The group in the self

A corpus-assisted discourse studies approach to personal and group communication at the European Parliament

María Calzada Pérez
Universitat Jaume I

Drawing on theoretical approaches to personal/group behaviour, and informed by Michael Hoey's priming theory, this paper presents a corpus-assisted discourse study of European Parliament interventions from 2004 to 2011. The study aims to identify the group in the self and the various selves in the individual. For the analysis, three corpora from the European Comparable and Parallel Corpus Archive are explored: EP_EN (with EP interventions: 26,959,446 tokens), HC (with House of Commons interventions: 70,567,728), and SandD_david_martin (with member of European Parliament – MEP – David Martin's interventions: 116,781). The main tool of analysis is the keyword, as generated by WordSmith 7.0. The analysis proceeds in three stages: stage 1, where the EP_EN and HC wordlists are compared, resulting in EP key priming; stage 2, where the SandD_david_martin and HC wordlists are compared, exposing David Martin's idiosyncratic productions; and stage 3, where the EP_EN and SandD_david_martin keyword lists are manually compared, leading to the identification of EP priming in David Martin's interventions.

Keywords: personal/group behaviour, parliamentary discourse, corpus-assisted discourse studies, priming theory, European Parliament, European comparable, parallel corpus

1. Introduction

The present paper, which revolves around parliamentary discourse, stems from two sources of interest, which inform the two main goals of the study. On the one hand, this paper focuses on personal and group behaviour, turning the spotlight on the coalescence between them. While it is commonplace to argue that

Published online: 22 February 2019
Pragmatics 29:3 (2019), pp. 357–383. issn 1018-2101 | e-issn 2406-4238

no production is (totally) original or unique and that we are all *bricoleurs* (Levi-Strauss 1966) of intertextual echoes, it is equally obvious that groups are made up of individuals and that intertexts would not exist if they had not previously been uttered by such individuals in the form of embodied texts. This is particularly the case in the political arena, where we largely perform/behave according to our group allegiances and collective history, but where certain individuals have been proved to exert enormous influence upon society and time. Therefore, the first goal of this paper is to contribute to systematic forms of identifying (parliamentary) group intertextuality within personal production (or vice versa, of spotting the personal touch in common, parliamentary, discourse). In other words, this paper aims to identify the amount of personal production, and the specific items of such production, that are accounted for by parliamentary group behaviour. In my opinion, this goal is always of relevance not just to the scholar but also to the citizen. The more we succeed in this venture, the more we will understand the ways in which our societies are managed and our personal lives are led. Additionally, we will have more refined tools to make politicians accountable, at a personal and group level, for their decisions and words.

On the other hand, this paper uses corpus-assisted discourse studies (CADS; see Partington et al. 2013) to complement two well-established, psychology-informed theories on personal and group behaviour: social identity theory (SIT) and self-categorisation theory (SCT). Corpus linguistics, being predominantly quantitative and inductive, often collaborates with other methodologies and theories with high rates of success (see, for example, Baker and Egbert 2016; Mautner 2009). The second goal of this paper is thus to provide further examples of prolific synergies between CADS and external fields, such as, in this case, socio-cognitive studies.

In sum, the overall research questions undertaken here include: Can a CADS method be used to analyse (parliamentary) group and personal production? Does this method provide a valid complement to SIT and SCT? Does this method yield useful data to help map personal performance onto group influence?

To answer these questions, the present paper is organized into four sections. In the first section, the basic tenets of SIT and SCT are briefly presented. In the second section, a corpus linguistics approach to group and personal communication is discussed. The third section presents a case study in which a CADS method is used to examine group and personal parliamentary production; more specifically, interventions at the European Parliament are compared to the personal production of the Social-Democrat MEP, David Martin. The paper ends with concluding remarks, in section four.

