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The Frame Semantics of KILL

The Identity, Gender, and Ethnicity of Fatal Attributions in British and American News Press

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Abstract

The aim with this study was to investigate the senses of the lexemes /assassinated/, /killed/, and /murdered/ in 21st century American and British newspaper discourse, which was done with the method of corpus-driven Cognitive Linguistics. The main research questions dealt with how the combination of grammatical and contextual features of the articles frame patients and agents of the verbs. A focus was given to transitive and intransitive actions on the grammatical level, as well as contextual information provided about the topics of discourse, and participants of the events. This was done in order to find out what these reveal about the polysemic structures of the words, and how they are associated culturally.

The results were conducted with the means of two statistical models in R: Multiple Correspondence Analysis, and Logistic Regression. It was concluded that the lexemes researched reflect some contemporary aspects of the semantic senses of the words concerning different framings of agent and patient participants, depending on the contextual information provided. The word /killed/ is mainly used in a war discourse of opposing sides in a conflict, where relatively vague, and therefore less identifiable patient reference is used when it comes to gender and family attributes. The bias is instead marked through explicit protagonist and antagonist markers of the sides. This is contrasted with specific patient framings for the word /murdered/, which is used for domestic reference with an overrepresentation of the female gender and other familial affiliations of women and children, creating a stronger sense of identification with these. In comparison, the word /assassinated/ is mostly used in historical, political and entertaining contexts for patients of male reference denoting politicians, who are primarily from foreign nationalities.

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Keywords

Frame Semantics, Lexical Semantics, KILL, Polysemy, Newspaper Discourse, Corpus-Driven Cognitive Linguistics.

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1. Introduction

The aim with this study is to investigate the senses of the lexemes /assassinated/, /killed/, and /murdered/ in American and British newspaper discourse, with the method of corpus-driven Cognitive Linguistics. The main research questions posed are how the combination of grammatical and contextual features of the articles frame patients and agents of the verbs. A focus is given to transitive and intransitive actions on the grammatical level, as well as contextual information provided about the topics of discourse, and participants of the events. This is done in order to find out what these reveal about the polysemic structures of the words, and how they are associated culturally.

2. Background

In this section, some theoretical frameworks concerning polysemy and Cognitive Linguistics important to this study are introduced. The descriptions are tied to a corpus-based approach, as well as some constructional approaches to meaning and polysemy, with the final paragraph briefly dealing with some definitions of so-called murder verbs.

A common practice regarding the definition of words is to assign meanings independently of context, in order to later create principles for the word's meaning interactions in certain contexts. This presupposes a static definition non-depending on context, versus definitions only attainable through the frameworks required for the lexeme's meaning. The degrees of these views prompt theoretical variations in the field of polysemy. One of them, the prototypical approach, relates meanings to "mental representations [and] cognitive models", as opposed to the classical approach, which divides up meanings based on logic and philosophy (Ravin 2000:1-15).

The position outlined for the prototypical framework is at the very core of Cognitive Linguistics, in that semantic meaning mirrors an extension of both linguistic and extra-linguistic entities, which function as cognitive representations operating in context, known as semantic encyclopedias (Langacker 1987). This view is utilized as a theoretical framework for a corpus-driven Cognitive Linguistic approach through the process of operationalization (further explained in section 3.1). Thus, the mapping of the semantic structures in a grammar can be captured while representing

internal conceptual structures of the language users at the same time (Glynn 2010).

One of the ways in viewing contextual meaning can be derived from the theory of Frame Semantics in which a particular interpretation of a word depends on the knowledge of the background relating to it (Goldberg 1995). Langacker refers to this as *profiling*, with the example of a hypotenuse only being understood in the background of a triangle (1987), in which the meanings of these differ depending on which frame is profiled (Goldberg 1995). In *A construction grammar approach to argument structure*, Adele Goldberg further extends this notion into lexical profiling of verbs, which she says “lexically determine which aspects of the frame-semantic knowledge are obligatory profiled” (44). She argues that this kind of profiling can capture a difference of meaning between verbs, which cannot be altered by context. As an example, the semantic difference of *rob* and *steal* are presented in her book, with the first verb profiling a victim being affected, while the second verb profiles the stolen goods (1995).

Alternative ways of determining the polysemy of verbs is rendered by Levin, who divides up verbs of killing into *murder*, respectively *poison* verbs. The former includes kill, assassinate, and murder, among others, while the second contains the means for different ways of killing, which implies them being a distinguishable factor in the classification (1993). While rejecting the definition of poison verbs, Lemmens accepts the distinction given to the murder verbs, which he uses as a generic term for investigating the agentivity of these. Among his thorough conclusions, he derives that the word kill has a high frequency of inanimate actors, as well as being distinguished from the remaining murder verbs, which in contrast “incorporate into their semantic base an undeniable blueprint for an intentional Actor.” (1998:107).

3. Method

3.1. Material and procedure

The material used in this research consists of articles gathered from the news database Access World News, of which British and American entries ranging from 2009 to 2011 were selected as an option with the keyword for each lexeme mentioned above.

The articles were further copied and pasted into the text editor TextWrangler, as a first step in the process. After highlighting the lexeme

through the search function, examples of each entry were copied with enough context usually consisting of one paragraph, and pasted into a new sheet. These examples were, in turn, pasted into MS Word where the advanced find and replace function was used to adjust the tabs in accordance with a space after each example, and to highlight the key lexeme in red. This was done in order for the examples to fit every row and to gain a better survey of them when pasted into Excel, which was the final step in the data gathering procedure.

The task afterwards was to sort the examples in Excel where three sheets were created for each lexeme. At this stage, the sheets contained a column for the example, another column denoting the lexeme type, a third displaying the year of publication, and a final for stating the country. These categories were crucial for working towards the goal of 540 examples in total, of which 180 each were constituted from the lexemes /assassinated/, /killed/ and /murdered/, which were divided on either the *US* or the *UK* alternative, resulting in word pairs of 90 lexemes per country. These 90 were further divided on the three year-features, constituting 30 examples per year.

3.2. Problem areas

The following paragraphs are dedicated for outlining some problematic aspects encountered during the proceedings, concerning frequency estimation and technical limitations prompting delays during the data gathering stages.

As previously mentioned, the data consisting of articles was collected from a news database. This was done manually, which entailed combining a lexeme with the year and country in the search function of the database. It was done several times for each of the three lexemes, which were combined with three separate year searches, and two separate country searches per word. /assassinated/ was the first lexeme in this procedure, for which 200 articles were gained containing the word from UK, which gave 208 lexeme examples, of which 90 were used in the research. The same amount of articles for US gave about twice as much, 400 articles, with 90 of them examined. This results in a margin of 110, respectively 310 examples left, which only could be seen after collecting the articles and searching the total amount of lexemes in TextWrangler. The extra entries could be used as backup examples; however, further estimative mismatches occurred at a larger scale.

When it came to the word /killed/, about a hundred articles were gathered, resulting in over 1700 entries. This prompted new data collections, as extracting the gathered entries required each of them being selected, marked and pasted into a sheet, which would entail a repetition of this 1700 times in the text editing software. Only 200 of these could have been chosen, although this would disrupt the track of the year options, as all of these were in the same collection with each lexeme. The amount of articles for this research eventually landed on 60 articles for /killed/, with about 400 word entries for UK, and 60 articles with 700 lexeme examples for US. For the word /murdered/, 60 articles with about 250 examples were taken from UK, and 90 articles with about 330 examples from US. Except from the difficulty in estimating a word's frequency and the technical prerequisites, regulations in the news database only allowed copying a maximum of 20 articles at a time, which further delayed the process.

4. Analysis

4.1. Operationalizing the coding schema

After selecting the examples with the lexemes and compiling them in an Excel sheet, the categories used for organizing the examination material were expanded with new columns in order to create a coding schema for the analysis. The schema was developed in accordance with the research question of how the lexemes interact in their meaning in the context of newspaper press in two countries using varieties of the same language, namely Great Britain and the United States as a scope. This tool of operationalization is important for defining concepts to attain measurability in empirical studies concerning corpus-driven cognitive linguistics. While providing methods of generalizing the grammar of a language based on the utterances of its users, the tool allows hypothesizing conceptual structures explaining motivational language use (Glynn 2010: 5).

Considering the words examined are constructed of a lexeme with a morphological inflection at the end providing syntactic information about the word class being either a verb or an adjective, e.g. 'kill-ed', some of the categories were clear-cut before the initiation of the analytical process. Examples of these are linguistic categories determining the tense, aspect, voice, agent, and patient of the verbs, and a 'Form' category featuring either predicative or attributive reference for sorting the verbal lexemes from the adjectival. However, most of the options and sub options were

created during the course of the analysis, as these required observations of patterns of occurrences specific to the discourse examined, including extralinguistic features. Some of these are the ‘Axiology’ and ‘Description’ alternatives focusing on emotive impressions gained through a contextual reading.

When the coding of all the examples was complete, the data was re-organized for the purpose of correcting misspells and missed codings into a coherent unit. This was accomplished through a command in the statistical software R where an overview of the data loaded could be accessed to check the features of each column. The tool was also helpful in assessing new features for necessary duplications of columns that were made for a coarse-grained level of the analysis, which was required for more general results.

In the next sections, information is provided about the variable and feature components of the coding schema used for the analysis and results, with the term ‘variable’ used interchangeably with ‘option’, ‘column’, ‘category’, and ‘alternative’. In most categories, ‘NA’, “not applicable”, has been included as a feature indicating the absence of data fulfilling the set criteria of categorical features. This indication is not listed in the descriptions for practical reasons.

4.2. Country

This variable states the country where the articles were published, and consists of the features ‘UK’ and ‘US’. 270 examples were used from each country, amounting to 540 in total.

4.3. Agency

The ‘Agency’ column was provided to keep track on the news source, for the possibility of biases being a contributing factor affecting the outcome of some categories in the schema. This was, nevertheless, dropped for time saving reasons prompting other priorities.

4.4. Year

This category contains three features of the years the articles were published: '2009', '2010', and '2011'.

4.5. Word

The 'Word' option consists of any of the three features 'assassinated', 'killed', and 'murdered'. They amount to 540 words in total with an occurrence of 180 words each, and were further divided between the two country features, resulting in 90 words per country.

