكم عاد انتم لو تدفعون ملايين بيومين تطلعونها من عيونها صحتها وناستها وكل شي يتغير عندها كل وحدة متزوجة تصير نفسية

May God give you bad luck,[13] even if you paid millions you are going to force women to pay it back from their health, joy, and change every aspect of their lives. All married women become psychologically disturbed.

This comment aggravated the male participants; most of their comments included self-disclosure and a comparison between themselves as individuals or their environment and what they assumed was the female tweeter's environment, opposing her generalization. These responses varied in their hostility; however, they could all be considered personal attacks. These included:

MT9:

بكل ردودك وانتي تسبيني وساكت وجالس اتناقش معك بس الظاهر انك بزر متعودة عالشات ارجعي للشات يا شاطرة بهالعقلية ما راح تنجحين هنا

You have been bad-mouthing me in all your responses while I'm quiet and trying to have a real discussion, but it seems that you are a child who is used to chatrooms. Sweetie, I think you should return to the chatroom; I don't think you will survive here.

MT8:

مدري محسستني انك عايشة معي هههههه نصيحة أخيرة بس خوذي أحد من برا عايلتكم لأن الظاهر عندكم الزوجة تنضرب للحين

For some reason, you made me feel like you are living with me, [laugh], one last piece of advice, take it from me, don't marry anyone from your family, it seems that your women are still being abused.

MT6:

والله انا أقيسه على اللي اعرف، مبسوطات وعايشات أحلى عيشة. يمكن مجتمعك اللي حولك يحتقرون الزوجة بس ماهو كل السعودية مثلهم بالتأكيد

My opinion is based on what I know, women are happy and living a good life here, but it might be your environment or community that looks down on women. Not all Saudi families are like this.

MT11:

طيب لا تسولفين سوالف الكبار الا إذا كبرتي هههههه

Then don't talk with adults until you grow up. [laugh]

TW11:

البطالة كيف بي اتزوج وانا لا أملك ما يكفيني كفرد اولا ثم المهور ثم المنزل ثم المعيشة ثم الفساد ثم نحن ثقافتنا التي لم تتغير

How am I going to get married if I cannot survive as an individual, in addition to the dowry then the house then our expenditures and then the corruption and finally our culture that would never change

In the second hashtag (TW11), men's responses were divided into two groups. The first was a group that used self-disclosure and described the tweeter's feelings and what he was going through, while others were asking him to cheer up. The other group, however, were challenging each other, redirecting the conversation to discuss what they perceived as a social reality. In their discussion, they used rhetorical questions, information-seeking questions, and elaborative statements, which were all in agreement with the tweet but varied in their levels of hostility. The examples below show that most of the male tweeters focused on the subject discussed:

MT5:

أكون واقعي بايش عفو...! ممكن

Excuse me!! If you don't mind telling me, what would you like me to be realistic about?!

MT6:

محد يطلب غير حقه

No one is asking for more than their rights…

MT4:

طيب أشكرك لكن بوريك صورة وأبي وش كان كلامك هنا هل هو مجرد كلام ولا ايش...

Ok, thank you. But I would like to show you a picture to see whether what you are saying is a bluff or not…

On the other hand, while only two female tweeters responded to this tweet, they both gave the tweeter of the post constructive advice. In other words, whereas the male tweeters concentrated on discussing the subject matter, the female tweeters concentrated on solutions. This might be seen as evidence that women's participation revealed feelings and showed support (Herring 1993 in Guiller and Durndell 2006: 369), while men's was "referential or information-oriented" (Holmes 1992: 132).

FT1:

لو بتنتظر ما راح تتزوج وبتنهي عمرك ع لا شي

If you will wait, then you will waste your life for nothing.

FT2:

اسأل اقرب انسان ناجح من اي جنسية وشوف سر نجاحه عدم الكسل وانتظار الحكومة وانسى كلمة أغنى بلد وبلد البترول حتشوف سر النجاح

Ask the nearest successful person, regardless of their nationality and see what is the secret behind his success: not to be lazy and wait for the government and forget that. it's a rich country or an oil country… then you will see the secret behind anyone's success.

6) # Spinsters

The last hashtag in this analysis discussed the existence of spinsters as a phenomenon. Of all the topics, it received the highest response rate from female tweeters (75%) in comparison to male tweeters (25%).

TW12:

العنوسة هي مشكلة مفتعلة والحل بالسماح للفتيات بالزواج دون تقييد ذلك بالجنسية او اللون او القبيلة وغيرها وغيرها من الامور المنافية لتعاليم #الاسلام

The existence of spinsters as a phenomenon is an artificial problem; the solution is to allow women to get married without any restrictions on the husband's nationality, color, tribe, or any other conditions that contradict the Islamic instructions.

Again, the female tweeters varied in their responses to this tweet; about four female tweeters agreed

with the tweet while criticizing the society or the status of women within the family structure, and they all varied in their level of hostility. Two participants expressed their agreement without adding a comment. One contributor changed the subject while three others wrote sarcastic comments, as in:

FT9:
في شي أفضل، نخليها غامضة ولكن وحدة سنارة ياتحصل هامور يا سمك قرش يا سردينة يا ضفدع الله كريم
There is a better option, why don't we make it even more mysterious, and give each girl a fishing rod, and each would either catch a hamour,[14] a shark, a sardine or a frog – may God help us here.

FT10:
أبي سلمون، أسهل لما اقتله وأطبخه هههههه
I will go for a salmon, it's easier to kill and cook [laugh],

Finally, a single participant asked the tweeter not to generalize, and another expressed emotional support to the tweeter, praying for him to find happiness.

4.3 Overall male-female computer-mediated discourse

Both genders' overall self-disclosure, represented in their use of 'I' or 'my' as in 'in my opinion,' 'I like,' or 'I want,' was not as frequent as the researcher anticipated (only 11 instances). Along with this, gender did not have any effect on the individual's self-disclosure (45.5% male tweeters, 54.5% female tweeters). In the researcher's opinion, this could be attributed to the fact that speakers in the Arab world and more specifically the Gulf tend to detach themselves as individuals from the topic discussed, so that they will not disclose or give any hints of their identities or socioeconomic circumstances. Thus, they would avoid using 'I', 'my,' and 'you,' preferring to use 'one' or 'someone,' or even to present their points of view in the form of statements rather than opinions except when the speaker is deliberately trying to make it personal. Normally, using the first or second person would appear to be if the speaker were trying to shame the other person or shed light on financial or intellectual differences or even differences in mentalities between them.

One super-polite tweet also came from each gender. Unlike what was indicated in the literature, they were both used to making sarcastic or challenging comments, as in the following example: "*Excuse me!! If you don't mind telling me, what would you like me to be realistic about?!"*

Most previous studies referred to the use of tag questions; although tag questions (statement + isn't it) are commonly used by Arab speakers, specifically by female Arab speakers, it is rare to find them in a written format. However, using statements as questions is something that is observable in the data; many of the tweets were rhetorical questions of various sorts. In a very few cases, other tweeters responded to these questions trying to show emotional support or offer advice, as in the following example:

MT: Ok, and for those who cannot find a single woman
MT: … if you were serious you would have found one.
FT: May God grant you the best woman who fills your heart and life with love and happiness…

This form was more commonly used by the male tweeters (80%) than the female tweeters (20%).

Table 2: Frequency of usage in the data

DISCOURSE MARKERS	Male Tweeters	Female Tweeters	Male Tweeters %	Female Tweeters %
Self-disclosure	5	6	45.5	54.5
Super Polite Forms	2	1	66.7	33.3
Tag/ Rhetorical Questions	7	2	77.8	22.8
Hedges	4	2	66.7	33.3
Intensifiers	0	0	0	0
Coalition (agreement)	18	14	56.3	43.8
(disagreement)	16	9	64	36
Flames	19	12	61.3	38.7
Ridicule of Others	26	18	59.1	40.9
Apologies	0	0	0	0
Challenges	9	3	75	25
Facilitative Language	27	21	56.3	43.8

Some of the language features that were mentioned in the literature, such as the use of intensifiers, were not used at all. On the other hand, a number of hedges such as '*mumkin*' or '*qad*'[9] were present.

Expressing agreement and disagreement is another form that was highlighted by previous researchers, as they demonstrated that men show less support for others than women and are more willing to disagree badly. In this data, it has been found that, generally speaking, the men tended to express their opinions more than women whether they agreed or disagreed with the other person. Their agreements comprised 56.3% of all agreements in comparison to the female tweeters' (43.8%). The men also expressed their disagreement more frequently (64%) than the women (36%). This might be an indication that the female tweeters felt relatively less comfortable sharing their opinions regardless of their stance. That argument might be supported by the frequency with which the male tweeters used flaming (61.3%), ridiculing others (59.1%), and challenging others' opinions (75%), which were all higher than their female counterparts' rates (see Table 2). However, it is worth pointing out that although flaming and ridiculing others have been attributed to men in the literature, we have seen significant examples of female flaming and ridiculing others in the data, which was not anticipated.

Also, the use of facilitative language, such as helping others to elaborate, expanding the discussion, eliciting additional information, or even offering advice or emotional support, was observed from both genders. Although the literature proves that this is a characteristic that generally appears more among women than men, male tweeters used these facilitative features more (56.3%) than their female counterparts (43.8%) in these instances.

5. Conclusion

Both male and female tweeters in the Gulf were interested in participating in and voicing their opinions through social media. In fact, virtual anonymity might have worked in favor of the female

[9] According to *The Hans Wehr Dictionary of Modern Written Arabic* (1976: 918, 744) the word '*mumkin'* means "possible, thinkable and conceivable", while '*qad'* means "may or might".

tweeters who are part of conservative societies and might not otherwise choose to participate, or who would be reluctant to take part in any other form of public communication. Significantly, in this data, more men initiating discussions/tweets was observed, along with a good distribution in terms of participation in these discussions between genders.

When it comes to language features used by each gender, it would be difficult to draw a clear line between them in terms of the discourse markers used. However, certain trends do appear in the data, among them women's use of emotional language, showing support, and being driven towards offering solutions rather than discussing the issue itself. In some instances, they asked rhetorical questions that can be considered facilitative and might have elicited more information or expanded the discussion.

On the other hand, men's participation reflected their stance towards the topic. They also focused on offering new factual information or challenging others, which could have led to the revelation of new information. Their disagreements were more hostile than the women's; however, they were more cautious in their disagreements with women to maintain their 'face' socially.

Although sarcasm and humor are features that are commonly seen in men's discourse, both men and women in this data used each feature. However, the intensity in the use of the features might vary across genders, which could be investigated further in future research.

Overall, features that appeared in the data and may be considered special characteristics of communication in the Gulf include the following. 1) Most speakers tried to distance themselves by not using the first person and instead using words like 'one' or 'someone' even if they were referring directly to themselves or their personal lives. This was apparent when tweeters defended controversial opinions or were disclosing information about their personal lives. 2) One of the recurring themes that appeared is the comparison between the Gulf and the West ideologically and socially. This constant comparison created a clear distinction or even a gap between the different sectors of society in terms of their educational background, beliefs, and perceptions.

This research is an attempt to analyze communication across genders in the Gulf; in order to reach solid conclusions, other mediums of communication will also need to be investigated. Additionally, one of the weaknesses of this research was the fact that most of the participants seemed to be from Saudi Arabia. This means that it might not represent the entire Gulf area as such but might simply give a snapshot of the communication in the region.

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A research framework for second nonverbal code acquisition

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Abstract: Nonverbal communication and language are two important components of human communication, yet the relationship between the two is severely understudied. One important question – When is learning another culture's foreign language not enough to be an effective communicator? – has special applicability to teachers and students of foreign languages. Compared to the acquisition of second languages, very little is known about the acquisition of second nonverbal codes. The extent to which different forms of nonverbal communication are universal versus culturally-constructed and involuntary versus voluntary is discussed, followed by the proposal of a framework within which empirical research on second nonverbal code acquisition may be conducted. The framework segments the forms of nonverbal communication into four different quadrants, and the feasibility and value of second nonverbal code acquisition for each quadrant are discussed. Research questions suggested by each quadrant and the implications of possible findings are also discussed. By revealing several gaps in our understanding of nonverbal communication and its relationship with language and culture, the framework highlights the need for more empirical work on nonverbal communication and the acquisition of second nonverbal codes. A deeper understanding of the cross-cultural variation of nonverbal communication and second nonverbal code acquisition could reduce intercultural miscommunication, strengthen learners' communicative competence, and uncover new insights about the nature of human communication, especially regarding the intersection between language, culture, and cognition.

Key words: Nonverbal communication; intercultural communication; second language acquisition.

1. Introduction[2]

Nonverbal communication (NVC) is a relatively new area of study; although the Greeks made mention of it as part of rhetorical discourse and Charles Darwin published a book on the topic in 1872, it did not emerge as a serious subject of study until the 1950s. Today, while NVC is an area of interest for psychologists, linguistics, sociologists, and international businesspeople, it has special applicability to teachers and students of foreign languages because it addresses the important question of "When is learning another culture's language not enough to be an effective communicator?" This question is especially relevant for international students and immigrants living in a new culture who are learning a new language not just as an academic pursuit but in order to live, work, and study effectively.

With this target population in mind, this paper presents a framework organizing empirical research in NVC to provide second language teachers and learners with some answers to this question.

1.1. Historical study of nonverbal communication

Mandal (2014: 418) states that "nonverbal communication includes all communicative acts except speech" and that "communication means conveying information through signals" (2014: 417). So, any signal other than speech that a person encodes (be it intentionally or not) that could be interpreted by another (intentionally or not) as communicating something falls under the umbrella of NVC. Under this definition, virtually every act that a person performs could be considered NVC. In fact, one significant feature that distinguishes NVC from verbal messages is that it is continuous. While words and symbols are discrete units with concrete beginnings and ends, there is no way to shut off the

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nonverbal messages a person sends aside from physically removing that person from the presence of others; the potential for NVC exists as long as a person's face, body, or presence is detectable by another (Malandro et al. 1989). This makes NVC a particularly different phenomenon for study than verbal communication.

However, it seems reasonable to allow that not everything that a person does needs to be considered as a potential component of communicative competence. One way to contain the scope of NVC, or at least distinguish which nonverbal acts are relevant to the goals of this paper, is to segment it by its forms and functions. This has parallels to the way that verbal language is approached for second language learning. At times, language forms are the focus of instruction (e.g. the present tense, -ly adverbs, plural formation, etc.), while at other times the function of language is the focus (e.g. making commands, offering apologies, making requests, etc.).

1.1.1. Forms of nonverbal communication

So, the first, fairly straightforward way to organize the types of signals that people exchange nonverbally is to categorize NVC into different *forms*. The study of the forms of NVC began around the 1940s as they were each "discovered." Some of the many forms include *kinesics* (body movements) (Birdwhistell 1970), *facial movements* (Ekman 1977; Eibl-Eibesfeldt 1979), *gestures* (hand, arm, and head movements) (Efron 1941; Ekman & Friesen 1969a; Kendon 1987), *oculesics* (eye movements) (Argyle & Cook 1976), *haptics* (touching behavior) (Hall 1959), *paralanguage* (sounds produced using the vocal tract that are not speech, such as gasping or laughing) (Trager 1958; Argyle 1972; Poyatos 1975), *proxemics* (the use of space) (Hall 1959), and *chronemics* (the use of time) (Poyatos 1972; Bruneau 1979; Merriam 1983). Empirical research on the different forms emerged slowly, but it primarily focused on just a single channel or form of NVC at a time (Patterson 2006), and only a small amount of effort was dedicated to intercultural investigation of the forms. Then, during the 1970s, the first empirical data emerged demonstrating that NVC can communicate even more than words do, particularly during emotionally-charged interactions (Mehrabian 1972).

Despite the importance of NVC to communication, the only form that has received serious attention in terms of second language acquisition (SLA) is gesture, which Kendon (2004: 7) defines as "visible action when it is used as an utterance or part of an utterance." 1.2-1.2.3 below provide an overview of recent work in gesture. Gesture is typologically universal but, like language, it varies across speech communities (Abner et al. 2015) Although gesture has been studied in terms of second language acquisition in recent years, the focus has remained on manual gestures despite the fact that gestures can be produced with the hands, arms, head, or face (Abner et al. 2015). Further, there has been little to no empirical work dedicated to studying other forms of NVC such as facial movements, oculesics, haptics, paralanguage, proxemics, and chronemics in terms of second language acquisition.

So, even though segmenting NVC by its forms renders it slightly more approachable for analysis (i.e. the ability to group like behaviors together, such as movements made with the hands vs. movements made with the facial muscles vs. movements made with the vocal tract and the emergence of the field of study of co-speech gesture), it appears that something more is needed if distinctions are to be drawn between those nonverbal acts that contribute to communicative competence and those that do not.

1.1.2. Functions of nonverbal communication

One way to determine if a nonverbal act contributes to communicative competence is to assess if it works with a verbal message in some way. This can be achieved by examining if a nonverbal behavior fits one of the six different functions NVC can serve: (1) complementing, (2) repeating, (3) accenting, (4) contradicting, (5) substituting, and (6) regulating (Malandro et al. 1989).

The first three functions are ones in which the nonverbal message works "with" the meaning of

the verbal message. For example, a nonverbal message that *complements* adds additional information or insight so that the meaning of a verbal message is further developed in some way. Tone of voice, facial expression, and gestures are all things that complement a verbal message by clarifying or reinforcing a verbal message, as when a teacher slams a fist on a desk to accompany a command (Malandro et al. 1989). Nonverbal messages that function to *repeat* are similar to complementary messages in that they emphasize or clarify a verbal message, but the difference is that a repeating message can stand alone without the verbal message while a complementing one cannot. An example would be holding up two fingers to signify you want two bags of popcorn while ordering in a noisy ballpark (Malandro et al. 1989). Accenting messages are also similar to complementing ones, but they differ in that they emphasize a particular point in a verbal message instead of the entire message. Pausing before or after a particular point functions to highlight a specific part of a speaker's message, as does kissing a spouse on the cheek highlight that you still love them while you state this as part of an apology for an earlier fight.

On the other hand, functions (4)-(6) do not work directly with the meaning of the verbal message, but they still add communicative value. In fact, some nonverbal messages even *contradict* verbal ones; this often results in confusion for the people decoding the "mixed" messages. An example would be someone verbally expressing gratitude for a gift while an obviously fake smile communicates that the gift is not liked (Malandro et al. 1989). In contrast, *substituting* messages do not accompany a verbal message at all. They often occur when barriers to verbal communication exist, such as a noisy cafeteria or large physical distance. In this situation, a person might wave to a friend instead of shouting a greeting. Sometimes, however, substituting nonverbal messages are chosen when no physical barrier to verbal communication exists, such as when a person chooses to glare at a person speaking to express dissatisfaction that the speaker is revealing something embarrassing about them (Malandro et al. 1989:14). Finally, *regulating* messages serve a function outside of content entirely: they mediate the flow of verbal dialogue. The most common signals include head nods and eye contact that communicate when someone is done speaking and who (if anyone) should speak next in a conversation.

Analyzing if a form of NVC fulfills one of these six communicative functions is a fairly objective method by which to determine if it contributes to communicative competence. However, there are two other, more subjective factors that must also be considered. First, another way to determine if a nonverbal act contributes to communicative competence is to consider if it serves a communicative function that language itself cannot. For example, Miller (2008: 59) suggests that focusing solely on the words that people exchange results in the false impression that the only goal of language is to exchange information. Alternatively, he offers, communication should be viewed as a tool via which humans exchange not only information but also "money, goods, services, love, and status." He further posits that communication acts could then be studied as "what people are trying to give and gain in their social interactions." On this view of communication, it is easier to understand how verbal messages are better suited for some exchanges and nonverbal messages for others, with each message type playing an important and complementary role in human communication (Miller 2008: 59).

For example, chronemic behavior (people's use of time) and grooming and dress habits are often labeled as types of NVC. But do they qualify as containing value for building communicative competence in a non-native culture? Neither of them seem to serve any of the six functions of NVC; however, they might seem to qualify under Miller's view that nonverbal messages are better suited than language when it comes to exchanging things other than information. If communication is viewed as "what people are trying to give and gain in their social interactions" (Miller 2008: 59), then chronemic behavior and grooming and dress habits could hold the potential to help people "give or gain" certain things that language cannot achieve as effectively. For example, there are many sociopragmatic rules governing the forms and use of verbal language to follow politeness norms, but

a person can still adhere to all of these verbal rules and still fail to demonstrate politeness if their other actions violate other aspects of politeness norms: arriving too late or too early to an event can be considered very rude and disrespectful. Similarly, the way one presents and adorns one's body can also communicate quite a lot. People who wear lots of jewelry but very little clothing vs. people who wear gothic clothing vs. people who wear flowy skirts and flowered headbands are all "saying" very different things about themselves and could be considered trying to achieve, fulfill, or maintain different types of reputations or identities. Every culture has a self-contained system for assigning meaning to different sorts of grooming or body adornment habits, through which things like status, respect, and fear can be established.

However, just because a nonverbal behavior can be used to communicate or exchange something other than information does not mean that it should be included as something to be acquired in second nonverbal code acquisition. The last, socio-psychological factor to consider is the extent to which a form of NVC is embedded within a person's identity. Just as with verbal language, it is important to ensure that second language learners are not forced to use an L2 (second language) or abandon use of the L1 (first language) in a way that harms the identity attached to their first language. The advantages and disadvantages of adopting a new form of NVC should be considered. For example, the risk of discomfort that people might feel by adopting different norms of use of time in a non-native culture (i.e. arriving earlier or later than what they feel comfortable with based on their native norms) seems to be outweighed by the advantage of not being perceived as rude or socially awkward. On the other hand, the end result of "blending in" does not seem to merit the discomfort and potential identity-infringement caused by encouraging someone to change their grooming or dress habits based on a non-native culture's norms.

In sum, under the definition given in 1.1., every behavior aside from speech *could* be considered NVC. However, for the aim of studying NVC in terms of communicative competence in second nonverbal code acquisition, it is important to consider three factors: 1) Does a form of NVC serve one of the six communicative functions related to language listed above? 2) Is a particular nonverbal message better suited than a verbal message for what is intended to be exchanged (i.e. an entity like respect or status) between two parties? 3) What is the ratio of risk (to one's identity) to benefit (in terms of communicative competence gained) associated with learning a particular non-native form of NVC?

1.2. Nonverbal communication and language

NVC is especially important when it comes to questions of second language acquisition because it plays a complementary role to verbal language and, like language, is used differently around the globe. For example, one way that NVC complements language is through the use of co-speech gesture to encode visuo-spatial information, such as the relative sizes or location of two objects (Abner et al. 2015). In this instance, co-speech gesture is used to encode information that verbal language alone cannot encode efficiently or with the desired level of detail.

As a point of clarification, the goal of this paper is not to argue that NVC is directly comparable to language. There are many aspects of language that make it different from NVC. For one, as mentioned above, language is produced with discrete beginnings and ends, while NVC is produced continuously. Second, language is considered a compositional system[3], which means that the meaning of its utterances is composed of both its forms and the way in which the forms are put together. Culbertson & Kirby (2015: 5) explain:

[3] Thank you to an anonymous reviewer for pointing this out.

> For example, the meaning of the word "stars" is derived from the meaning of the root *star* combined with the meaning of the plural morpheme *-s*. Similarly, the meaning of a larger unit like "visible stars" is a function of the meanings of the individual parts of the phrase. Switching the order to "stars visible" changes the meaning of the unit in a predictable way. [quotations in original]

The compositionality of language differentiates it from almost all other natural communication systems, which arguably are all holistic rather than compositional (Smith & Kirby, 2012). Indeed, NVC is considered a holistic system, which means that there is a simple one-to-one mapping between signal and meaning. As a result, language is much more productive than NVC. Productivity, one of Hockett's (1960) thirteen "design-features" or fundamental properties of language, means that language users can encode and decode infinitely new and creative utterances by piecing together forms of language in ways that align with the language's allowable patterns. NVC is not productive like language because the nonverbal signals that people use to create meaning cannot be combined together in different patterns to create new meanings.

Given these significant differences, one of the goals of this paper is not to highlight exact parallels between language and NVC but rather to call attention to some potential areas of similarity between the two that may reveal insights about second nonverbal code acquisition given current knowledge in the field of second language acquisition. However, just because language is more complex on the surface than NVC, this does not mean that the acquisition of second nonverbal codes will necessarily be simple. Of course, some nonverbal signals might be straightforward to teach and learn, such as the difference between signaling a quantity of three using the thumb and first two fingers or using the first three fingers (excluding the thumb).