4.6. Modifier

This variable was added after observing modifying descriptions of the words /murdered/ and /killed/, and delimits the features of 'Adjective' and 'Adverb' in connection to these.

4.7. Style

The 'Style' column was initiated to distinguish the author's choice of representing events in the articles, and contains the features of 'narration', 'citation' and 'paraphrase'. The first mentioned delimits information where the writer does not make reference to a secondary source directly, as in citation marks, which encloses the second mentioned feature, or paraphrasing, when clearly referring to a source as stating information, as the last mentioned feature encompasses.

4.8. Description

The 'Description' category is one of the subjective columns that involve the different impressions gathered from the examples as a whole, initially evolving from the emotional elicitation in connection to the lexeme /murdered/. Hence, the feature 'Emotive' (see example 1a.) was added, as well as 'Informative' (see example 1b.) and 'Informative Critical' (see example 1.c), which were assessed in a scale of the lexeme's relatedness to

these. There were ideas of expanding this column into further emotions and impressions, although the time limitation was a factor contributing to a more coarse-grained alternative for this category.

- (1) a. She sobbed: "They murdered Malcolm." (Emotive).
- b. Nine Afghans, eight of them security forces and one an interpreter for the Marine commander, were killed (Informative).
- c. He pays for this act of courage with his life, assassinated at the hands not of his former enemies, but of his own hard-line supporters (Informative Critical).

4.9. Axiology

'Axiology' is the second of the subjective categories, which initially consisted of the features 'Positive', 'Neutral', and 'Negative', and later further enclosed 'Positive Heroic', 'Negative Antagonistic' and 'Modified'. The latter was invented for contexts that were neither polarized nor neutral in tone, but modified in some sense. The 'Neutral' feature does not signify absolute neutrality in this study, and is more of an indicator relative to the positivity or negativity of a statement.

4.10. Form

The 'Form' column encompasses the 'Predicative' and 'Attributive' features in order to distinguish whether the lexeme is used as a verb in a predicate phrase or an adjective in a subject phrase, which is aimed at the further sorting required in the categories denoting these, which are stated below.

4.11. Attributive

This is the category that requires the 'Attributive' form of the previous column to be filled, and has adherent categories mentioned in the subheadings below. It contains the features 'Specified Human', denoting reference to humans with specific surnames and last names; 'Spec', describing specific humans of specific roles and/or nationalities and sex with no direct reference to names; 'Unspecified', referring to unspecified

humans when it comes to name, and at least two of the three properties above. Similar features were also used for groups: 'Unspecified Group', and 'Specified Group'.

Based on fewer occurrences of the attributive form, 82 compared to 459 in the predicative form, the categories concerning attributives had to be regrouped into more generalized features depending on their frequency, in order to fit the statistical tool R.

4.11.1. Attributive Identity

'Attributive Identity' contains the different identities ascribed to the subject in the attributive form. The features of the grain coarse version of this category sorted by frequency include 'Politician', 'Family', 'Student', 'Professional', 'People Miscellaneous', 'Military', and 'Criminal'.

4.11.2. Attributive Apposition

This section covered all the appositive and additional reference of the attributive subject and was more of a help category for determining the identity, and the subsequent affinity and number categories mentioned below, rather than a variable used in the statistics. The category was used to gain a better survey over the naming, in order to maintain a discourse as similar as possible to that used in the newspapers investigated.

4.11.3. Attributive Number

This variable deals with the numerical properties given to the attributive references, which function as an indicator for quantifiable amounts of the subject participants.

4.11.4. Attributive Affinity

Depending on the portrayal of the subject's familial affiliation in the articles, different features were added to cover these, in order of specification and frequency. At a more coarse-grained level, these are:

‘Family Member’, ‘Daughter’, ‘Father’, ‘Male Relative’, and ‘Female Relative’.

4.11.5. Attributive Nationality

The category named ‘Nationality’ is another of the attributive options regrouped into more general descriptions, denoting the subject’s national and continental belonging. These are ‘American’, ‘British’, ‘Latin American’, ‘African’, ‘Asian’, ‘Middle Eastern’, ‘European’ and ‘Mixed’. The continental aspect indicates a generalization from the national aspect in cases where the latter occurred less.

4.11.6. Attributive Gender

In this alternative, the sex of the subject is identified, which are ‘Female’, ‘Male’, and ‘Unspecified’.

4.12. Verb Tense

The ‘Verb Tense’ encloses three features: ‘Future’, ‘Past’, and ‘Present’. This category was restricted to the predicative form of the lexeme researched as opposed to the verb of the sentence in cases where the lexeme took the attributive property, for delimiting reasons concerning time. The majority of the verbs were in past tense, as expected.

4.13. Verb Aspect

The features of ‘Progressive’ and ‘Perfective’ are contained in this category as a refinement of the previous one. The vast majority of the verbal lexemes belong to the perfective aspect, which was to be expected through the exclusion of verb forms other than those taking the predicative form of the lexeme. This and the former category were eventually dropped in the result process, as they are less useful in this context.

4.14. Voice

The ‘Voice’ option contains the ‘Active’, ‘Middle’ or ‘Passive’ reference of the ‘Predicate’ feature (see section 4.10. Form), with the aim of signaling transitive and intransitive actions. The middle voice illustrated in example (2c.), is used to indicate an absent agent, which unlike the passive voice in (2b.) refers to an agent, usually occurring after the postposition *by*. The active construction in (2a.) emphasizes the agent syntactically through taking in an initial position preceding the verb.

- (2) a. **A string of insurgent attacks** killed at least eight people (Active).
b. A British sailor has been murdered by **pirates** (Passive).
c. King Edmund was assassinated in 940AD (Middle).

Table 1 below illustrates the distribution of voice.

Table 1. Occurrences of ‘Voice’

Voice	Frequency
Active	96
Middle	231
Passive	131
Total:	458

4.15. Postposition

This column was added as means for the high frequency of some postpositions following certain lexemes examined. The most common coarse-grained features of this category are ‘In’, ‘By’, ‘On’, and ‘After’.

4.16. Postpositive Collocation

A collocation category was needed to capture the syntactic information describing the events and dates directly followed by a postposition. The features contained here are ‘Event War’, ‘Agent’, ‘Date’, ‘Location’,

‘Location and Date’, and ‘Activity’. These were often an option in agentless references. Below follows some examples of the collocations.

- (3) a. He was murdered **in July** (Date).
- b. Hundreds of young women have disappeared or been murdered **in her hometown of Ciudad Juarez, Mexico** (Location).
- c. Two Afghan UN officials were among those killed **in the blast** (Event War).
- d. An officer was killed **during an attempted carjacking** (Activity).
- e. He was killed **by friendly fire** (Agent).

4.17. Location

The ‘Location’ column captures the country of where the fatal event took place. It contains entries denoting countries or continents, which had to be duplicated for a course-grained alternative, depending on their frequencies in the texts. These are: ‘America’, ‘Afghanistan’, ‘Middle East’, ‘Asia’, ‘Europe’, ‘UK’, and ‘Latin America’. A subcategory for more specific places was created, and later dropped because of the time limitation.

4.18. Reason

This category has a causative function and was made for collecting explicit statements made about the motif of the fatal action caused. The features created here were either ‘Specified’ or ‘Unspecified’.

4.19. Specified Reason

Whenever the former column was specified, the ‘Specified Reason’ column was filled for identifying the stated cause. Table 2 below shows the features of this column and their frequencies.

Table 2. Occurrences of ‘Specified Reason’

Specified Reason	Frequency
Crime	32
Miscellaneous	11
Opposition	22
Personal	15
Terrorism	39
War	41
Total:	159

4.20. Suspect

In this category, the features ‘Specified’ and ‘Unspecified’ were used when a clear reference to the agent of an action was absent and the suspicions or speculations of an agent were present instead. Due to the few examples generated from this, and especially in the sequential subcategories, these were not a priority in calculating the results.

4.20.1. Suspect Identity

‘Suspect Identity’ lists various identities of the suspect, which are ‘Military’, ‘Terrorist’, ‘Criminal’, ‘Country’, ‘Opposition’, ‘Miscellaneous People’, and ‘Male Relative’.

4.20.2. Suspect Gender

This is an option including the sex of the suspect where the features available at this stage are ‘Male’ and ‘Unspecified’.

4.21. Agent

The ‘Agent’ variable represents the originator of an action and interacts with the predicative form and voice, which are previously mentioned as a feature, respectively category. Similarly as in ‘Attributive Reference’, it includes ‘Specified Human’ for humans with stated names, ‘Specified’ for

specific human reference without names, and ‘Unspecified’ for people lacking most of the properties above, particularly names. ‘Specified Group’ and ‘Unspecified Group’ were also used for acknowledging two or more people. The examples of these features can be seen in (4 a-e.) below. In addition, this category contains less successive categories than those of ‘Attributive’ and ‘Patient’ subcategories, as less information was given about the agents in the examples.

- (4) a. He was assassinated in 1978 by **anti-gay conservative Dan White** (Specified Human).
- b. Indian leader Mahatma Gandhi was assassinated by **a Hindu fanatic** in New Delhi (Specified).
- c. "We believe he met someone he knew and trusted and subsequently lost his life, probably having been murdered by **that person**." (Unspecified).
- d. Two of the bombers were killed by **police** (Specified Group).
- e. "**International forces from an unknown address** came to the area and...put 10 youth in two rooms and killed them." (Unspecified Group).

4.21.1. Agent Reference

If the ‘Predicative’, and consequently ‘Active’ or ‘Passive’ alternatives were checked, the agent would take the ‘Reference’ feature to indicate the presence of an agent. In circumstances where an agent was lacking in the predicative construction and the provided context, the ‘Middle’ column was checked in ‘Voice’, which marks the presence of the ‘No Reference’ feature in this section. ‘Inanimate Reference’ was additionally created for inanimate agents.

4.21.2. Agent Apposition

Here is the category in which all the appositions and extra reference to an agent were contained, as an auxiliary alternative for filling columns dealing with identity and specification as accurately as possible, with consideration of the descriptive discourse used in the newspaper.