Nevertheless, there are other forms of NVC that most certainly will be more difficult to master, such as how to use gaze appropriately to show respect (e.g. it can be hard to control one's eye in a way that is counter to one's usual behavior) or which behaviors to use within different zones of physical space (see 3.1. for more information). Furthermore, it cannot be ignored that people using second nonverbal codes are more than likely using them in conjunction with a second language. So even if NVC itself cannot be considered a fully complex system, it is important to acknowledge that people using second nonverbal codes must do so in a way that layers on top of the complex, compositional system of language in a cohesive and synchronized way, a task that should not be underestimated.

1.2.1. Gesture and language

The descriptive and explanatory work that has been done on gesture in recent decades has demonstrated a strong connection between language and gesture. Abner et al. (2015: 437) state that "At almost every level of analysis that linguists are interested in – from prosody to discourse structure – research has recently uncovered systematic and sometimes surprising relationships between language and gesture."

Gesture research has been used to further claims about connections between cognition, mental representations, and linguistic constructions. For example, Defina (2016) used analysis of co-speech gesture to uncover new evidence that serial verb constructions in Avatime refer to single events rather than multiple events, a topic previously lacking clarity as well as a viable method through which to investigate it. Defina's (2016) use of evidence from co-speech gesture to support claims about linguistic structures and their underlying mental representations highlights the value of continuing empirical research on nonverbal communication and its intersection with language.

1.2.2. Gesture and SLA: descriptive work

An example of a relationship between language and gesture that has been widely used in empirical study of gesture in SLA is the typological distinction between verb-framed and satellite-framed languages for path of motion (Talmy 1985, 2000). In this view, speakers are expected to perform path of motion gestures at the same time that they verbally articulate path of motion (either with the verb or with a satellite phrase, depending on the language). Speakers of verb-framed languages, like Spanish, express path of motion using verbs and thus nonverbally articulate path gestures simultaneously with verbally articulating the verb. Speakers of satellite-framed languages, like English, on the other hand, express path of motion using satellite phrases, such as adverbials or prepositional phrases, and thus nonverbally articulate path gestures simultaneously with verbally articulating the satellite phrase.

Results of whether speakers are able to successfully shift path of motion gestures to match native L2 ones have been inconclusive. Stam (2001, 2006, 2010) found that only one advanced speaker was able to shift gesture patterns from Spanish to English, and even then the gestures' timing mirrored the timing of native English gesture but the form was still Spanish. Kellerman and Van Hoof (2003) found that Spanish L1-English L2 speakers did not shift patterns, but that Dutch L1-English L2s put the path gesture on the verb when speaking English even though both Dutch and English are satellite-framed. They suggest verb-framed gesture as the unmarked option as one explanation of this finding. Finally, Negueruela et al.'s (2004) results aligned with Kellerman and van Hoof's in that even at advanced levels, L2 users did not demonstrate native L2 gesture patterns.

Path of motion gestures are just one example of the connection between linguistic structures and gesture patterns. Gestures for spatial frames of reference have also been shown to co-vary with typological linguistic patterns; for example, speakers of languages that use cardinal directions to discuss spatial relations (north, south, east, and west) also gesture towards cardinal directions as well (Levinson 2003). More work needs to be done to not only describe but also to understand the relationship between gesture typologies and language typologies.

1.2.3. Gesture and SLA: explanatory work

Kita's (2009) meta-analysis revealed four primary factors of cross-cultural variation in co-speech gesture: conventions on form-meaning associations (emblems), linguistic diversity in expressing spatial information, differences in spatial cognition, and gestural pragmatics. While this meta-analysis demonstrates a strong link between gesture and culture, it also suggests that there is still a great deal to explore. For example, "How exactly do emblems or gestural pragmatics originate?" "To what extent – and why – do linguistic typologies and gesture typologies overlap?" "How are cognition, gesture, and language related?"

Two major theoretical perspectives guiding gesture research in SLA begin to answer this last question: Slobin's concept of *thinking-for-speaking* and McNeill's Growth Point Hypothesis. Thinking-for-speaking could be considered a contemporary version of the Sapir-Whorf hypothesis. Slobin claims:

> There is a special kind of thinking that is intimately tied to language – namely, the thinking that is carried out, on-line, in the process of speaking… In the evanescent time frame of constructing utterances in discourse one fits one's thoughts into available linguistic frames…. In acquiring a native language, the child learns particular ways of thinking for speaking. (1996: 75-76)

Recalling Kita's (2009) findings that two sources of diversity in gesture are linguistic diversity in expressing spatial information and differences in spatial cognition, it makes sense that learning

different thinking-for-speaking modes would be tied to learning second gesture codes.

Further supporting this idea is McNeill's idea of the growth point – that together speaking and gesture comprise a single unit of meaning and express two different sides of thought (McNeill & Duncan 1998; McNeill 1992, 2000a, 2000b, 2005).

> When co-expressive speech and gesture synchronize … There is a combination of two semiotic frameworks for the same underlying idea, each with its own expressive potential. Speech and gesture are co-expressive but nonredundant in that each has its own means of packaging meanings. (McNeill 2005: 91)

If speech and gesture are two parts of a single, unified system and express two different sides to thought (McNeill 1992, 2005), then studying the SLA of gesture can give us another means by which to try to observe and understand L2 learners' thoughts, even if it is still indirectly.

In terms of pedagogical implications for SLA, this implies that second language teachers and learners must consider gesture and language as two inseparable components of well-formed utterances; both need to be learned for communicative competence to be obtained. Additionally, because research has shown that gesture is not merely a reflection of thinking but can even provide feedback that actually influences thinking (Goldin-Meadow & Beilock 2010), SLA teachers and researchers should consider how the acquisition or practice of second gesture codes might aid in the acquisition of second languages. Since learning a second language requires acquiring new online thinking processes, it could be that new physical codes, such as gesture, may be a way to speed up or ease the acquisition of new thinking processes related to underlying linguistic representations.

Gullberg (2006: 111) calls attention to the fact that "the SLA of gestural repertoires is a desperately underresearched area and questions regarding what, how, and when are wide-open to investigation." She says that gesture can be considered a system containing both receptive and productive knowledge that learners need to acquire. Because of this:

> The ways in which learners deploy gestures and the ways in which their gestures change with development can offer insights into communicative and cognitive aspects of the process of language acquisition (gestures in SLA) … Moreover, we need to investigate if and how learners can acquire gestural repertoires, and to tackle pedagogical and methodological challenges like teaching and assessment methods … The challenge is to integrate gestures into the field of SLA such that they can feed into and inform theories of L2 learning and L2 use. (Gullberg 2006: 104, 117 [parentheses in original])

If gesture might be able to reveal all of this, what else might be gained by studying the acquisition of the other forms of NVC as well?

1.3. Nonverbal communication and culture

NVC is extremely important when it comes to communicating with others from different cultures because, as Archer (1997: 86) keenly observes, "Someone who violates cultural norms for nonverbal behavior makes us profoundly uncomfortable… yet people never explicitly correct a nonverbal violation." For example, it is common in some Mediterranean cultures to hold the elbow of one's conversation partner, while to Americans this would be extremely disconcerting. Unfortunately, the result of violating nonverbal norms is typically rejection or avoidance of the offending person (Archer 1997).

Another reason that NVC is important to study interculturally is that there is no way to shut off the nonverbal messages a person sends aside from physically removing that person from the presence of others. So, even if people from different cultures have no words to exchange, they will still inadvertently communicate as long as they are in each others' presence. The idea that "one cannot not communicate," originally put forth by Gregory Bateson and later extended to nonverbal communication by Ray Birdwhistell, means that it is impossible to communicate nothing; for example, even silence can send a strong message and is used differently in communication by different cultures (Littlejohn & Foss 2009: 900). Given the ubiquitous nature of NVC, it is no wonder that it is often the source of cross-cultural miscommunication.

Anthropologist Edward Hall believed that the influence of culture on communication was so strong that he basically took the two to be equivalent (Littlejohn & Foss 2009: 533). In agreement, Littlejohn & Foss (2009: 533) claim:

> Differences in cultural values and perceptions can be a quiet, invisible source of great misunderstanding between people from different regions … the problem begins when our cultural verbal and nonverbal meanings are attached to the people of other cultures.

Today, learning how to communicate in another culture is focused largely on the verbal aspects of language. However, communicative competence (Gumperz & Hymes 1972; Canale & Swain 1980), a driving force in second language teaching and learning today, maintains that effectively communicating in a second culture requires more than just knowledge of grammar, and NVC is a prime example of this.

1.4. Communicative competence

Today, teachers of second languages are urged to consider what else students need to acquire in addition to the rules of language in order to be able to effectively communicate using an L2: in other words – the components of communicative competence. Gumperz explained communicative competence as follows:

> Whereas linguistic competence covers the speaker's ability to produce grammatically correct sentences, communicative competence describes his ability to select, from the totality of grammatically correct expressions available to him, forms which appropriately reflect the social norms governing behavior in specific encounters. (Gumperz & Hymes 1972: 205)

So, communicative competence requires knowledge not only of the rules of language but also of the rules of language *use,* or knowing when and how it is appropriate to use different forms. Communicative competence has been segmented into four aspects: linguistic, sociolinguistic, discourse, and strategic (Canale & Swain 1980). NVC plays a role in all four of these aspects of communicative competence.

First, NVC is important to linguistic and sociolinguistic competence because NVC plays a complementary role to verbal language, as discussed above. For example, in America, expressing condolences for someone's loss while grinning from ear to ear would not be considered "correct" even if the verbal message had no grammatical errors. Things like using body language and eye movements correctly are integral to behaving appropriately in different cultures, e.g. by lowering

one's eyes to show respect to others, by placing oneself at the appropriate distance from one's interlocutor based on the social situation, and knowing whether it is normal to arrive early, on time, or late to events. Next, NVC is an important part of discourse competence because regulating eye movements and some gestures help to moderate the flow of linguistic interactions; even informal regulating signals such as moving forward in one's chair or clearing one's throat serve as discourse cues (Xiong 2003: 125).

Finally, NVC is an important part of strategic competence because it is often what interlocutors rely on when one or more parties lack the shared linguistic resources needed to communicate verbally: "acting out" what one means is a typical course of action when verbal resources fall short. And, if a verbal interaction starts to unravel or go south, nonverbal communication can help to "save" the interaction if a miscommunication has occurred. For example, touching someone in a comforting way or moving the body to communicate submissiveness can be a quick way to disarm an unintentionally offended interlocutor, but "comforting touching" and "submissive body posture" are not defined the same way in all parts of the globe. Strategic competence is of particular importance to learners in the early stages of L2 acquisition who rely on it more than advanced learners do, so an emphasis on NVC during early stages of L2 acquisition could be of particular importance to learners.

1.5. Statement of purpose

NVC is particularly interesting for intercultural communication because it is the only communicative means available when two or more people do not share a spoken language and is usually relied on heavily if a speaker has a low level of proficiency in a language. However, even if interlocutors do share a verbal language, mutually incomprehensible or unshared nonverbal messages may frustrate the intended encoding and decoding of their messages. As Miller (2008: 57) states, "Misunderstanding of nonverbal communication is one of the most distressing and unnecessary sources of international friction." Although nonverbal communication is an important component of learning to communicate in a different culture, there is a gap in our understanding of people's ability to learn second nonverbal codes. (Here, the term *second nonverbal code* has been coined to refer to the nonverbal aspects of communication that need to be acquired to attain communicative competence in a second language.) There needs to be more effort dedicated to exploring people's ability to learn second nonverbal codes and to what extent doing so increases their communicative or cultural competence when using a second language.

To begin addressing this gap, I will explore the following questions:

(1) Which aspects of NVC are universal and which are culturally-constructed?

(2) Do cultural differences in NVC cause intercultural communication issues? If so, how?

(3) Which aspects of NVC are voluntary and which are involuntary?

(4) Is the study of second nonverbal code acquisition a worthwhile pursuit?

I argue that the answer to this last question is "yes" and conclude by proposing a framework within which further inquiry and empirical research on the acquisition of second nonverbal codes can be conducted.

2. Nonverbal communication: universal or culturally-constructed?

Is NVC universal or is it dependent on culture? If it is the former, then this whole discussion would be rendered moot. If it is the latter, then further inquiry can help uncover the extent to which NVC needs to be considered as part of what second language learners need to acquire in order to obtain

communicative competence.