4.21.3. Agent Identity

This option includes the identity of the agent, with the following features: ‘Terrorist’, ‘Criminal’, ‘Military’, ‘Male Relative’, ‘Family’, ‘Mad Person’, ‘Country’, ‘Agent’, ‘Miscellaneous People’, and ‘Miscellaneous Events’. The two latter were initiated for a coarse-grained alternative of the column.

4.21.4. Agent Gender

Features of the ‘Agent Gender’ category representing the agent’s sex include ‘Female’, ‘Male’, ‘Mix’, and ‘Unspecified’. An example of these occurrences follows in Table 3 below.

Table 3. Occurrences of ‘Agent Gender’

Agent Gender	Frequency
Female	7
Male	84
Mixed	3
Unspecified	97
Total:	191

4.22. Patient

The ‘Patient’ column contains information about the receiver of an action and interacts with the ‘Agent’ columns in cases where reference exists for the agent. The features gathered here are ‘Specified Human’, describing humans with specific names; ‘Specified’ for specific humans without nominal reference; ‘Unspecified’ for unidentified persons; ‘Specified Group’, and ‘Unspecified Group’.

4.22.1. Patient Identity

This section has the most frequent and varied identity features in comparison to previous columns dealing with the same factor, due to the amount of patients exceeding them in number. This has allowed for a wider range of identities listed in the following table containing their occurrences:

Table 4. Occurrences of ‘Patient Identity’

Patient Identity	Frequency
Agent	3
Aidworker	10
Artist	6
Civilian	3
Criminal	6
Ethnic/Religious Member	14
Family	77
Identities mixed	12
Leader	33
Military	74
Miscellaneous People	45
Opposition	8
Pensioner	3
Police	9
Politician	39
President	27
Professional	35
Religious Leader	7
Student	22
Terrorist	19
Total:	452

4.22.2. Patient Nationality

As the name suggests, this category presents the patient’s nationality, which was duplicated for more generalized occurrences enclosing continental belonging in cases where a particular nationality rate was low. The features presented in this section are: ‘American’, ‘British’, ‘Afghan’, ‘Asian’, ‘Middle Eastern’, ‘European’, ‘African’, ‘Latin American’, ‘International’, and ‘Unspecified’.

4.22.3. Patient Apposition

Similarly to the appositive categories mentioned, this was created as an auxiliary option to the appositions and extra reference stated about the

patient, in order to gain a better survey of the discourse used in the naming used to utilize the categorization of the related columns below.

4.22.4. Patient Affinity

This option focuses on descriptions about the patient's familial belonging and other relationships, with features as 'Daughter', 'Son', 'Mother', 'Father', 'Partner', 'Male Relative', 'Family Miscellaneous', and 'Acquaintance'.

4.22.5. Patient Number

'Patient Number' is a category for marking the quantifiable labels given to the patient. These had to be regrouped to more general numbers for the results.

4.22.6. Patient Gender

In this alternative, the gender reference of the patient is stated. A table describing its features follows below.

Table 5. Occurrences of 'Patient Gender'

Patient Gender	Frequency
Female	86
Female & Unspecified	5
Male	257
Male & Unspecified	1
Mixed	20
Unspecified	85
Total:	454

4.23. Means

The 'Means' category is composed of abstract and concrete objects, human assistance, or even human bodies used for performing the fatal action. The

features here contain ‘Weapon’ with guns and knives as options, ‘Artillery’, ‘Bomb’, ‘Suicide bomber’, ‘Vehicle’, ‘Contract Killer’, ‘Poison’, and ‘Language’. The latter only occurred twice and was used in a humorous sense. Some of the ‘Vehicle’ entries indicated accidental events, which was the single means describing unmotivated action.

4.24. Manner

The ‘Manner’ column comprises details of how the lives were taken, and has the following features: ‘Shooting’, ‘Stabbing’, ‘Attacking’, ‘Battling’, ‘Crashing’, ‘Poisoning’, and ‘Natural disaster’.

4.25. News Circumstance

Finally, this last category specifies the scope of the published news, enclosing the following list of features:

Table 6. Occurrences of ‘News Circumstance’

News Circumstance	Frequency
Relatives Comment	
Report Investigation	
Relatives Trial	
Report Miscellaneous	
Report Attack	
Report Opinion & Interview	
Report Biographic	
Report Politics	
Report Funeral/Memorial	45
Report War	
Review & Entertainment	
Report History	
Total:	541

5. Results

The results were conducted with the means of two statistical models in R. The first, Multiple Correspondence Analysis (MCA), was used for discovering patterns of correlations between the factors of the lexemes studied. These factors are visible in a 2-dimensional plotted space that provides associated or dissociated features depending on their proximity (Glynn 2010). The second model is called Logistic Regression and was used to predict the probability of an outcome and state its accuracy. This technique functions confirmatory and measures binary comparisons in the predictions (Glynn 2010).

The following sections are presented with results considered most important in this study, which comprise six MCA plots and two models of Logistic Regression. Enlarged copies of some of the plots are available in the appendix section. In addition, the variables are rendered in capital letters (LEXEME), the full feature-names in lowercase letters enclosed in apostrophes ('killed'), and their abbreviation, as visualized on the plots and models, within brackets ([KIL]). These are not always abbreviated, and are mixed with lowercase letters as well ([Adjective]).

5.1. Multiple Correspondence Analysis

The figures derived through MCA represent agent reference in the first plot, whose distribution of agents further gets explained in the second plot. The remaining figures deal with different levels of patient distribution, and finally a mixture of grammatical, and particularly contextual interactions.

5.1.1. Lexical Profiling

In Figure 1 below, three variables are combined: LEXEME with capitalized abbreviations of the words 'assassinated' [ASS], 'killed' [KIL], and 'murdered' [MUR]; VOICE representing the 'active' [Act], 'passive' [Pass], and 'middle' [Mid] voice; and AGENT REFERENCE, with the adherent features denoting 'reference' [Ref], 'no reference' [NoRef] or 'inanimate reference' [RefIn] in connection to the agent.

Perhaps the most salient feature noticed, is that the 'inanimate reference' [RefIn] is closest in association to the word 'killed' [KIL].

Furthermore, this lexeme appears to share the proximity of the variables for ‘active’ [Act], ‘middle’ [Mid], and ‘no reference’ [NoRef] with the word

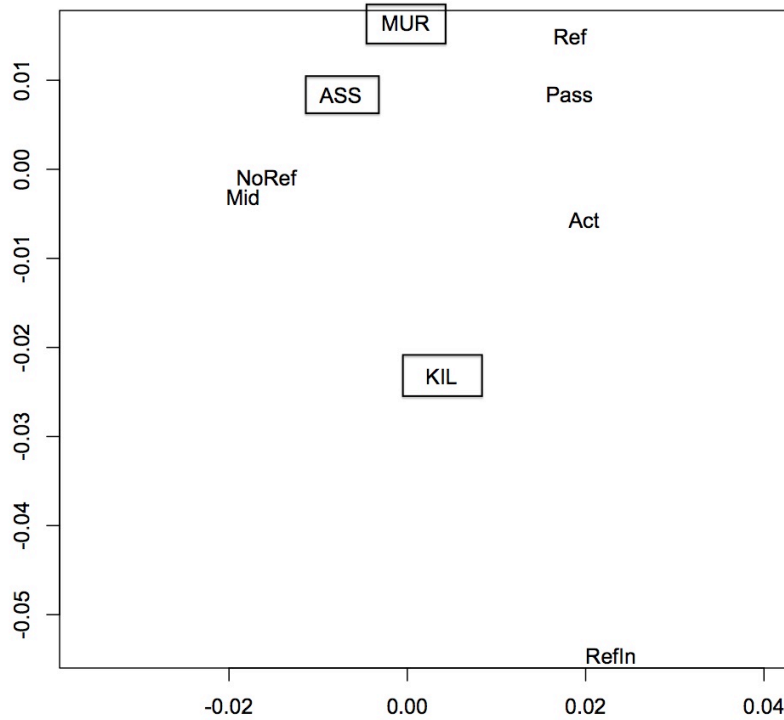


Figure 1. Interaction of Lexeme, Voice, and Agent Reference

‘murdered’ [MUR]. However, the lexeme ‘assassinated’ [ASS] is more associated with the ‘middle’ [Mid] voice construction and ‘inanimate reference’ [RefIn] than either of the ‘killed’ and ‘murdered’ words. Additionally, in relation to ‘killed’ [KIL], the ‘passive’ [Pass] construction and ‘agent reference’ [Ref] is closer to the two other lexemes, with the ‘reference’ [Ref] being a feature most associative with ‘murdered’ [MUR]. This outcome suggests a relatively different profiling for the word ‘assassinated’ [ASS], where the agent is absent to a larger extent. It provides that one meaning of the predicative form of the lexeme is more associated with the patient receiving an action, than an agent originating it.

5.1.2. Agent Distribution

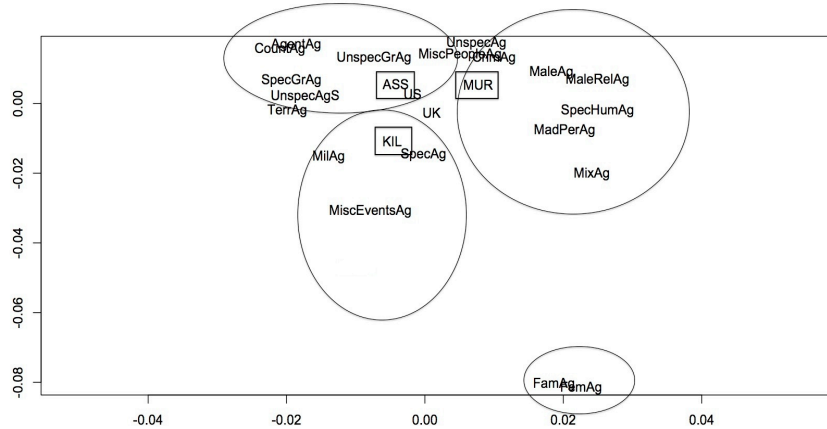


Figure 2. Interaction of Lexeme, Country, Agent, Agent Identity, and Agent Gender

Figure 2 represents the following variables:

- LEXEME with the features ‘assassinated’ [ASS], ‘killed’ [KIL], and ‘murdered’ [MUR]
- COUNTRY, entailing [UK] and [US] features
- AGENT, with information about the specifications of reference, which are ‘specified human’ [SpecHumAg], ‘specified’ [SpecAg], ‘unspecified’ [UnspecAg], ‘specified group’ [SpecGrAg], and ‘unspecified group’ [UnspecGrAg]
- AGENT IDENTITY, providing different labels given to persons, as ‘terrorist’ [TerrAg], ‘criminal’ [CrimAg], ‘military’ [MilAg], ‘male relative’ [MaleRelAg], ‘family’ [FamAg], ‘mad person’ [MadPerAg], ‘agent’ [AgentAg], ‘country’ [CountAg], ‘miscellaneous people’ [MiscPeopleAg], and ‘miscellaneous events’ [MiscEventsAg]
- AGENT GENDER, with the ‘female’ [FemAg], ‘male’, [MaleAg], ‘mixed’ [MixAg] and ‘unspecified’ [UnspecAgS] options

The sections of this figure can roughly be divided into three parts, in accordance with each of the lexemes. Starting with the area around the word ‘killed’ [KIL], the agents there are more likely to be ‘specified’

[SpecAg], that is, identified people, but with no reference to names. Furthermore, the identities associated with the lexeme are ‘military’ [MilAg] and ‘miscellaneous events’ [MiscEventsAg], of which the latter is a description linked to an agent with inanimate reference [RefIn], mentioned in Figure 1. Another identity label, ‘terrorist’ [TerrAg], is also characteristic of ‘killed’ [KIL], and is a feature shared with the lexeme ‘assassinated’ [ASS]. This word is more associative of agents with ‘unspecified’ [UnspecAgS] gender and ‘specified group’ [SpecGrAg], closely connected to the identities ‘country’ [CountAg] and ‘agent’ [AgentAg], as in “spy”.

Finally, the word ‘murdered’ [MUR] is closer to the ‘unspecified’ [UnspecAg] type of an agent, as well as ‘specified human’ [SpecHumAg], listing two differing sets of information where the latter contains nominal information about the originator of an event as opposed to the former, with almost no referential clues of the actor. When viewing the identity types, ‘murdered’ [MUR] is closer in interaction to ‘criminal’ [CrimAg], ‘mad person’ [MadPerAg], and ‘male relative’ [MaleRelAg] as agents, with the gender of these being ‘mixed’ [MixAg] and predominantly ‘male’ [MaleAg]. The ‘family’ [FamAg] identity label at the far bottom forms a distinct grouping with the ‘female’ [FemAg] gender type for this word. It suggests that female agents are more figurative of family members when originating murder events, and perhaps not as specifically known in naming as the male relatives, or that the females have less reference to criminal qualities.

5.1.3. Patient Distribution 1

Figure 3 below introduces variables and features provided in the following list:

- LEXEME, with the words ‘assassinated’ [ASS], ‘killed’ [KIL], and ‘murdered’ [MUR]
- COUNTRY, including the [US] and [UK] options
- PATIENT, comprehending the specificity and non-specificity of its reference, which are ‘specified human’ [SpecHumP], ‘specified’ [SpecP], ‘specified group’ [SpecGrP], and ‘unspecified group’ [UnspecGrP]
- PATIENT AFFINITY with information about the patient’s familial

affiliation as in ‘daughter’ [DaughP], ‘son’ [SonP], ‘mother’ [MothP], ‘father’ [FathP], ‘partner’ [PartP], ‘male relative’ [MaleRelP], ‘female relative’ [FemaleRel], ‘family miscellaneous’ [FamMiscP], and ‘acquaintance’ [AcqP]

- PATIENT NUMBER, marking quantifiable amounts of patients: ‘two’ [Two], ‘three’ [Three], ‘four to five’ [FourToFive], ‘six’ [Six], ‘seven’ [Seven], ‘eight’ [Eight], ‘nine to ten’ [NineToTen], ‘eleven to fifty’ [ElevenToFifty], ‘nine to ten’ [NineToTen], ‘fifty to thousands’ [FiftyToThousands], and ‘approximate number’ [ApprNo]

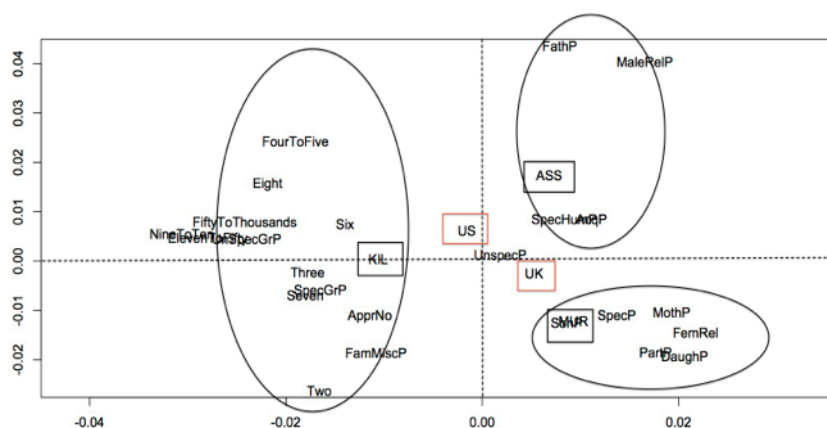


Figure 3. Interaction of Lexeme, Country, Patient, Patient Affinity, and Patient Number.

Once again, three distinct areas for the lexemes can be visualized in this figure. Departing from ‘murdered’ [MUR], the patient is more likely to have ‘specific’ [SpecP] reference in relation to this word, implying a specified patient except when it comes to naming. Moreover, the ‘mother’ [MothP], ‘female relative’ [FemaleRel], ‘daughter’ [DaughP], ‘son’ [Son] and ‘partner’ [PartP] features of AFFINITY are most likely to interact in this area, creating senses with a discreet meaning for these. The slightly additional proximity of the [UK] feature with ‘murdered’ [MUR], suggests that this usage was more characteristic of the British articles.

Moving up to the zone of ‘assassinated’ [ASS], the patient here is highly associative with ‘specified human’ [SpecHumP] and ‘acquaintance’ [AcqP] features, which entails a reference to names, respectively affinity relation.

These are features closer to the lexeme ‘murdered’ [MUR] sharing the left spectrum, than to ‘killed’ [KIL] on the left side. The ‘father’ [FathP] and ‘male relative’ [MaleRelP] affiliations of patients are more typical of ‘assassinated’ [ASS], compared to ‘female relative’ [FemaleRel] for ‘murdered’ [MUR].

The word ‘killed’ [KIL] has a unique distribution in the figure for two reasons. First, it is closely grouped with ‘family miscellaneous’ [FamMiscP], indicating unspecified family belonging, and second, because it is the single lexeme sharing the closest proximity to PATIENT NUMBER. The patient type is also ‘unspecified group’ [UnspecGrP], which bears connections to an interaction with the quantifiable reference.

To sum up, the qualities of this figure altogether present senses of three main distinctions having to do with affiliation and number: 1. A majority of female relative types with the exceptions of the group sons are meanings associated with the patients for the word ‘murdered’ [MUR]; 2. Groupings of male relatives are more associated with the patient for the word ‘assassinated’ [ASS]; and 3. The lexeme of ‘killed’ [KIL] is more characteristic of less specified family relations of the patient, as well as being the only word associating patients as specified, and especially unspecified groups of quantities.

5.1.4. Patient Distribution 2

In Figure 4, the distribution of the patient is under the magnifying glass when it comes to the lexeme’s interaction with the identity and gender of the patient. The features of these are listed below:

- LEXEME – ‘assassinated’ [ASS], ‘killed’ [KIL], and ‘murdered’ [MUR]
- PATIENT IDENTITY with following labels: ‘agent’ [AgentP], ‘aid worker’ [AidwP], ‘artist’ [ArtistP], ‘civilian’ [CivP], ‘criminal’ [CrimP], ‘ethnic/religious member’ [Ethnic.RelMemP], ‘family’ [FamP], ‘identity mixed’ [MixP], ‘leader’ [LeadP], ‘military’ [MilP], ‘miscellaneous people’ [PeopleMiscP], ‘opposition’ [OppP], ‘pensioner’ [PensP], ‘police’ [PoliceP], ‘politician’ [PolP], ‘president’ [PresP], ‘professional’ [ProfP], ‘religious leader’ [RelLeadPP], ‘student’ [StudP], and ‘terrorist’ [Terr]
- PATIENT GENDER, with the following sexes: ‘female’ [FemP],

‘female and unspecified’ [FemP, UnspecP], ‘male’ [MaleP], ‘male and unspecified’ [MaleP, UnspecP], ‘mixed’ [MixPS], and ‘unspecified’ [UnspecP].

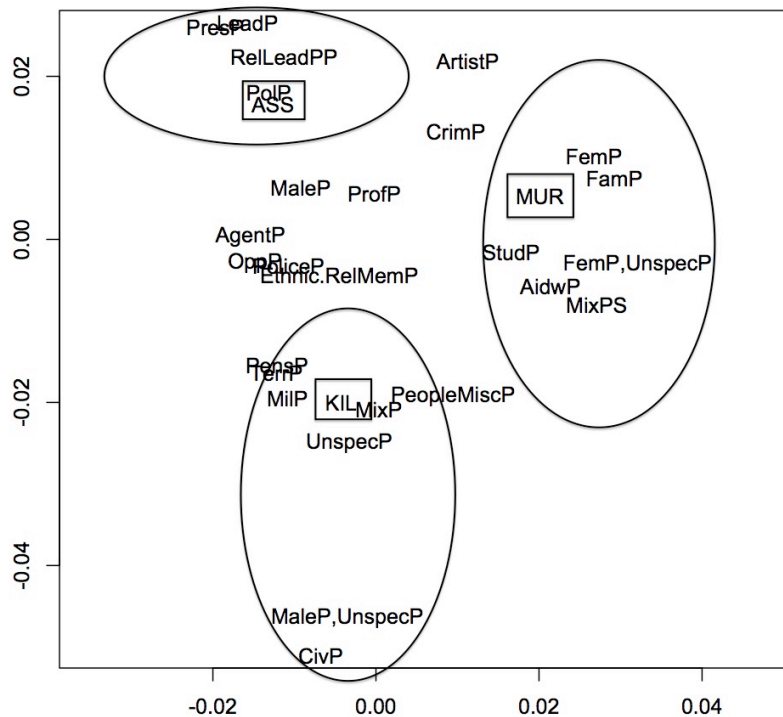


Figure 4. Interaction of Lexeme, Patient Identity, and Patient Gender

Two main divisions can be derived from this figure. To the right, the word ‘murdered’ [MUR] is distinguished from the two other lexemes placed on the left side. Apart from ‘female’ [FemP], ‘mixed’ [MixPS], and ‘female and unspecified’ gender [FemP, UnspecP], it encompasses ‘student’ [StudP], ‘aid worker’ [AidwP], ‘family’ [FamP], ‘artist’ [ArtistP] and ‘criminal’ [CrimP]. The two latter are relatively closer to ‘assassinated’ [ASS] than their identity counterparts mentioned.