2.1. A brief history of the debate

In 1872, Darwin published *The Expression of Emotions in Man and Animal* and claimed that mammalian NVC was innate. This launched a still ongoing debate over whether NVC is universal or culturally-constructed. In the 1920s, Wilhelm Wundt posited that gesture functioned as a universal language that allowed people to understand one another (Littlejohn & Foss 2009). From the 1940s through the 1960s, however, anthropologists such as Birdwhistell and La Barre argued that NVC was culturally-determined based largely on subjective, impressionistic data from observing other cultures (Eibl-Eibesfeldt 1979).

More rigorous and empirical study of intercultural gesture was first pioneered by David Efron in 1941, who found that it was sociological processes rather than race that influenced people's gestural repertoires. His work was followed by others such as Desmond Morris in the 1970s.

However, research started to emerge in 1970s that once again supported the universal / innate position, and this time it was empirically based. Work by Ekman (1977) found that six facial expressions were shared by cultures worldwide, suggesting that at least some facial expressions are universal or innate: fear, anger, sadness, disgust, happiness, and surprise. Eibl-Eibesfeldt (1979) provided further evidence of the universality of some facial expressions when he found that even congenitally blind and deaf children with no arms produced the expected patterns of facial expressions. However, things were still not so straightforward. Even though some facial expressions were demonstrated to be universal, different cultures were found to have different rules for when and how the facial expressions are displayed or used. These cultural conventions are called display rules.

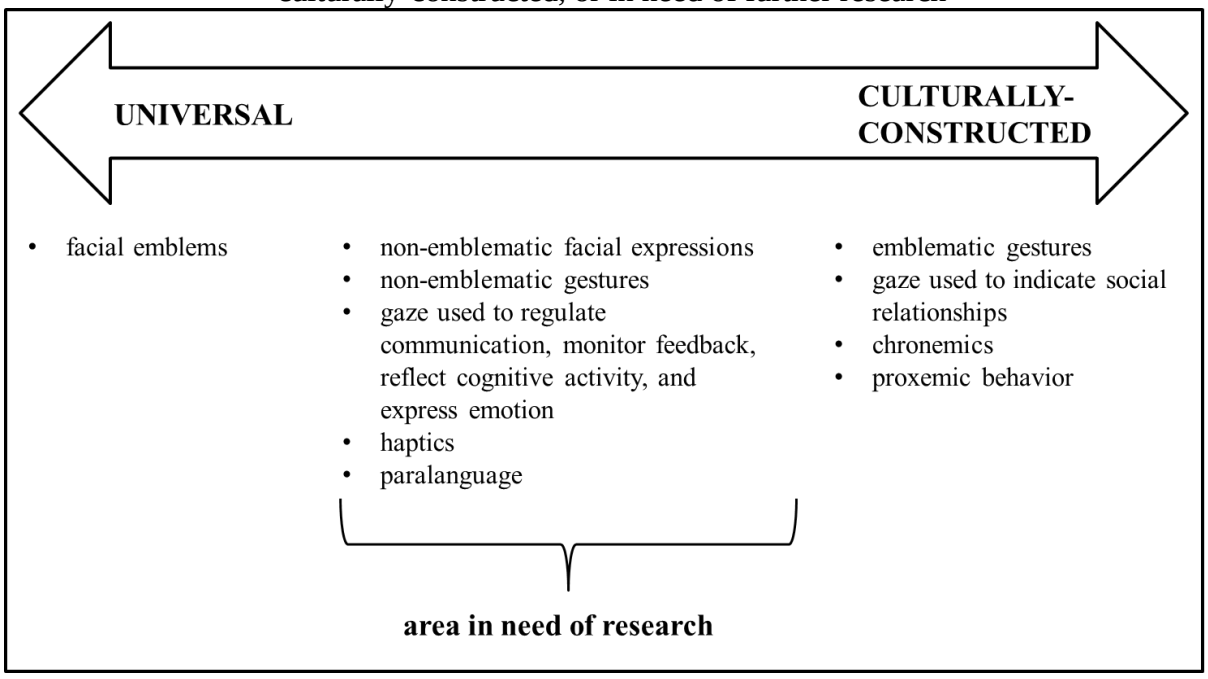
For example, although two cultures may share an emotional reaction "norm" such as that a loved one dying results in feelings of sadness, one culture's display rule may "prescribe that the chief mourners must mask their facial expression with a mildly happy countenance" while the other's culture does not (Ekman 1977). So, even though the forms of some facial expressions were found to be universal, their use was shown to vary across cultures.

2.2. Classification of forms as universal or culturally-constructed

The question of whether nonverbal communication is universal or culturally-constructed is still unresolved, in part because it is clear that there are at least some aspects of NVC that are culturally-determined and some that are more (if not completely) universal. Figure 1 below shows the different forms of NVC categorized as "universal" or "culturally-constructed" based on findings in the literature or as "area in need of research" if no data was found for a form in the literature. Here, *universal* means that the form of NVC is encoded and decoded across all cultures in the same way and mutual intelligibility likely exists because of some sort of biological origin/innateness of the form. (Note: This does not mean that the form is always displayed / realized to the same extent in all situations across cultures – see discussion of display rules above.)

Please note that while Figure 1 appears to use discrete categories, this was done simply to create a preliminary, simple model – it is more likely the case that instead of a binary classification of universal or culturally-constructed, a better representation would be a spectrum. 2.3, 2.4., and 2.5. below give more detail on the "universal", "culturally-constructed," and "area in need of research" sections of Figure 1, respectively.

Figure 1: Preliminary classification of the forms of nonverbal communication as universal, culturally-constructed, or in need of further research



2.3. Universal forms

As discussed in 2.1. above, there is only one form of NVC that has been empirically demonstrated to be universal: facial expressions. These expressions are sometimes called facial emblems since they have definable form-meaning associations, and since Ekman's (1977) original findings of six universal facial expressions (fear, anger, disgust, sadness, happiness, and surprise), two additional facial emblems have been identified: interest and contempt (Ekman & Friesen 1986; Matsumoto 1992). However, not all movements made with the face can be classified as universal. As only the expressions empirically demonstrated to be consistent across cultures can reliably be placed in the universal category at this point, the phrase "non-emblematic facial expressions" has been categorized as an area in need of future research and refers to any movement / expression formed by the face that is not considered a facial emblem.

2.4. Culturally-constructed forms

The forms of NVC that can currently be categorized as culturally-constructed are emblematic gestures, gaze used to indicate social relationships, chronemics, and proxemic behavior. It is no surprise to find that emblematic gestures are culturally-constructed because, by definition, emblematic gestures have conventionalized form-meaning associations. Ekman & Friesen (1969a: 63) define emblems as "those nonverbal acts which have a direct verbal translation, or dictionary definition, usually consisting of a word or two, or perhaps a phrase. This verbal definition or translation of the emblem is well known by all members of a group, class, or culture."

Emblematic gestures are similar to the sounds and structure of most verbal components of communication in that for the most part the forms have an arbitrary relationship with meaning and, because they are not self-evident or intuitive, can result in miscommunication if communicators lack a shared code. For example, in the U.S. sticking out the tongue signifies ridicule or contempt while in other cultures it is a sign of self-castigation or admission of a social mistake.

Gaze patterns that function to indicate social relationships are the only type of oculesic behavior

that can be categorized as culturally-constructed. For example, the norm in many Latin American and Asian cultures is for children to avoid eye contact with people of authority such as teachers, which could be interpreted as disrespectful or dishonest in other cultures. Several studies have demonstrated that gaze patterns related to social relationships are culturally-constructed. For example, the gaze heights of African-American and Anglo-American of speakers and addressees exhibit opposite patterns when it comes to which conversation partner holds a higher gaze (LaFrance & Mayo 1976; Erickson 1979). Additionally, people of some cultures, such as Bosnian Muslims and some traditional Vietnamese, do not look at people of the opposite sex or at the elderly (Galanti 1997). However, the fact that these studies are fairly dated should highlight the importance of revisiting gaze patterns that communicate information about social relationships with more modern methods, such as videography.

Gaze patterns indicating social relationships are just one of the five different functions of gaze patterns outlined by Knapp & Hall (2002): regulating conversation, monitoring feedback, reflecting cognitive activity, expressing emotions, and communicating social relationships. As there has been little research on cross-cultural gaze patterns when it comes to the other four functions, modern methods should also be extended to include the other functions of gazing as well.

Chronemics, or the way that people use time, is considered a form of NVC because the way that people use time "communicates." Just consider the contrast in the messages sent by people who always seem to be in a rush and those who behave in very slow, non-urgent ways. Many elements of chronemics exhibit cross cultural variation. For example, punctuality is conceptualized differently by different cultures. Brazilians define "late" at 33.5 minutes but "early" at 54 minutes ahead of schedule. On the other hand, Californians define "late" at 19 minutes, with the average American considering "early" as 25 minutes ahead of schedule (Malandro et al. 1989). Another way in which the use of time is culturally-constructed is that some cultures are considered monochronistic (e.g. they schedule only one thing at a time) while others are polychronistic (e.g. they schedule multiple things at a time) (Hall 1959, 1983).

The last form of NVC classified as culturally-constructed in Figure 1 is proxemic behavior, or the use of space. This is because the four different zones of space that people use when interacting (Hall 1959, 1966) – intimate, personal, social, and public – are defined at different distances by different cultures. The norms for the different types of spaces exhibit cross-cultural variation to the extent that, for example, the Arab "social" space is the American "intimate" space (Xiong 2003).

2.5. Forms in need of research

The middle section of Figure 1, labelled "area in need of research" highlights a gap, as there is not yet enough data on many forms of NVC, such as non-emblematic facial expressions, non-emblematic gestures, four of the five functions of gaze patterns, haptics, and paralanguage, to classify them according to universality.

A brief note on haptics: while there have been demonstrated differences between cultures in the frequency / amount of touching in given situations, such as between couples in public (Jourard 1966), there has not been much inquiry into more of the specifics of haptics such as what different types of touching mean and how they are used across cultures. Does touching "mean" the same in all cultures (i.e. is a kiss always a sign of affection?) with display rules prescribing different rules of use, or are there different forms of touching in different cultures that are used to express similar sentiments? Are there meta-differences such as some cultures using haptics to express something that is not expressed by haptics in another?

As a final comment on Figure 1, it would be remiss to not draw attention to the fact that the picture is not as straightforward as it would seem for those forms that have already been classified as universal or culturally-constructed. Just as facial emblems, the only form to yet be demonstrated as universal, can exhibit cultural variation via display rules, so too do we find surprising cross-cultural

similarities in some emblematic gestures. For example, Americans and Colombians both nod heads for agreement, shake fists in anger, wave hands good-bye, and indicate disapproval with a thumbs-down gesture (Rowe & Levine 2012). This highlights the need for additional work, not only descriptive but also explanatory. Can insights be drawn that explain why some cultures share certain emblematic gestures? Can theories be posited to explain how, on the basis of linguistic typology, cultural typology, or maybe even something else such as geography or climate, differences in gaze patterns, chronemics, and proxemic behavior arise?

3. Nonverbal communication and intercultural communication issues

The existence of cross-cultural variation in the forms of NVC does not automatically imply that problems with intercultural communication will arise, yet we do see several situations in which NVC causes intercultural miscommunication or tension. One situation ripe for conflict is when cultures share an identical gesture but assign it different meanings. "Gestural gaffes" can occur when people use a gesture that means something different in a culture that is not their home culture or when they fail to interpret a non-native gesture correctly (Archer 1997: 80). For example, the emblematic gesture for "OK" in the U.S. means "money" in Japan, "sex" in Mexico, and "homosexual" in Ethiopia (Archer 1997: 81).

Second, miscommunication or tension can occur when there are slight differences in gestures that result in huge semantic differences. For example, holding a finger to one's forehead means "stupid" in many European cultures, but moving the finger just a small distance to the temple means the exact opposite in America, where it signals "smart" (Archer 1997: 95). Given these two examples, it is important that intercultural communicators do not assume they will be able to encode and decode another cultures' gestures correctly, and it would be prudent to extend this cautious approach to the other forms of NVC as well. With gesture, we are starting to get a grasp of what we know that most people do not know about each other's gestures, but with the other forms of NVC we still do not know what we do not know.

There are also more covert factors in which lack of communicative competence in another culture's nonverbal behavior causes miscommunication. One is when cultures have meta-differences in NVC. Archer (1997) found that categories of gesture are not invariant across cultures: some have a rich collection of obscene gestures while others have none, many cultures have a gesture for male homosexuality but only one has a gesture for lesbianism (Uruguay), and some cultures have highly distinctive categories of gesture based on the concerns of that particular culture that are not found in any other culture. In these sorts of situations, miscommunication can occur because non-native communicators will not only not know what gestures are being used, but they will also have little ability to anticipate what they may mean because of the meta-differences.

Another covert factor is when cultures share the same form and assign it the same meaning but have different conventions that prescribe when it is appropriate to use. For example, a smile is a universal sign of happiness or general positive feelings, but smiling in school pictures is common in the U.S. but not in Russia. And, finally, in at least one culture, gesture is a requirement for a complete message. Wilkins (1999) documented that the Arrernte people from central Australia use a fully integrated speech-gesture system for demonstrative expression, and one can imagine how a foreigner could easily focus on just the verbal language in this situation and either fail to comprehend or produce a message accurately.

In addition to gesture, there are many other documented differences in forms of NVC that can cause miscommunication or tension. For example, greeting ritual behavior differs greatly by culture: it is common for Americans to shake hands, for Polynesians to rub each other backs, for Northwest Amazonians to slap each other on the back, and for the Andamanese to sit in each other's lap, wrap arms around each other's necks, and weep (Malandro et al. 1989). It is easy to see that employing the

"wrong" greeting ritual in a different cultural context might unintentionally communicate standoffishness, romantic interest, aggression, or weakness.

Another often overlooked area of NVC that can cause tension during intercultural interaction is chronemics. Chronemics can become an intercultural communication issue if cultures share different notions of punctuality. Since being late can imply disrespect or disinterest, tension can arise if someone arrives late by another's standard but not their own and does not apologize or show acknowledgement of the social gaffe.

Like chronemics, proxemic behavior is another form of NVC that can cause intercultural communicators to think that the other is being "rude" even though they are just following the norms of their own culture. By studying a group of healthy, middle-class American adults primarily from the Northeastern United States, Hall (1966) defined four physical zones of spaces used by Americans in communication: intimate distance (0-18 inches), personal distance (18 inches-4 feet), social distance (4-12 feet), and public distance (12-25+ feet). Standardized behaviors occur at the different zones of space. For example, the intimate zone is reserved for lovers and close personal contacts for behaviors like lovemaking and comforting, and Hall (1966) found that people became fidgety and uncomfortable if a stranger entered their intimate zone of space; participants would even attempt to remedy the violation by attempting to reestablish the proper distance. However, the types of behaviors that occur at different distances vary across cultures.

Generalizing on his findings, Hall (1969: 183) stated,

> People of different ethnic origins need different kinds of spaces, for there are those who like to touch and those who do not. There are those who want to be auditorially involved with everybody else (like the Italians), and those who depend upon architecture to screen them from the rest of the world (like the Germans).

More specifically, Hall (1966) lists some of the ways in which it is common for Arabs to use space that would likely make many Americans uncomfortable: crowding levels in public places, pushing and shoving in public spaces, and conversing at close physical distance. Given these differences in norms of proxemic behavior, Americans might perceive Arabs as hostile or aggressive while Arabs might perceive Americans as aloof or standoffish.

Still, caution must be taken not to overgeneralize. In addition to individual variation, not everyone within an ethnic group will share the same patterns of proxemic behavior. Variables like sex, status, and social role, to name a few, all contribute to shaping an individual's behavior.

3.1. Nonverbal competence

It seems intuitive based on the section above that, at least for some forms, NVC is an important component of smooth and efficient communication between cultures, but is there data to support this? A small amount of empirical research has moved beyond concerns of whether NVC is universal or culturally-determined and has explored questions of cultural competence related to NVC. Findings do support the idea that better "proficiency" in NVC is correlated with increased intercultural competence. Rosenthal et al. (1979) developed the Profile of Nonverbal Sensitivity (PONS) Test to test the abilities of people from 58 different cultures to decode multi-channelled NVC of American English. They found that there was variability in decoding ability across cultures and that subjects whose backgrounds were culturally and linguistically similar to the US did better than those who were more distant. Molinsky et al. (2005) found that the ability to distinguish between real and fake gestures in a foreign setting was positively correlated with self and external rankings of intercultural competence.

This is a good start, but still the primary focus has been on gesture. Further inquiry into the diversity (and its source) of the different forms of NVC and the role they play in communicative

competence must be done to gather more insight into the nature of the second nonverbal codes that second language learners need to acquire.

4. Nonverbal communication: voluntary or involuntary?

Keeping in mind that the end goal is to determine if and then how exactly the acquisition of second nonverbal codes can contribute to second language learner's communicative competence, it is important to acknowledge that simply refining the placement of all the forms of NVC in Figure 1 would not be sufficient. In addition to determining what cultural variation there is in the forms of NVC, it is also important to acknowledge that not all forms of NVC may be entirely under a learner's control.

With this in mind, I propose that in addition to the dimension of "universality vs. culturally-constructedness," another dimension needs to be included to direct further nonverbal code acquisition research: involuntariness. It seems fruitless to attempt to learn second nonverbal forms that are involuntary – how can one force oneself to change involuntary behaviors?

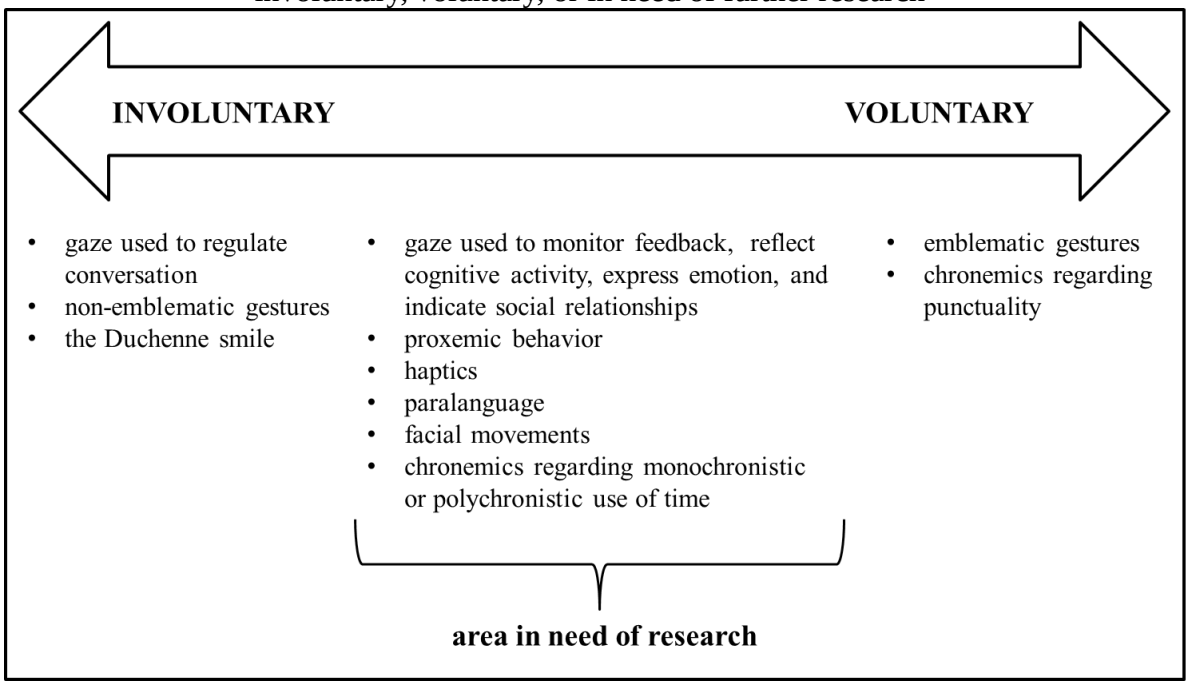
4.1. Classification of forms as voluntary or involuntary

As an attempt to begin assessing the voluntariness of the many forms of NVC, I propose Figure 2, which classifies forms of NVC as "involuntary," "voluntary," or "area in need of research" based on a review of the literature. The definition of involuntariness I used to create Figure 2 is as follows: a form of NVC is involuntary if it is encoded both *involuntarily* and *unconsciously* by the producer. To explain these two terms further, here *involuntary* production of a form of NVC by an encoder entails two characteristics. First, the form of NVC was not *intentionally* begun by the encoder, and second, the encoder does not have *control* over the form (e.g. either cannot stop producing or cannot alter the form). On the other hand, *unconscious* means that the producer has no *awareness* that the form is being encoded[4].

While not everything performed involuntarily is necessarily unconscious (for example, a sneeze is produced involuntarily but is still conscious), for the sake of concision I intend for the strongest classification of involuntary to also imply unconsciousness. However, I believe that with the proper training or exposure, namely consciousness-raising, there will be some forms of nonverbal communication that can move from "unawareness" to "awareness" and in the process will also move from "unintentional and uncontrollable" to "intentional and controllable."

[4] Awareness, intention, and control are three components that have been used to distinguish automatic behaviors from controlled behaviors, which roughly parallel the terms involuntary and voluntary used here. See Bargh (1994, 1996), Posner & Snyder (1975), and Shiffrin & Schneider (1977) for additional information.

Figure 2: Preliminary classification of the forms of nonverbal communication as involuntary, voluntary, or in need of further research



My intention is that Figure 2, like Figure 1, be interpreted as a gradated spectrum rather than as a binary classification, and this is consistent with others' interpretation that there is a continuum of involuntariness (Bargh 1996, 1997; Bargh & Chartrand 1999)[5]. This is because awareness, intention, and control can appear to different degrees and in different combinations with each other – thus the continuum. 4.2., 4.3., and 4.4. below detail the involuntary, voluntary, and area in need of research sections of Figure 2, respectively.

4.2. Involuntary forms

Despite claims in the literature that certain types of NVC are involuntary, it is hard to find supporting empirical evidence. Miller makes the following claim about regulating eye moments but does not substantiate it with any data, "Whatever the pattern of eye signals that two people are using, they use them unconsciously" (2008: 55). He goes on to make a similar statement about non-emblematic gestures, "If you take a moving picture of someone who is deeply engrossed in a conversation, and later show it to him, he will be quite surprised to see many of the gestures he used and the subtle effects they produced" (Miller 2008: 57). Non-emblematic gestures seem to parallel regulating eye movements in that they seem to serve some regulating function in conversation, all unconsciously to the producer.

Perhaps as a result of their regulating, unconscious nature, both forms also carry relatively little content information. Perhaps this is why these forms are involuntary – it makes sense that communicators should dedicate their working memory to the content they are producing or receiving and that regulating behaviors are implicitly learned when young but later controlled subconsciously, like walking or following the grammar of one's native language. Similarly, all humans know how to breathe even though they likely cannot articulate the rules or mechanisms they are following to do so: breathing occurs without conscious control. Just as discomfort and awkwardness can arise when

[5] The literature cited here uses the term *automaticity* instead of *involuntariness*.

a person attempts to control natural breathing, so too do things become unnatural when attention is paid to eye moments. "If you try to become aware of your own eye moments while you are talking to someone, you will find it extremely frustrating. As soon as you try to think self-consciously about your own eye moments, you do not know where you should be looking" (Miller 2008: 55). Just as we are better at subconscious rather than conscious walking, breathing, and using native grammars, so too are we not as adept at consciously performing regulating eye moments and non-emblematic gestures. Regulating eye movements and non-emblematic gestures seem to be learned but unstudied. Perhaps because they are implicitly learned they are better implicitly produced as well.

The Duchenne smile, the last form classified as involuntary in Figure 2, is a specific type of smile that involves movement of the muscle that surrounds the eye (orbicularis oculi) in addition to the zygomatic muscles that pull up the corners of the lips (Ekman 1989; Duchenne & Cuthbertson 1990). The Duchenne smile is separated from other types of smiles because it is purported to evidence genuine positive feelings of enjoyment (Ekman et al. 1980) and cannot be faked or produced voluntarily; the outer ring of the eye muscle can be contracted voluntarily but the inner ring cannot (Hager & Ekman 1985; Ekman et al. 1980). Despite being involuntary like regulating eye movements and non-emblematic gestures, it has some notable differences from these other two forms. First, it carries a large amount of content information, both positive and negative, because genuine smiles as well as forced smiles are both recognizable.