Another identity label, ‘people miscellaneous’ [PeopleMiscP], is a characteristic of the lexeme ‘killed’ [KIL], which has its own sets of

identities consisting of ‘mixed’ [MixP]; implying a mix of two or more identities, ‘military’ [MilP], ‘terrorist’ [TerrP], and ‘pensioner’ [PensP], with the latter stemming from only three examples (see section 4.22.1.). These are linked with the ‘unspecified’ [UnspecP] gender, which together with the identities can be connected to the word having numeric reference to patient subjects explained in Figure 3. The ‘civilian’ [CivP] identity and ‘male and unspecified’ [MaleP, UnspecP] gender type form a distinct grouping in the same section.

In the left section towards the middle, a circle of features emerges between ‘killed’ [KIL] and ‘assassinated’ [ASS]. More or less shared features of these words are ‘ethnic/religious member’ [Ethnic.RelMemP], ‘police’ [PoliceP], ‘opposition’ [OppP] and ‘agent’ [AgentP], with the two latter situated a bit higher up in the direction of ‘assassinated’ [ASS]. In addition, the ‘male’ [MaleP] gender is more associative with the patient of this word, which is followed by of leading figures: ‘leader’ [LeadP], ‘religious leader’ [RelLeadPP], ‘president’ [PresP], and ‘politician’ [PolP]. This can be compared to the patient being a specified human in connection to ‘assassinated’ [ASS], where more information is given around a patient of this word, as seen in the previous figure.

In sum, the interaction of LEXEME and two PATIENT variables makes some clear distinctions between the word usages in connection to gender and identity of the patients. The most salient aspect is perhaps the gender type of female related to the word /murdered/, and male, mainly belonging to the words of /killed/ and in particularly /assassinated/. Some identities are also distinct for the words, as for example, family, aid worker and student with the first mentioned lexeme; pensioner, military, and terrorist with the second, including different kinds of leader references with the third mentioned lexeme.

5.1.5. Patient Distribution 3

The constituents of Figure 5 below deals with the LEXEME variable ‘assassinated’ [ASS], ‘killed’ [KIL], and ‘murdered’ [MUR], and the PATIENT NATIONALITY variable embedding ‘British’ [BrP], ‘American’ [AmP], ‘European’ [EuroP], ‘African’ [AfrP], ‘Asian’ [AsianP], ‘Middle Eastern’ [MEP], ‘Latin American’ [LatinAmP], ‘Afghan’ [AfghP], ‘International’ [InterP], and ‘unspecified’ [UnspecP].

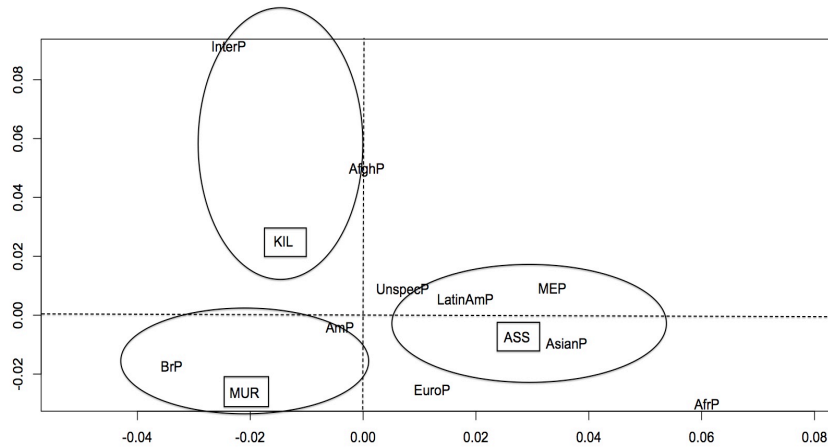


Figure 5. Interaction of Lexeme and Patient Nationality

The figure can roughly be divided into two parts, as an initial stage of interpreting the results. To the right, a cluster emerges around the word ‘assassinated’ [ASS], implying the national and continental belongings of patients associated with this word in the articles. These are ‘African’ [AfrP], ‘Asian’ [AsianP], ‘Middle Eastern’ [MEP], ‘Latin American’ [LatinAmP], and ‘European’ [EuroP]. ‘American’ [AmP] nationality is in between the three lexemes, suggesting a relatively even distribution among these. The ‘unspecified’ [UnspecP] nationality is another feature shared, this time between ‘killed’ [KIL] and ‘assassinated’ [ASS].

The lexeme ‘murdered’ [MUR] at the bottom left, has most association to ‘American’ [AmP], and especially ‘British’ [BrP] nationality. The lexeme ‘killed’ [KIL] is about equally linked with ‘Afghan’ [AfrP], and ‘American’, and mostly with ‘International’ [InterP] nationality.

5.1.6. Extralinguistic Features

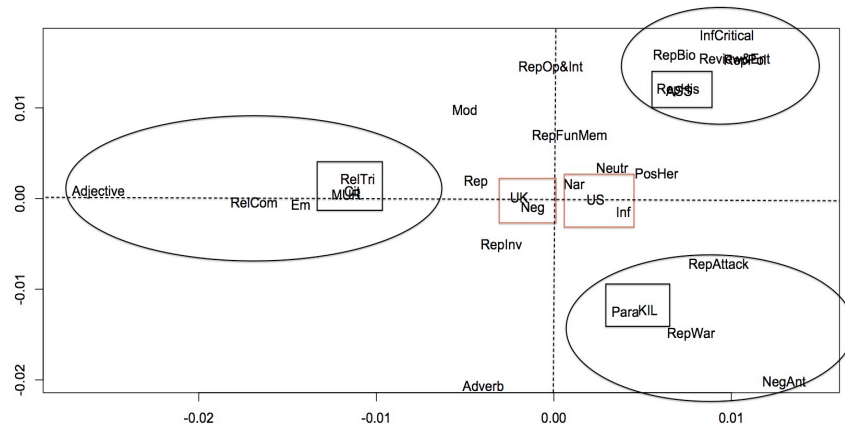


Figure 6. Interaction of Lexeme, Country, Modifier, Style, Description, Axiology, and News Circumstance.

Seven variables interacting in Figure 6 are listed below:

- LEXEME, with the features ‘assassinated’ [ASS], ‘killed’ [KIL], and ‘murdered’ [MUR]
- COUNTRY, including [UK] and [US]
- MODIFIER, with either the ‘adjective’ [Adjective] or ‘adverb’ [Adverb] option denoting modification of the lexeme
- STYLE, implying ‘narration’ [Nar], ‘citation’ [Cit], and ‘paraphrase’ [Para] as alternatives used in representing sources
- DESCRIPTION, delineating the contextual impressions of the readings as ‘emotive’ [Em] as opposed to ‘informative’ [Inf] and ‘informative critical’ [InfCritical]
- AXIOLOGY, a representation of the statement’s mode of polarity, which are ‘positive heroic’ [PosHer], ‘negative’ [Neg], ‘negative antagonistic’ [NegAnt], ‘modified’ [Mod] or ‘neutral’ [Neutr]
- NEWS CIRCUMSTANCE, which presents the different themes associated with the contextual piece of information provided. These are ‘relatives comment’ [RelCom], ‘report investigation’ [RepInv], ‘relatives trial’ [RelTri], ‘report miscellaneous’ [Rep], ‘report attack’

[RepAttack], ‘report opinion and interview’ [RepOp&Int], ‘report biographic’ [RepBio], ‘report politics’ [RepPol], ‘report funeral/memorial’ [RepFunMem], ‘report war’ [Rep War], ‘review and entertainment’ [Review&Ent], and ‘report history’ [RepHis]

The lexeme ‘murdered’ [MUR] forms a distinct grouping to the left, with four strongly associated features: ‘adjective’ [Adjective] of the MODIFIER variable, ‘relatives comment’ [RelCom] and ‘relatives trial’ [RelTri] of NEWS CIRCUMSTANCE, ‘emotive’ [Em] of the DESCRIPTION variable, and ‘citation’ [cit] of the STYLE option. This part of the result shows that the word ‘murdered’ [MUR] in the articles is more likely to have emotive reference, and figurate in evens where relatives of the deceased express utterances ([RelCom]), as well as when the news cover relatives in trial procedures linked to the fatal event ([RelTri]). Hence, the ‘citation’ [cit] feature interacting with these indicates that the authors of the articles choose to cite the relatives in the circumstances of these events and word use. The lexeme ‘murdered’ [MUR] is also more likely to be altered with ‘adjective’ [Adjective], and has a ‘modified’ [Mod] type of AXIOLOGY, slightly heading towards the lexeme ‘assassinated’ [ASS].

‘assassinated’ [ASS] is a word most linked to the overlapping features of ‘report historical’ [RepHis], ‘report biographic’ [RepBio], ‘report politics’ [RepPol], and ‘review and entertainment’ [Review&Ent] of the NEWS CIRCUMSTANCE variable, which indicate the common discourse around this word’s usage in the news. The feature ‘report funeral/memorial’ [RepFunMem] is also associative, and roughly shared with the lexeme ‘murdered’ [MUR]. The DESCRIPTION variable features assigned to ‘assassinated’ [ASS] is mainly ‘informative critical’ [InfCritical]. The axiological features ascribed near the same zone are both ‘positive heroic’ [PosHer] and ‘neutral’ [Neutr]. Although they are plotted in between ‘assassinated’ [ASS] and ‘killed’ [KIL], they are more characteristic of the former.

Around the word ‘killed’ [KIL], on the other hand, common features of NEWS CIRCUMSTANCE are ‘report attack’ [RepAttack] and ‘report war’ [RepWar], suggesting that the lexeme mostly has been used in data transmission of conflict situations. The mode of description in articles highly occurrent with this lexeme is ‘paraphrase’ [Para], and the closest style variable is ‘informative’ [Inf]. The ‘adverb’ [Adverb] feature here is more common in this unit, which also shares the discourse type ‘report investigation’ [RepInv] with ‘murdered’ [MUR].

Another grouping worth noting is the [US] and [UK] features with close proximity and a central distribution in relation to the lexemes, although with some more distinct associations. The [US] option is, for example, more adjacent to ‘assassinated’ [ASS] and ‘killed’ [KIL], whereas the [UK] option is closer to ‘murdered’ [MUR], which shows that the descriptions of the three lexemes are more inclined towards either of the countries in the frequency of the descriptions. These descriptions may entail the different discourses used, as in war and trial settings connected to each word.

The ‘negative’ [Neg] axiology and ‘narration’ [Nar] style have quite central proportions among the lexemes, though the latter is closer to [US] and more connected with ‘assassinated’ [ASS] and ‘killed’ [KIL], while the former is nearer [UK].

5.2. Logistic Regression

The next two models presented compare lexeme pairs with some of the variables used in the final figure of MCA, for a confirmatory result of these.

5.2.1. *Assassinated vs. Murdered*

Below is a model with LEXEME and its features ‘assassinated’ and ‘murdered’ as a response variable to the features in the left column. These are used to predict the probability of each word’s property in relation to them. As mentioned before, Logistic Regression only measures binary inputs, which is the reason for why ‘killed’ is not possible in this combination.

The asterisks on the right side show that a particular result is statistically significant, with the number next to it indicating a percentage of the probability of achieving the same or stronger result if repeated. The more asterisks, the closer to zero the percentage value is, which increases the significance. The assessment of the importance of an outcome is further provided under the Estimate column where the score indicates the strength of the importance, which increases with higher numbers. The C-value is further used to state the accuracy of a prediction, depending on its percentage score (Glynn 2010).

```

Coefficients:
                Estimate Std. Error  z value Pr(>|z|)
(Intercept)      5.694e+00  1.171e+00    4.864 1.15e-06***
AxiologyNeg       9.024e-01  5.711e-01    1.580  0.11410
AxiologyNegAnt    4.376e+00  1.083e+04  0.000404  0.99968
AxiologyNeutr    2.059e+00  7.583e-01    2.716  0.00661 **
AxiologyPosHer   -1.212e+00  1.068e+00   -1.134  0.25670
DescriptionInf  -4.191e+00  8.980e-01    -4.667  3.05e-06***
DescriptionInfCritical -6.823e+00  1.525e+00    -4.475  7.65e-06***
NewsCircumstanceRelTri  1.651e+01  2.469e+03  0.007  0.99466
NewsCircumstanceRep -2.066e+00  8.133e-01    -2.541  0.01107 *
NewsCircumstanceRepAttack -2.151e+01  5.918e+03  -0.004  0.99710
NewsCircumstanceRepBio  -2.406e+01  3.607e+03  -0.007  0.99468
NewsCircumstanceRepFunMem -4.535e+00  1.094e+00    -4.144  3.41e-05***
NewsCircumstanceRepHis -4.862e+00  1.124e+00    -4.325  1.52e-05***
NewsCircumstanceRepInv  7.462e-02  1.077e+00  0.069  0.94478
NewsCircumstanceRepOp&Int -6.451e+00  1.632e+00    -3.953  7.72e-05***
NewsCircumstanceRepPol  -2.281e+01  1.273e+03  -0.018  0.98571
NewsCircumstanceRepWar  -2.185e+01  3.357e+03  -0.007  0.99481
NewsCircumstanceReview&Ent -2.208e+01  2.171e+03  -0.010  0.99188
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Frequencies of Responses