Second the Duchenne smile is not learned, even implicitly, as congenitally deaf and blind children produce it (Eibl-Eibesfeldt 1979). However, an explanation that would resolve this second difference is that all three involuntary forms are innate and it just appears that regulating eye movements and non-emblematic gestures are implicitly learned because they are not mastered fluently by children until later than the Duchenne smile, possibly due to the timing of motor control development.

Even though there are involuntary forms of communication and they do not always appear to contain a lot of content information, they are still important to the study of second nonverbal codes. Alibali et al. (1997) claim that speakers are not usually aware of the gestures they produce during speech, but that they likely still have a sense of which gestures are acceptable and which are unacceptable, which implies that there are "grammatical" and "ungrammatical" uses of nonverbal communication just as there are of verbal language. Abner et al. (2015: 442) suggest that a promising area for future study would be "…the extent to which speakers have firm intuitions about the forms of gestures and the timing of gesture and speech. Such intuitions would be akin to notions of grammaticality and acceptability…" So, even if the knowledge is unconscious (just like most people's knowledge of the grammar of their L1), knowing the correct forms and timing of gestures that accompany a language are important parts of communicative competence.

4.3. Voluntary forms

Moving to the right-hand side of Figure 2, we find emblematic gestures and chronemics as the two forms of NVC that can be classified as voluntary. These classifications were not made based on evidence from the literature but rather from reason. A person of good psychological health does not involuntarily stick out their tongue or move their fingers in specific ways to form the signs that are emblematic gestures. Theoretically, with the proper training and skill, people should be able to acquire second nonverbal forms that are voluntary or at least suppress formation of their native ones when using a foreign language. As for chronemics, it is also reasonable to assume that people are in control of their punctuality (arriving at a scheduled time or a certain amount of minutes before or after), but admittedly the way that people use time (monochronistically or polychronistically) might not be as voluntary, so this has been categorized as an area in need of further research.

4.4. Forms in need of research

There has not been much said in the literature as to the voluntariness of the other four functions of gaze, proxemic behavior, haptics, paralanguage, facial movements outside of certain types of smiles, and monochronistic or polychronistic use of time. There have been several research efforts investigating the automaticity of the encoding and decoding of psychological constructs such as social relationships, emotional expression, prejudice, personality traits, and expectancies, of which nonverbal communication is an important part, but the research pays minimal if any attention to analyzing the use of specific forms of nonverbal behavior to communicate them. When the research has paid attention to the use of nonverbal communication, it has only been able to demonstrate indirectly the automaticity of a few nonverbal behaviors such as the Duchenne smile, blushing, and tone of voice (see Choi et al. 2005 and Lakin 2006 for reviews).

For example, studies on deception have revealed the phenomenon of "leakage," or uncontrollable and unconscious nonverbal behaviors that give people away (Ekman & Friesen 1969b, 1974; Rosenthal & DePaulo 1979a, 1979b). Tone of voice is often the most revealing channel of nonverbal communication, followed by the face and body (Rosenthal & DePaulo 1979a, 1979b; Scherer et al. 1985). Interestingly, even people conscious of leakage cues who try to control them have been found to be unsuccessful. For example, Feldman & White (1980) found that because people are often more aware of the face's ability to give away true feelings, attempts to control facial movements often result in leakage cues being unknowingly "shunted" (Choi et al. 2005: 316) to the body.

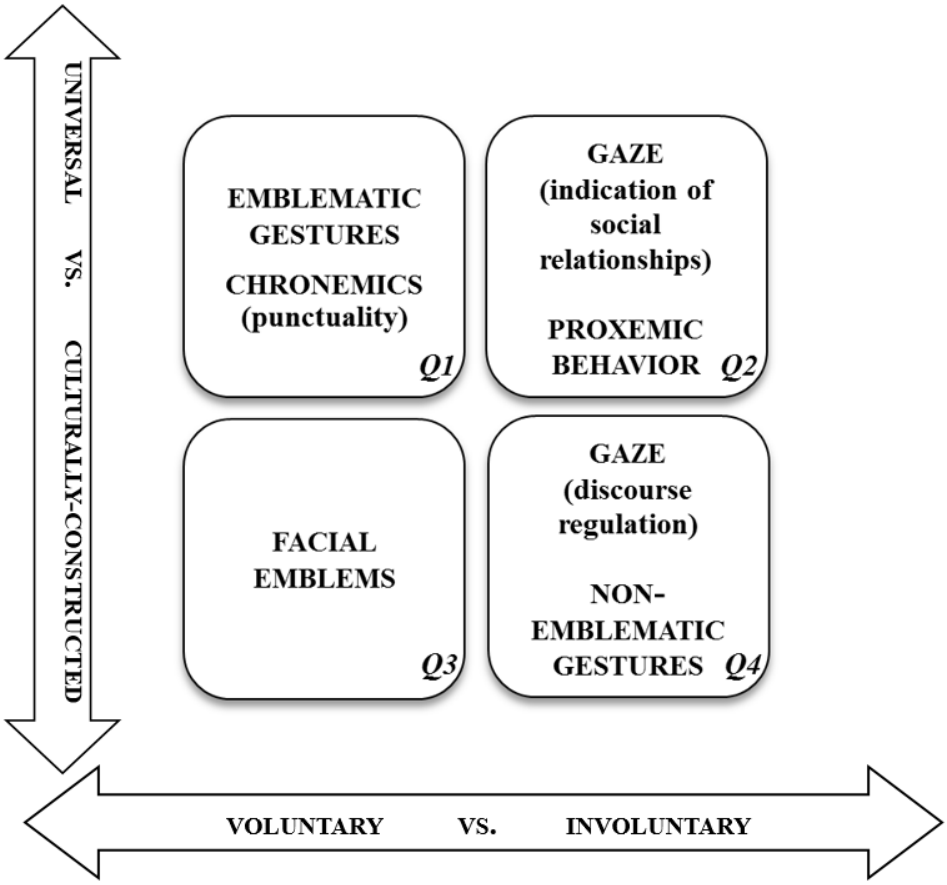
All of this work constitutes a solid foundation, but targeted inquiry into the different forms of NVC that produces definitive evidence of the extent to which humans have control over them is an important component of investigating the acquisition of second nonverbal codes. To solicit such evidence, Lakin (2006: 71) suggests methods such as reducing the level of consciousness involved, using funneled debriefing procedures, and performing awareness checks and concludes that "future work in nonverbal communication would benefit from explicit acknowledgement of the role that both automatic and controlled processes play in the encoding and decoding of nonverbal behaviors." Without this, teachers and learners of second languages will not be able to make informed decisions about where and how to target efforts to learn NVC forms.

5. A research framework for second nonverbal code acquisition

By exploring how forms of NVC can be classified as "universal vs. culturally-constructed" and "involuntary vs. voluntary" based on past scholarship, this paper has revealed several gaps. In order to start addressing these gaps and encourage that the intersection between NVC and SLA include attention to a wider variety of forms than just gesture, I now introduce a framework that unifies the forms of NVC in a way that makes future empirical research into the acquisition of second nonverbal codes possible.

The framework suggests that future research on second nonverbal code acquisition should begin by segmenting forms of NVC into a matrix that simultaneously organizes them on scales of "universal" to "culturally-constructed" and "involuntary" to "voluntary." See Figure 3. The resulting matrix makes possible an analysis of the feasibility and value of second nonverbal code acquisition. Theoretically, the more voluntary a form is, the more feasible it will be to acquire, while the forms that are the most involuntary may not be able to be acquired at all. Similarly, the forms that are the most universal will be of the least value to acquire because they cannot cause intercultural miscommunication if they are shared between all cultures, while those that are the most culturally-constructed will be the most valuable to acquire. Each quadrant will have its own set of research questions and implications for the acquisition of second nonverbal codes.

Figure 3: A research framework for second nonverbal code acquisition



Two notes of clarification are appropriate here:

1. the axes are not binaries but rather continuums – a form may not fall neatly into a single quadrant in the matrix; and
2. the forms in the matrix in Figure 3 are exemplary only. Before being able to fully explore the research questions suggested by each quadrant and understand the implications associated with each, it is first important to gather more empirical evidence to refine the position of these exemplary forms and to classify more forms into their correct quadrants.

The matrix is useful because it provides a comprehensive framework by which to approach all the forms of NVC in terms of second nonverbal code acquisition. The comprehensiveness of this approach makes it unique. Most work on NVC has been done in isolation of some sort: focusing just on one form of NVC, just on trying to prove the universality of or the role of culture in shaping NVC forms, just on the importance of NVC as relates to verbal language, just on whether or not an L2 learner uses L1 or L2 gestures, etc. Under the assumption that NVC plays an important and complementary role to verbal language, this framework offers a way to examine people's ability to learn different components of second nonverbal codes, to assess the value of doing so for each, and ultimately to prioritize which forms should be given the most attention.[6]

[6] One implication of the matrix is that second language learners will eventually be able to code switch nonverbally.

In 5.1. through 5.4., I will explain the placement of the exemplary forms in Figure 3 into their different quadrants, pose some research questions for each quadrant, and hypothesize what potential findings for each quadrant might mean regarding the feasibility and value of nonverbal code acquisition. However, this is intended only as a starting point. My hope is that further research would classify more forms of NVC into their appropriate quadrants, explore and be able to represent in the framework how forms do not fall neatly into a single quadrant, make new recommendations about the feasibility and value of nonverbal code acquisition, and provide more insights into the relationships between the forms of NVC, language, and culture.

5.1. Quadrant 1 (Q1): voluntary and culturally-constructed

Forms in Q1 should be the most feasible for someone to acquire, as they are both voluntary and learned. Emblematic gestures should be especially accessible to learn because they are semiotic. Theoretically, acquiring emblematic gestures should just be a matter of learning how to form the signs, what their attached meanings are, and when and how it is appropriate to use them. But, are Q1 forms indeed the most feasible for someone to acquire because they are voluntary and learned? Does this necessarily imply ease of acquisition? Using the vocal tract to produce phonemes is also voluntary and learned, but there is often great difficulty when it comes to learning the phonemes of a new language. There might also be similar difficulty when it comes to learning different forms of NVC.

Perhaps examining how exactly children acquire culturally-constructed and voluntary forms of NVC would help us understand how second nonverbal code learners need to go about the process. If children learn them explicitly, then there might be hope that acquisition will be fairly straightforward for second nonverbal code learners as well. If it is implicitly, then acquisition will be harder and time spent immersed in the culture will be essential to acquisition of these forms. Archer (1997) observed that young children, despite knowing correct gestures, are not often able to produce or use them fluently until late adolescence – in early childhood they have been shown to use a second hand to manipulate their fingers into the correct configuration. Archer (1997: 90) concludes that since these behaviors are never taught explicitly they must be acquired through direct observation, yet he acknowledges that "we have very little exact understanding of how this learning occurs."

Already with this first quadrant, we see that grouping forms together by universality and voluntariness might not readily result in a very clear or unified picture of how they should be approached in terms of second nonverbal code acquisition. Ideally, all the forms in a single quadrant of the matrix should be able to be approached in the same way when it comes to second nonverbal code acquisition, but we can already anticipate how that is not the case for Q1 forms. For example, even if simply explaining to learners a culture's notions of punctuality and outlining the consequences of not adhering to them might be sufficient for acquisition of punctuality norms, this surely will not be the case for emblematic gestures. Learners undoubtedly will have to watch gesture several times and then engage in a sufficient amount of practice because not only the form but also the timing (in

Anticipating this does bring up a few concerns. First, nonverbal code switching will likely be trickier than verbal code switching because not only do code switchers make choices about which code to use "to achieve certain social ends… but speakers make choices with the expectation that addressees will recognize a choice as carrying a particular intention" (Myer-Scotton 1998:19). When code switching verbally, the communicators involved can recognize which language, dialect, or register is being used due to grammatical and phonological characteristics – these cues are not available when it comes to nonverbal messages. Thus, there arises the issue of proper decoding of the nonverbal messages. If two people from different cultures are communicating and it is obvious which culture's NVC forms would be more applicable, proper decoding seems more likely. For example, when a tourist visits a foreign country it seems more likely that the responsibility lies on the tourist to adopt the behaviors of the foreign country. In other situations, as in international political or business meetings, it may be more ambiguous. What if both parties communicating attempt, with inconsistent levels of success, to use the others' NVC patterns? This might result in frustration and confusion for all parties involved.

relation to speech) and the pragmatic norms of use will need to be mastered.

There are still many other questions suggested by Q1. How does the "lexicon" of emblematic gestures differ between cultures? If there is not a "1-to-1" translation then acquiring second nonverbal forms in this quadrant might not be as simple because learners will need to build new semantic categories. What relationship is there between gesture and language typology? Are gestures determined by language typology, non-linguistic factors, none, or both?

Acquiring Q1 forms seems the most valuable, as they have the most potential to cause cross-cultural tension and miscommunication (see 3. above). For this reason, probably the most urgent task related to Q1 would be to determine what other forms of NVC fall into this quadrant.

5.2. Quadrant 2 (Q2): involuntary and culturally-constructed

Next, Q2 forms are involuntary and culturally-constructed. Because they are culturally-constructed, they have to be learned in some capacity. However, because they are involuntary they will be harder to acquire and use "fluently" than Q1 forms. It seems that one should have control over where one looks (gaze) and how one uses space (proxemic behavior), but it could be possible that Q2 forms become involuntary because they are more strongly linked to cultural values and somehow become more engrained. In other words, because these forms are not biologically hardwired, it is possible to learn to exercise some amount of control over them, but because they are learned implicitly over time and have connections to cultural values, it may be difficult to learn to do so.

Emblematic gestures are arbitrary signs, but things like looking or not looking at others and how close we stand to others reflects a view of the world that encodes ideals of respect, relationships, politeness, etc. Learning these forms is more than just learning new arbitrary sign-meaning associations. If a person does identify with the values of the culture from which they learned native display rules, then learning to adhere to new display rules might feel like violating some internal principles. It is probably at least somewhat involuntary to perform those nonverbal forms that match "gut values," and consciousness-raising and a fair amount of practice will likely be required to change a person's use of these forms.

In fact, Archer (1997: 98) argues that there are some types of nonverbal behavior such as appropriate speaking distances and eye contact norms that are different from gesture in that not only are they unconscious, but, even if prompted, cultural natives would likely be unable to articulate the "rules" for them. Like Q1, it would be helpful to determine how exactly children acquire culturally-determined and involuntary forms of NVC and if this differs for adults. It seems likely that children acquire these forms implicitly since the forms are involuntary and since explicit discussions of things like how close to or far away from others to place oneself in different social situations is not commonplace. In fact, inability to pick up on these things is considered pathological, as in the case of autistic children. Can adults also learn these implicitly if they are immersed in another culture, or is there some sort of sensitive or critical period after which learning becomes more difficult, as hypothesized for learning some components of verbal language?

Another area to explore would be how empirical evidence might prove that some gaze patterns or proxemic behavior is actually involuntary. Because of claims that regulating eye movements are involuntary, I have placed gaze patterns that communicate information about social relationships as involuntary as well. This was done under the assumption that whenever the eyes are used to communicate non-content related information, the movement is involuntarily. However, another important question would be whether gaze patterns can be classified wholly as either involuntary or voluntary, or if it differs based on the function of the gazing.

Can involuntary forms somehow be "raised" to the level of voluntariness? For example, can people eventually learn to control forms that might initially be involuntary if they are given the proper training and consciousness-raising tactics? If people simply cannot learn to control involuntary forms of NVC, then the focus should be on consciousness-raising regarding intercultural differences.

However, Lakin (2006) suggests that people can indeed learn how to control behaviors that are usually automatic or unconscious:

> We may be unaware of the nonverbal cues that we encode typically, but we can direct our "internal eye" easily onto these behaviors and therefore become more aware of them. People may not process the nonverbal messages they receive from others consciously, but if something causes a disruption in their automatic processing (e.g., an unusual event), or if people are motivated to learn about another person, that process can easily become conscious. Finally, people may even try to control (i.e., with intention and awareness, and with varying degrees of success) their nonverbal behaviors. (Lakin 2006: 71 [quotations and parentheses in original])

Finally, because there are some demonstrated "default" gaze patterns, is it possible that there are unmarked and marked forms in Q2? Perhaps unmarked versions are when natural responses are "allowed," and marked versions are when display rules modify the expression of natural responses. For example, while it is "natural" to feel sadness at the death of a loved one, not all cultures allow the expression of it. And, unless culturally socialized otherwise, people tend to gaze or even stare at people and things they either strongly like, dislike, or have interest in (Rowe & Levine 2012). So, while a student might naturally want to look at a teacher during a lecture because they are the focus of their interest during class, as stated above cultural conventions can change this: many Latin American and Asian children are told not to look directly at authority figures.

In addition to determining if there are other forms that belong in Q2, future work should explore the classification of unmarked and marked forms, their origin, if there is a difference in involuntariness between both, and people's ability to go from unmarked to marked or marked to unmarked forms when it comes to second nonverbal code acquisition.

A last important consideration for Q2 forms is their great potential to cause intercultural miscommunication because they exhibit cross-culture variation but are also involuntary – one might mistakenly assume that one's native form is the only "natural" form. One does not know what one does not know – namely that one's behavior may not be the appropriate natural behavior to someone from another culture and vice versa. This makes Q2 forms very valuable to study in terms of second nonverbal code acquisition, particularly regarding the extent to which these forms are perceived as indicators of cultural / communicative competence.

5.3. Quadrant 3 (Q3): voluntary and universal

Q3 forms, being universal, are probably some of the least valuable to study in regard to second nonverbal code acquisition because there should be less need to study or examine forms of NVC that are shared by most cultures. One exception to this would be when display rules differ across cultures. Understanding differences in and practicing use of display rules would be the most productive activities for second nonverbal code learners attempting to master forms from this quadrant.

In fact, the only form of NVC that has been empirically demonstrated to be universal is facial emblems, which are indeed affected by display rules. This must mean that humans must have at least some sort of voluntary control over forming them. Understanding the nature of display rules and how they are learned would be an important avenue of inquiry for Q3. Are all display rules actually voluntary? Might they actually be more involuntary like Q2 forms because display rules often are linked to cultural values? How are display rules learned by children? When do children begin to produce "fluent" use of display rules? The answers to these questions would be a good start for uncovering if and how to teach non-natives of a culture a new set of display rules for Q3 forms.

There are several additional areas of research indicated by this quadrant. For a start, one interesting observation is that even the only form that can be placed in Q3 does not necessarily fall cleanly into a single quadrant. Why is it, for example, that forced or faked smiles are detectable (i.e. that the Duchenne smile is involuntary), but that other facial emblems can be faked? In this case, the Duchenne smile would fit better in Q4 rather than Q3 even though other facial emblems belong in Q3. Research should investigate which facial emblems are voluntary and which are not and attempt to determine what the cause of this is. If a cause were to be found, it might end up being a better way to segment NVC for placement in the matrix than the current forms. Research should explore if some facial emblems are more voluntary than others, and more attention should be given to those that are voluntary than those that are involuntary, since involuntary forms will be harder to master.

Additionally, what other forms besides facial emblems might also be universal and voluntary, and what is the origin of the universality? Is it because of biological development or is because of some sort of Universal Grammar for NVC (see 5.4. below for more on this)? Finally, is there anything that is truly universal and voluntary and not impacted by display rules? If so, we could rule out those forms as something that learners need to acquire as part of second nonverbal codes.

5.4. Quadrant 4 (Q4): involuntary and universal

Forms in Q4 are involuntary and universal. I have placed non-emblematic gestures in Q4 because people are usually not aware of the non-emblematic gestures they produce while speaking (making them involuntary) and because they are not often cited as major causes of intercultural miscommunication (a point in favor of them being universal). However, given the paucity of empirical research on the involuntariness of forms of NVC, modern methods should be used to gather data on this claim. And, admittedly, there have been some demonstrated differences across cultures in the pace and amount of space used to gesture (Efron 1941) and the gestures used for path of motion verbs (Stam 2001, 2006, 2010; Kellerman and Van Hoof 2003; Negueruela et al. 2004).

Perhaps the situation for non-emblematic gestures is similar to the placement of facial emblems into Q3 (as in the Duchenne smile versus other facial emblems), in that there are sub-categories of forms that do not all fall cleanly into a single quadrant. It seems that non-emblematic gestures might fall into three sub-categories: 1) universal, 2) culturally-constructed and cause intercultural miscommunication, and 3) culturally-constructed but unlikely to cause intercultural miscommunication. Modern methods should be used to investigate which non-emblematic gestures (or which aspects of them such as pace, space, form, frequency, etc.), if any, fall into each of these three sub-categories.

If any findings do yield cross-cultural differences, the origin of the differences should be explored (language typology? social factors? geographical factors? etc.). Current research in gesture has focused on differences in manual gesture based on typological language differences, namely on path of motion verbs. Additional research should explore differences in other manual gestures related to other typological features of verbal languages as well as non-manual gestures.

Regulating eye movements have also been placed in Q4 because they are purported to be done involuntarily and not much has been said cross-culturally about different ways of using eye movements as regulators. One interesting question for Q4 forms would be to determine if they all share the function of being discourse regulators and if parallels to verbal discourse regulators can be found.

One interesting observation about Q4 forms is that there seems to be the least amount of data on the types of forms that would fall into this quadrant. Perhaps these have been the least empirically studied because they are the least likely to have an impact on intercultural communication as they contain less "content" than forms in the other quadrants. Or perhaps they are the least studied because they fall into a sort of double blind spot. By double blind spot I mean that people pay little attention

to them because 1) they are produced involuntarily so people are unaware of them and 2) since they are universal, there has never been cause for them to arise as an object of study because of cross-cultural differences.

On the one hand, forms in Q4 could be considered the least worthwhile to pursue in terms of second nonverbal code acquisition because, being universal, they will not cause intercultural communication and, being involuntary, it will be hard to change a person's use of these forms. On the other hand, identifying forms that are universal and involuntary in all cultures could be a very important step in starting explanatory work on NVC that could then be extended to verbal communication. If there are any forms that are truly universal and involuntary these would be evidence of a truly universal human communication code, the study of which might reveal interesting findings about the evolution of human communication. If there are no universal and involuntary forms, this quadrant would cease to be relevant to the study of the acquisition of second nonverbal codes.

An important area of study for both Q3 and Q4 is determining the nature of the universality in question. When it comes to NVC, can innateness be used synonymously with universality? To answer this question, the notion that there may be more than one type of innateness must be considered. Or, rather, there may be several different paths by which a certain trait or structure *becomes* innate. While innateness is a notably difficult term to define, Cofnas states that "where the innateness concept has been usefully employed in science, it has generally been used to refer to something like Lorenzian innateness" (2017: 6). A Lorenzian definition of innateness means that "a trait is innate if the information underlying it is…stored in the genome," and it also assumes that the only way a species adapts to its environment is through genetic change over the course of generations (Cofnas 2017: 9).

However, this is not the only way to conceptualize innateness. For example, Cofnas (2017) argues that it is not just phylogenetic experience, or the process of natural selection that causes modifications to the genome over the course of generations, that can result in changes to the innate information stored in the genome. He argues that adaptive information, even that which is genetically-based, can "require cultural inputs and scaffolding to develop and be expressed" (Cofnas 2017: 2). In other words, adaptive information such as "knowledge and traditions" can be accumulated and transmitted between generations via "cultural evolution" (Cofnas 2017: 9).

So, if a form of NVC is universal, then this implies that it is innate. This is because if a form exists across (all) varied cultural backgrounds (i.e. is universal), it must be innate to humans in the same way that walking and growing different types of hair on different parts of the body is hardwired into our genetic endowment. However, if a form of NVC is innate, it is not necessarily universal. It depends on the route by which the innateness arose. If the innateness arises from something in the environment, a form of NVC will of course not be universal unless all humans experience the same environment. Several possible routes to innateness in regard to NVC will be explored below.

First, one type of innateness stems from a biological origin; this aligns with the Lorenzian definition of innateness above. The fact that the universal facial expressions (facial emblems) for the emotions of fear, anger, happiness, and potentially sadness (Ekman 1989; Redican 1982) are shared with other nonhuman primates suggests that at least some forms of NVC have a biological evolutionary origin and that perhaps the two terms (universal and innate) can be used synonymously for at least some forms. For example, the fact that congenitally blind children spontaneously produce smiles similar to those of seeing children (Eibl-Eibesfeldt 1979) and that nonhuman primates produce similar expressions suggests some sort of genetic hardwiring (Chevalier-Skolnikoff 1973). The forms of NVC that are "reflexlike" (Choi et al. 2005: 314) and seemingly hardwired physiological processes are argued by some to have been adaptive and strategic to survival since they resulted in the quick display of critical emotions like anger and fear (Ekman & Davidson 1994; Etcoff 1986). In this case, universality can be equated with innateness.