```

ASS MUR
180 180
C: 0.969
R2: 0.813

```

Six results prove significant for the word /assassinated/, marked by negative numbers. Two of them are features of the DESCRIPTION variable, which are ‘informative’ [DescriptionInf] and ‘informative critical’ [DescriptionInfCritical]. From the estimate score provided, [-6.823e] vs. [-4.191e], the latter is higher in importance than the former. Nevertheless, both features prove significant in the results, showing that the word /assassinated/ is used in relatively informative and critical discourses compared to the word /murdered/.

The remaining four significant features of the NEWS CIRCUMSTANCE variable enclose ‘report miscellaneous’ [NewsCircumstanceRep], ‘report funeral/memorial’ [NewsCircumstanceRepFunMem], ‘report history’ [NewsCircumstanceRepHis], and ‘report opinion and interview’ [NewsCircumstanceRepOp&Int]. The feature ‘report miscellaneous’ [NewsCircumstanceRep] has the lowest significance and estimate rates in comparison to the rest of the features, while the estimate for ‘report opinion and interview’ [NewsCircumstanceRepOp&Int] has the highest. It is also more in line with a similar score for previously assessed ‘informative critical’ [DescriptionInfCritical], which means that these are the most

salient senses for the word /assassinated/, in comparison with /murdered/. All the features listed here are a unique property of /assassinated/, however, which is confirmed by the C-value of about 97 percent certainty of acquiring the same or stronger outcome, should the same comparison be done again. This is the same for the second lexeme.

Finally, the positive numbers under the estimate column represent the lexeme /murdered/, which has one mark of significance delineating the 'neutral' [AxiologyNeutr] feature of AXIOLOGY. While another feature, 'negative' [AxiologyNeg], lacks a similar marking due to 11 percent probability of a repetition of the same analysis resulting in chance [0.11410], it proves more important in the estimate number, in comparison. This shows that both features are important for the distinctive meanings for determining the senses of /murdered/.

5.2.2. Assassinated vs. Killed

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	0.1230	1.5912	0.077	0.938378
AxiologyNeg	2.7170	1.2661	2.146	0.031885 *
AxiologyNegAnt	5.4980	2.6396	2.083	0.037261 *
AxiologyNeutr	3.6348	1.3828	2.628	0.008577 **
AxiologyPosHer	2.9561	1.3331	2.217	0.026591 *
DescriptionInf	-2.0911	0.6195	-3.375	0.000737 ***
DescriptionInfCritical	-4.1740	1.1468	-3.640	0.000273 ***
NewsCircumstanceRep	-1.4731	0.9996	-1.474	0.140569
NewsCircumstanceRepAttack	1.6343	1.2509	1.307	0.191355
NewsCircumstanceRepBio	-19.8098	2335.9789	-0.008	0.993234
NewsCircumstanceRepFunMem	-2.0981	1.0426	-2.012	0.044182 *
NewsCircumstanceRepHis	-19.5410	1483.0068	-0.013	0.989487
NewsCircumstanceRepInv	1.2268	1.3043	0.941	0.346899
NewsCircumstanceRepOp&Int	-19.7404	2015.0084	-0.010	0.992184
NewsCircumstanceRepPol	-3.5777	1.1248	-3.181	0.001469 **
NewsCircumstanceRepWar	1.3656	1.0363	1.318	0.187593
NewsCircumstanceReview&Ent	-19.4234	1341.7298	-0.014	0.988450

 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Frequencies of Responses
 ASS KIL
 180 180
C: 0.94
 R²: 0.738

In the model above, the response variable LEXEME is used again, this time with the comparative features of ‘assassinated’ and ‘killed’. For an explanation of the contents in this model, see previous section (5.7.1.).

The positive numbers under the Estimate column stand for the word /killed/. As can be seen, four of the features most typical of this lexeme belong to the AXIOLOGY variable, with the features ‘negative’ [AxiologyNeg], ‘negative antagonistic’ [AxiologyNegAnt], ‘neutral’ [AxiologyNeutr], and ‘positive heroic’ [AxiologyPosHer]. These are all the axiology types available in this research, but one, ‘modified’, suggesting that the various polarity assessments are more common with the word /killed/ than /assassinated/, presumably taking the modified stance more often, which gives less obvious clues of polarity in connection to it.

Equally, four features for the lexeme /assassinated/ are present, which are recognizable from the negative numbers under Estimate. The first two are ‘informative’ [DescriptionInf], and ‘informative critical’ [DescriptionInfCritical] of the DESCRIPTION variable, which has the strongest significance in these results. The same features were distinct for the same word in the previous results (see 4.7.). The second features are ‘report funeral/memorial’ [NewsCircumstanceRepFunMem], and ‘report politics’ [NewsCircumstanceRepPol] of the NEWS CIRCUMSTANCE variable.

The results of this model have a rate of 94 percent in the C-value, which gives a strong predictor of only 6 percent resulting chance if the analysis would be reiterated.

6. Discussion

The word mostly used with the active voice in the study is /killed/, which has the least specified reference of patients of the lexemes, as the patients of it are usually referred to in generic terms of numbers, as well as in affinity relations, compared to that of daughter and son specifications in connection to /murder/. Concerning identities for patients in connection to /killed/, those are of military, terrorist, and mixed identities, denoting more than one reference type. Civilians are also present in this category, highly linked with male and unspecified as the only gender marker for the word, which shows that singular and female gender is not as directly referred to in connection to this lexeme. Here is also where “miscellaneous” people are referred to most, which denotes a grouping of various identities.

As the opposing groupings in the identity labels suggest, /killed/ has been used in war settings, which is further confirmed by the topic of discourse used in the reports with war and attack themes. Consequently, the agents are, similarly to some of the patients, labeled as predominantly military and occasionally terrorists, in addition to miscellaneous events as a generic term for inanimate agents. One difference between patients and agents is that the agents have specified reference, which was mainly derived through the observation of two sides of a conflict. The division is more palpable in the comparison of /killed/ with /assassinated/ in the confirmatory statistics, where the former was more associative of clear axiological assessments including protagonist and antagonist features.

The distinction of nationalities enclosing Afghan, American, and international reference in the background of British and American news between 2009 and 2011, is representative of the influences of the word use due to the war in Afghanistan. The reports concerning this period were mostly paraphrased in the newspapers for the word /killed/. This decentralizes the author in the way focus is shifted from the individual to a national level, with the statements of primary sources for information about the war events representing the nation (see example 5).

The vagueness and multiplicity attributed to patients makes the information around them less relatable, and therefore less sympathetic, if compared with the same factors for the use of the word /murdered/. However, overt positive or negative labels of the conflicting sides through hostile versus domestic representations function as expressions of sympathies, as seen in example 6 below.

- (5) Five of the U.S. service members were killed in a roadside bomb attack in eastern Afghanistan, according to U.S. military officials.
- (6) Two caring British heroes befriended locals in war-torn Helmand - days before they were killed in a treacherous attack by an Afghan ally.

The lexeme /assassinated/, on the other hand, is characteristic of a critical, evaluative tone. The author here is most likely to use a narrative mode, which frames the author's voice that sometimes shifts to conspiratorial utterances (see example 7).

- (7) Take, for example, Oswald's visit to the FBI offices in downtown Dallas 10 days before he assassinated the president. This visit has to be put in perspective.

Unlike the word /killed/ which is used for contemporary descriptions, /assassinated/ is primarily figurative in historical reports (see example 8), and secondarily political, which includes present-day reference as well. The word is also integrated into cultural themes of the news sections dealing with biographies, reviews, and entertainment (see example 9). Although not as overt as the other features, another topic of discourse related is around opinions and interviews.

- (8) Some historians believe he killed himself. Others believe he was assassinated, possibly by political enemies. At the time of his death, Lewis was serving as governor of the Louisiana Territory under President Thomas Jefferson.
- (9) Riccardo becomes a beleaguered President, with Ulrica a television psychic and Oscar an Oval Room PA. The concept sounds like fun, and it's executed with a degree of imagination and flair. But it runs out of steam quickly, and, by the time the assassinated Riccardo is having his bullet wounds stanced by paper towels while Renato remains unarrested, it has come to seem positively silly.