But what types of (or routes to) innateness might not equate with universality? Ekman (1989)

considers that some facial expressions might have originated not through genetic evolution but through "species-constant learning." He uses the examples of brow raising and brow lowering to illustrate the process of species-constant learning: brow raising increases visual input by increasing the superior visual field, while brow lowering decreases background light, reduces glare, and protects the eyeball. Brow raising would have been learned as a response to emotions of surprise because it increases visual input, and brow lowering would have been learned as a response to anger or sadness because it serves as protection from outside "threats," such as glaring light or an imminent blow to the face by someone else. According to this explanation,

> The genes may determine only how the equipment works. The signal value of such an action and its association with emotion (surprise) may depend primarily upon early experience, experience common to all members of the species who have functioning visual apparatus. (Ekman 1989: 158 [parenthesis in original])

However, what if some forms of NVC did originate through learning but the learning was not actually species-constant and thus resulted in cross-cultural variation of NVC forms? Would this be a different type of innateness than biological innateness? Epstein's (2016) article seems to argue that it is not. Epstein's central point is that the often dichotomized "nature vs. nurture" issue is incorrect because "nurture" (or the environment / external stimulus / input) can really only be understood in regard to nature. Framing his argument in terms of language development, Epstein argues that the fact that two infants exposed to two different languages' input (in his terms: different "acoustic disturbances hitting the eardrum") come to develop different language capacities is not due to

> …'*the environment*' as is usually confusingly stated—but to a species level property by which these variant exposures are mapped to those particular developmental trajectories resulting in particular anatomical (including mental) states. (2016: 199 [italics in original])

In other words, it is not that cross-cultural variation implies different sorts of innateness when it comes to language or NVC. Rather, it is more that there is a specifically human innate ability to learn language (and by extension possibly nonverbal codes), and the specific language or nonverbal code that develops for a given individual depends on the set of sound-meaning (for language) and movement/form-meaning associations (for NVC) they are exposed to through audio and visual input. The type of innate, biological endowment humans possess determines the range of possible development paths, and the input a given human experiences defines the path taken and the resulting anatomical and mental states. "That is, it is a defining property of the species that the possible class of variant developmental trajectories is determin*able* by the variant experiences of a particular type" (Epstein 2016: 199 [italics in original]).

For example, people living in very different climates would have had very different early experiences and thus would have learned and then shared, through cultural transmission, different forms of NVC for the same expressions of emotion. Importantly, this does not imply that only people of a certain race (i.e. with a certain genome) can learn certain nonverbal codes. This parallels the situation when it comes to language acquisition: it is not the case that only Korean people are able to learn Korean. So, although a variety of environmental or cultural factors might have led to the development of different nonverbal codes over time, this does not mean that different members of the human race have different innate abilities to learn different languages or nonverbal codes. It is the same innate ability that happens to take different development paths (Epstein 2016).

Just like an innate Language Acquisition Device (Chomsky 1965, 1981; Pinker 1984, 1994) and Universal Grammar (Chomsky 1980) are theorized to be the means by which people learn how to verbally express themselves based on the language(s) that surrounds them as they grow up, so too might there be another innate device that allows people to learn the appropriate nonverbal code of the culture and / or language that surrounds them.

If the innateness is indeed similar to Universal Grammar, there might be a certain time frame within which forms in this quadrant must be learned (both as a first and second code) if they are to be used naturally / fluently. However, if the innateness is similar to walking (in that if the code is not acquired within a certain time frame then it can never be learned at all), then forms in this quadrant may be impossible to acquire at all as a foreign nonverbal code. Still, yet another sort of innateness can be invoked by comparison to the process of breathing. Breathing is quite innate to all humans, yet it cannot be voluntarily done naturally. Only when one "surrenders" control can natural breathing occur. The point here is that much more work is needed to determine if there are other universal forms of NVC, to what extent this universality overlaps with innateness, and what the exact nature of the innateness is.

Finally, another type of innateness could be that humans have a penchant for NVC that must be fulfilled, a sort of "generalized need" to use parts of the body in addition to the vocal tract during expression (and here again the specific forms learned are based on the surrounding culture and language). This would be similar people's need to verbally express themselves.

Another intriguing question is the intersection between involuntariness and universality / innateness. Perhaps the notion of how tightly connected these two aspects are depends on the type of innateness of a given form. If there is genetic evolution and therefore hardwiring of the form, the form will likely be highly involuntarily. If, instead, the innateness is akin to Universal Grammar in that the specific manifestation is dependent on learning based on culture or language, then the form should be more voluntary (but by no means completely voluntary based on what we know about people's use of their native language(s)). Given the indication research in the field of SLA has given us of the complexity and difficulty of acquiring verbal languages, it is likely that the acquisition of second nonverbal codes will similarly be a significant challenge to both practitioners and researchers.

Further research should seek to better understand the qualities of and relationships between universality, innateness, and involuntariness and to refine the matrix as needed.

5.5. Methodologies for testing the framework

In order to begin refining the placement of forms onto the matrix, much descriptive cross-cultural work needs to be done. Ethnographic approaches would be an effective way to gather data on different cultures' rules *and* rules of use (communicative competence) of the different forms of NVC, after which grammars of NVC could be written and then compared to create nonverbal typological inventories. An important note here is that the use of the term culture throughout this paper does not refer strictly to political entities. Just as dialect variations persist within and across geo-political borders, so too should cultural differences in nonverbal repertories be considered by keeping in mind that cultures and sub-cultures are also associated with factors such as ethnicity, race, gender, socio-economic class, age, etc. Furthermore, as with the study of language, it is essential to keep in mind that there will be individual variation as well.

Additionally, methodologies to test the involuntariness of different forms need to be exploited. For example, participants could be put under cognitive load, asked to make snap judgments or decisions to reduce the amount of control they have over behaviors, and engaged in awareness checks or funneled debriefings (Lakin 2006).

As the framework assumes that where a given form falls on the involuntary to voluntary axis indicates that form's feasibility of acquisition, one way to start testing this hypothesis would be to

compare how learners who receive explicit instruction on forms do in learning to produce the form compared to those who receive no explicit instruction. This method would work well for testing whether consciousness-raising results in the ability to control forms that are initially involuntary. Regarding gestures tied to language typology, Gullberg says:

> Gesture theory would suggest that shifts in these gestures follow from shifts in the underlying linguistic representations used. These may not be open to explicit learning. It is an empirical question as to whether instruction could affect this side of L2 gesturing. (Gullberg 2006: 110)

So, explicit instruction could be given on the linguistic form, the gesture form, or both, and assessment should include tests of shifts in gesture as well as shifts in linguistic representations. To assess receptive knowledge, grammaticality judgment tests could be used for both linguistic representations and nonverbal forms (Abner et al. 2015), while productive knowledge could be assessed by videotaping participants narrating stories and then analyzing the audio for linguistic forms and the video for nonverbal forms, as well as the two in conjunction with each other to analyze the timing.

As for testing the assumption that the more cultural variation a form exhibits the more valuable it will be to acquire, self and external ratings of cultural or communicative competence could be used to determine if there are correlations between receptive and / or productive knowledge of forms and performance on self or external ratings.

Finally, while this discussion has primarily focused on the acquisition of productive knowledge used to encode NVC, abilities to decode NVC need further consideration as well. Encoding and decoding are two processes that occur practically simultaneously during communication, so receptive knowledge should also be considered when it comes to second nonverbal code acquisition.

6. Conclusion

The matrix above is a first attempt at unifying the forms of NVC for empirical study in terms of second nonverbal code acquisition. This framework is not just theoretical; it is also practical. Because it links empirically measurable features of forms of NVC (universality and involuntariness) with practical traits (value and feasibility of acquisition), the matrix can provide second language learners and teachers with actionable information about where and how to focus attention when it comes to second nonverbal codes. For example, although some teachers may currently include instruction on NVC in their second language classrooms, this is not the norm and the focus is typically only on a few token voluntary forms. The hope is that this framework provides motivation to focus on other forms, such as involuntary ones that may require more dedicated effort (e.g. consciousness-raising efforts and regular practice sessions) but that result in a valuable gain in communicative competence. However, while it is essential to highlight the importance of focusing on other forms of NVC in the classroom, at this point this is not the primary motivation of this paper.

This is because the principal goal of introducing this framework is not to motivate or urge direct inquiry into the *teaching* of second nonverbal codes. Rather, it is a draft of a model for research into second nonverbal code *acquisition*: it provides a unified picture of all the forms of NVC while also suggesting smaller, more approachable programs of research from biological, psychological, linguistic, and cognitive perspectives. In other words, the value of the ideas and the framework proposed here are that they not only highlight gaps in knowledge regarding NVC but also lay out a model to begin addressing those gaps. Further research should be motivated to empirically verify the voluntariness of the different forms, to investigate the uniformity or diversity of the forms across the

globe, and to understand the communicative value that the different forms possess. The value of the framework also stems from some of the similarities it draws between second nonverbal code and second language acquisition. Many of the issues related to second nonverbal code acquisition for each quadrant (e.g. explicit vs. implicit learning, age of fluent mastery in children, the existence of a sensitive or critical period, the innateness debate, affective factors such as identity and social motivation, typologies and marked vs. unmarked forms, etc.) parallel themes in SLA research and thus encourage collaboration between those who study NVC and those who study language, as these systems are, after all, intertwined.

The relationship between SLA researchers and second language teachers has been in flux since the emergence of the field of linguistics. While it is important that the two collaborate, it is not wise to assume that findings in SLA research are immediately translatable or can be implemented in a straightforward way into the classroom. The same caution should be taken with the study of second nonverbal code acquisition. Although many research questions are proposed here and potential implications for NVC instruction are suggested, it is vital that theoretical and empirical work be carefully tested for applicability to the classroom. So, while this paper attempts to extend the idea of communicative competence (a concept central to a good proportion of second language instruction practices today) to include NVC, the ideas throughout are not meant to be interpreted as "ready for implementation" suggestions for second language teachers. Theories about NVC acquisition need to be empirically tested and the findings then formulated into hypotheses about NVC instruction—which then also must be empirically tested.

The framework is still rough: it provides more questions than answers, and not even all of the exemplary forms mapped onto the matrix can be cleanly categorized into a single quadrant. Additionally, it is important to remember that factors like culture and language are likely not the only causes of variation in nonverbal forms. Other factors like individual variation, gender, and age should also be considered. Furthermore, all of the "messiness" uncovered throughout the course of this paper reflects the normal process of critical analysis—bits and pieces of the object of analysis (in this case, nonverbal communication) usually need to be deconstructed, broken apart, and critically examined in relation to each other and in relation to the whole before a clearer picture emerges of how all the individual parts fit together. For example, the relationship between the typology of language and the typology of NVC, the relationship between universality, innateness, and level of voluntariness of the different forms of NVC, and the relationship between the origin of unmarked and marked forms of NVC and biological or other historical factors are all currently unanswered questions that have the potential to yield information critical to understanding what role NVC plays in communicative competence and the nature of humans' capacity for second nonverbal code acquisition.

Before the parts can all be fitted back together and a theory of second nonverbal code acquisition begun, more descriptive work is needed to refine existing and map additional forms of NVC onto the matrix. Also, the model should be refined to more accurately represent the fact that the two axes are not binaries but rather continuums. Further, explanatory work is needed to deepen our understanding of nonverbal communication, particularly regarding the exact nature of the universality or innateness of some forms and how and why forms are voluntary or involuntary. Ultimately, the hope is for such findings to not only further our understanding of how biology and culture might have influenced the development or evolution of nonverbal communication codes but also to translate into recommendations about the feasibility and value of second nonverbal code acquisition that inform the second language classroom.

Edward Sapir (1927: 556) once described nonverbal behavior as an "elaborate and secret code that is written nowhere, known by none, and understood by all." I hope that the framework proposed here will serve to motivate and direct further research on second nonverbal code acquisition, or at the very least that it provides a new lens through which to view what is already known today about nonverbal communication and its cross-cultural implications. Perhaps if we just start with the

descriptive steps of writing it all down, we may eventually come to know – instead of just understand – the elusive nonverbal codes we all use.

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