As previously mentioned in the comparison of this lexeme to /killed/, the latter is associated with clear reference of polarization while this is lacking for /assassinated/, whose axiology is rather complex to assess. This can be due to relatively nuanced topics of discourse mentioned, indicating a wider range of expressive possibilities in connection to /assassinated/ in the media, compared to the straightforward reporting in war events for /killed/. Although the axiology is not as obvious, it displays occasional shifts to protagonist reference.

When it comes to agentivity, /assassinated/ is distinctively associated with agentless reference and middle voice, which frames the patient. In cases where agents are mentioned, they are both specifically and unspecifically referred to as groups, with the labels of countries or agents as identities. The patients of these are usually referred to as specific humans, who are male politicians depicted as fathers and other male

relatives. They are mostly distributive of people of various continents, with the American being less associative, and British least.

In contrast, the lexeme /murdered/ is domestically oriented in the way it is most associative of patients with American, and especially British nationalities. It is also connected to female, unspecified, and mixed gender types, with the familial identities of these as mothers, daughters, and other female relatives. An exception is sons, which is the closest affinity type associated with the word. The most common identities here are family, student, and aid worker.

The agent gender, on the other hand, is predominantly male, with identities as various male relatives, mad persons, criminal, and miscellaneous people. The two latter are mostly tied to unspecified agents, while the rest are people specified in naming. The female agents are distinct with a familial identity, which creates a contrast of their association of agents, compared to that of males'.

The topic of discourse used around this word is seen in settings where relatives of the deceased issue comments around death events. This is also confirmed by the choice of representing the news content by shifting the voice to people affected in these circumstances, through the use of citations. These factors, and the properties of the patients as women and children of familial bonds in a domestic context, makes the lexeme /murdered/ highly identifiable, and therefore most sympathetic, which contributes to the emotive reference associated with the word (see example 10).

- (10) Visibly shaken, George, 48, added: "Our precious and gentle son Ben was brutally murdered on the streets of London..."The people who murdered him knew nothing about our Ben, not a hair on his head, a bone in his body. They had never met him before or spoken to him, they just cruelly took his life away with knives for no apparent reason."

It is important to stress that these outcomes are based on an interaction relative to the three words. Therefore, an equally interesting experiment would be to treat each word in isolation, in order to find out more about the separate distributions around these. Apart from the comparison in topics of discourse, and levels of relatedness and *pathos* mentioned, questions can also be raised around the division of gender types across the words and identities, as well as specified and unspecified forms of identification of people in the contexts they occur. What makes some identities specific to

females, and some to males? Why are female agents portrayed as family members, while male agents are more referred to as criminals when originating the similar actions of a fatal outcome? Why are agents and patients specified in some contexts, and not in others? How are these aspects related to meaning, cognition, and society?

In conclusion, the study of the words /assassinated/, /murdered/, and /killed/ has confirmed some semantic patterns in the use of these in 21st century British and American newspaper discourse. Depending on the context of the reporting, the agent and patient participants of the events have been framed differently, which alters the focus of associations and relatedness to these. This can be seen in the various specification levels given to the patients, as well as the heroic versus antagonistic reference, and the various shifts of voice and content in representing persons and events.

7. Summary

The aim with this study was to answer the research question of how the lexemes /killed/, /assassinated/, and /murdered/ were used in British and American news press between 2009 and 2011. This was accomplished through a corpus-based cognitive linguistic method enabling the operationalization of usage-based features consisting of grammatical and contextual categories chosen for the research. Among the most important of these were various references of agents and patients on the linguistic level, as well as impressions gained on a contextual basis.

The material used was accessed from a news corpus from which a dataset sample was taken, with 540 examples of the lexemes utilized. After a finished coding of these, the results were extracted through the statistical software R, in which two models were used: Multiple Correspondence Analysis for the interactive patterns of the three lexemes, and Logistic Regression for a statistical confirmation of the results.

The MCA provided distinctions concerning the lexical profiling of the agentivity, with /assassinated/ as the word most associated with the patient rather than the agent, due to lacking agent reference to a larger extent. The same analysis established that the agent distribution in connection to the same word was most associative of agents and countries, both as specified and unspecified groups. The case was different for /killed/, where the agents mostly consisted of military, and terrorist labels to a lesser extent. The lexeme /murdered/ was highly connected with male agents having

criminal, and mentally instable identity references, compared to the female agents who were given familial identities.

Furthermore, the model of MCA showed a distinction in the quantitative and affinitive references of patients. The former was tied to /killed/, and the latter to the remaining lexemes, with an additional distinction of male relatives in connection to /assassinated/, and mostly female relatives figurative of the word /murdered/. The British and American patient nationality proved domestic reference of the last mentioned word, while the nationality of assassinated patients was mostly globally varied in comparison.

The last MCA figure informed about the different contexts in which the words were used, with the word /murdered/ distinctly used in situations where relatives of the deceased were cited in death events. The tool also showed that /killed/ was used in war reporting, with paraphrasing as a primary way of transferring information in the media. The word /assassinated/ was used in critical and political reports more often (confirmed in the statistics), with a wider range of discourses concerning history, biography, review, and entertainment.

In the final assessments of the results with the models of Logistic Regression, it was confirmed that the polarity evaluations for the lexeme /killed/ were strong in comparison with the same for /assassinated/, which more complex to assess on the same basis.

Based on the outcomes of this study, it is concluded that the lexemes researched are representative of some contemporary aspects of the 21st century within the British and the American cultures, affecting the semantic senses of the words. These concern different framings of agent and patient participants, depending on contextual influences. One of them concerns the word /killed/ used in a war discourse of opposing sides in a conflict, where relatively vague, and therefore less identifiable patient reference is used when it comes to gender and family attributes. The bias is instead marked through explicit protagonist and antagonist markers of the sides. This is contrasted with specific patient framings for the word /murdered/, which is used for domestic reference with an overrepresentation of female gender and familial affiliations of women and children, creating a stronger sense of identification with these. In comparison, the word /assassinated/ is mostly used in historical, political and entertaining contexts, for patients of male reference denoting politicians, who primarily come from other parts of the world.

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Appendix I

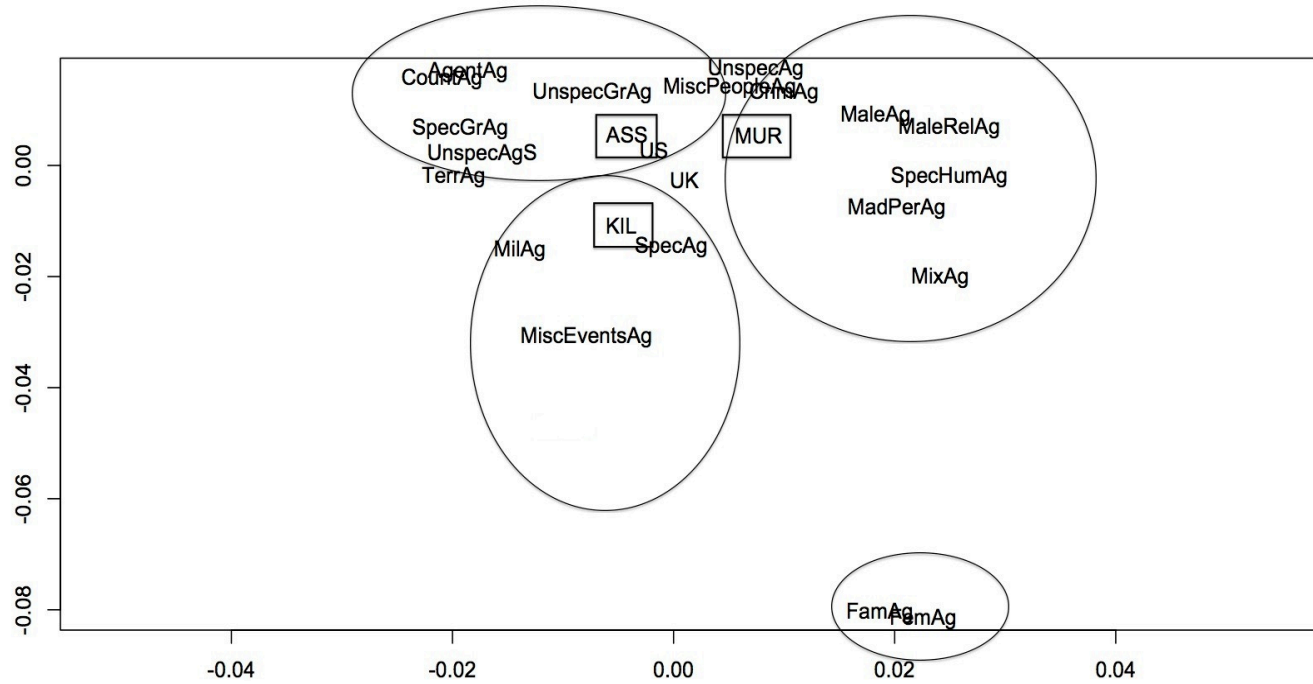


Figure 2. Interaction of Lexeme, Country, Agent, Agent Identity, and Agent Gender

Appendix II

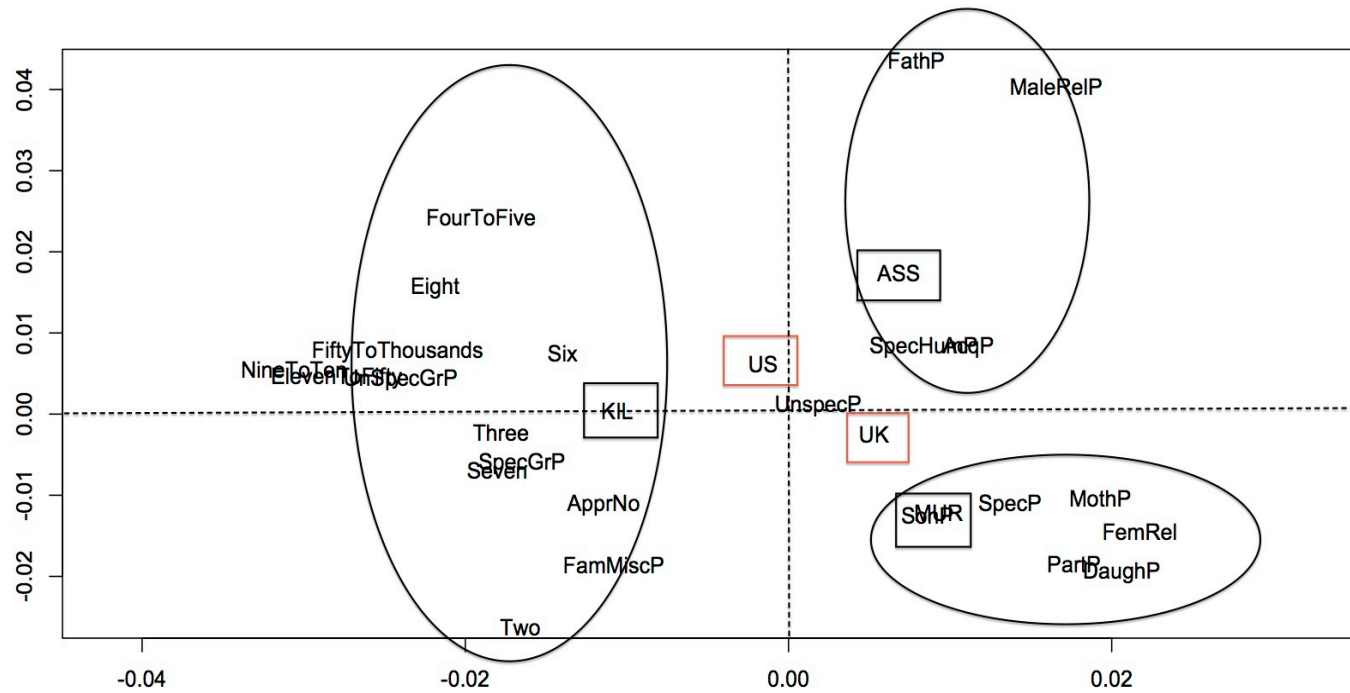


Figure 3. Interaction of Lexeme, Country, Patient, Patient Affinity, and Patient Number.

Appendix III

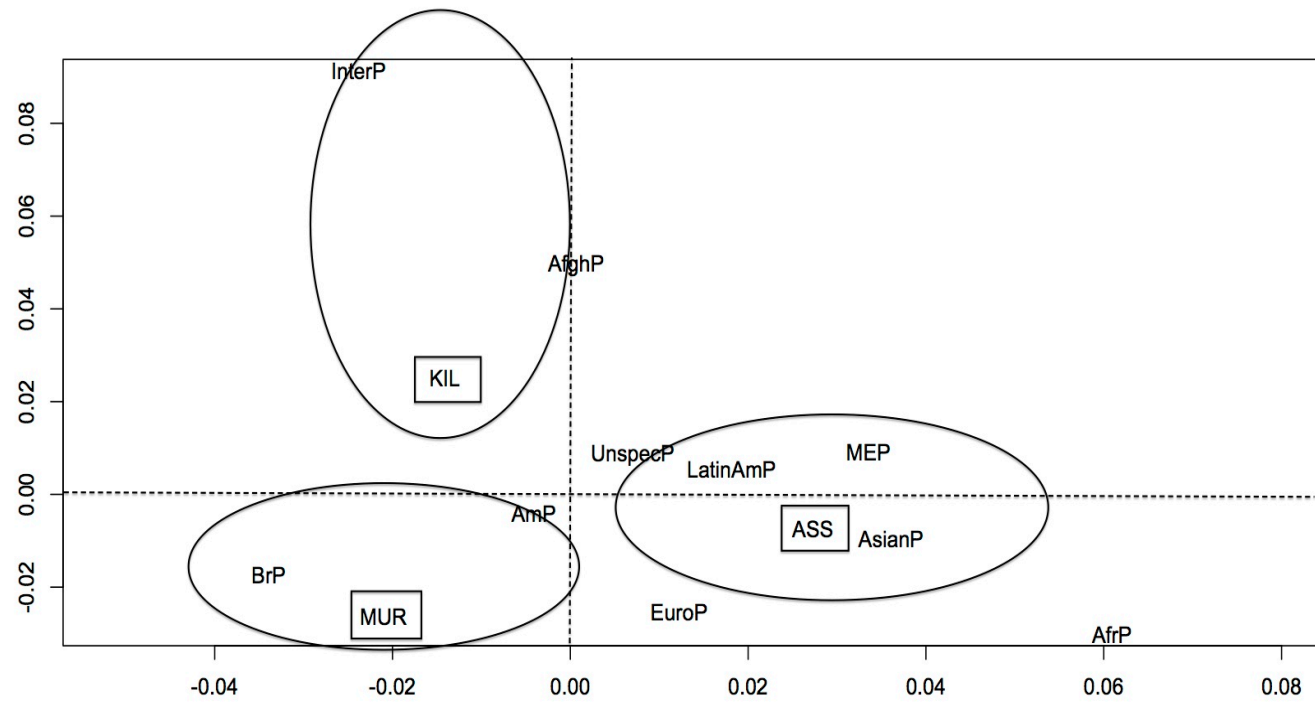


Figure 5. Interaction of Lexeme and Patient Nationality

Appendix IV

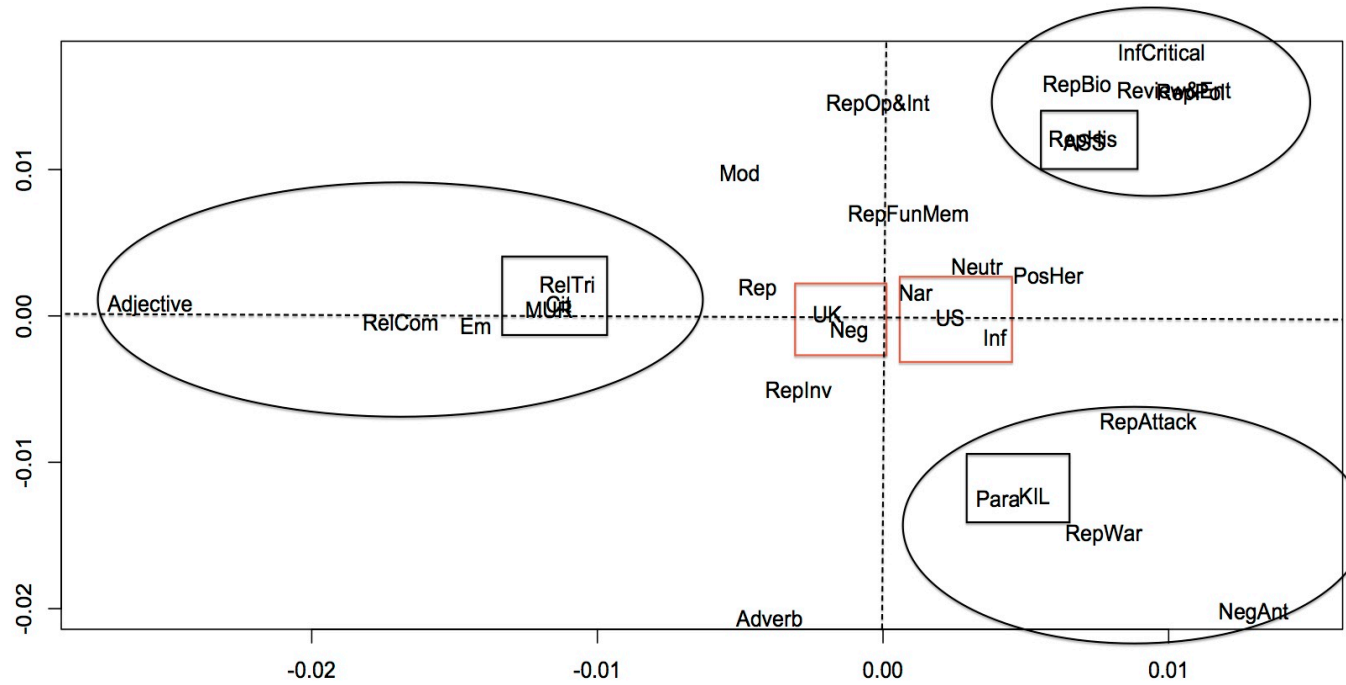


Figure 6. Interaction of Lexeme, Country, Modifier, Style, Description, Axiology, and News Circumstance.