1.1 Brief outline of personal and group behaviour according to SIT and SCT

Personal and group behaviours have been dissected in many ways. Social identity theory (SIT) and self-categorisation theory (SCT) are two influential approaches to the field, largely championed by Henri Tajfel and John C. Turner, respectively (who, in fact, often researched and wrote together). Briefly put, SIT and SCT focus on the indisputable fact that people act both as individuals and as members of social groups. More precisely, Trepte (2006) quotes Hogg and Abrams to explain that SIT focuses on "the group in the individual" (Hogg and Abrams 1988, 3) and assumes that one part of the self-concept is defined by our belonging to social groups. SCT, in turn, proposes "that there is not just one self or self-concept, but many different group and also personal selves, corresponding to different comparative contexts" (Spears 2011, 208). Hence, SIT and SCT investigate group dynamics not only to understand society in general (and its composite groups in particular) but also to explain the human being in its full complexity. If the group is nothing without the individual, the individual would not exist without a membership in at least one group. Here, a group is defined as "a number of people who feel and perceive themselves as belonging to this group and who are said to be in the group by others" (Tajfel and Turner 1979, 40 in Trepte 2006, 256).

SIT and SCT are wide in their scholarly scope: (i) they delve into the antecedents and consequences of the personal/group compound (Ashforth and Mael 1989, 24–26), which they describe (and study) as existing along a continuum in more or less mobile societies (Tajfel and Turner 1986, 8–13); (ii) they are equipped to explain social change in its various formats (Tajfel and Turner 1986, 19–20); and (iii) they are equally capable of accounting for social stability and stasis (Spears 2011, 207). In short, both theories are particularly strong in describing the cognitive mechanisms by which human beings become integrally linked to groups. Among these mechanisms, categorisation has particularly strong explanatory power. Using categorisation, we classify ourselves and others as being part of in-groups ('we') and out-groups ('they') (Tajfel and Turner 1986, 13–15). It is through categorisation that our understanding of the world and of social interaction is filtered, and our expectations, hopes, and fears are defined. In the words of Tajfel and Turner (1986, 15–16):

> Social categorizations are conceived here as cognitive tools that segment, classify, and order the social environment, and thus enable the individual to undertake many forms of social action. But they do not merely systematize the social world; they also provide a system of orientation for self-reference: they create and define the individual's place in society.

On the one hand, categorisation may be described as a largely stereotypical and depersonalising process (Spears 2011, 210–211). By stereotypical, we mean here that, when categorising ourselves and others, we use a somewhat reductionist perception, tending to accentuate features that best represent the desired group, and ignoring grey areas. By depersonalising, we mean that, when categorising ourselves and others, we "see each other … as interchangeable representatives of the salient category on relevant (stereotypic) dimensions, rather than as unique individuals" (Spears 2011, 210).

On the other hand, categorisation is also largely relational and comparative (Tajfel and Turner 1986, 16). That is, when undertaking fine categorisation, individuals go beyond their favoured groups, relating and comparing them with other groups, which gives them their differentiated and unique status. These comparisons give the most relevant results when performed against "similar, proximal or salient [that is, pertinent or accessible in certain contexts] out-groups" (Ashforth and Mael 1989, 33). Trepte (2006, 258) concurs with this premise:

> Social comparison usually takes place with groups that are similar to one's own group […] the "closer" the other groups are to ourselves in terms of the dimensions on which we compete, the more relevant the social comparison gets and the more we "need" and want a positive outcome.

The relational/comparative nature of categorisation therefore results in stereotyping/depersonalising processes that accentuate commonalities, leading to "the minimal group paradigm" (Tajfel 1979 in Trepte 2006, 256) which says that, in minimal conditions, categorisation leads to in-group favouritism and out-group discrimination.

1.2 Brief outline of a corpus linguistics approach to personal and group communication: Priming theory through keyword analysis

Categorisation plays a key role in the socio-communicative amalgam of cognition, society, and discourse (see Van Dijk 2014). This role consists in unleashing multilayered forms of mediation between social environments and their representation, notably through language, to such an extent that, for Van Dijk, "there is no direct link between discourse and ideology" (2014, 397). Indeed, in the socio-communicative amalgam of cognition, society, and discourse, language is a point of instantiation and one of the most powerful means by which to categorise societal structures. It is therefore not surprising that linguistic approaches have already made valid contributions to the personal/group discussion explained earlier.

Especially relevant to this discussion, I would argue, is the work of corpus linguist Michael Hoey, and his priming theory, which (among other things) explains

how group communication has an impact on individual text production and how, in turn, the latter affects the former. Briefly put, for Hoey (2005, 8), "[a]s a word is acquired through encounters with it in speech and writing, it becomes cumulatively loaded with the contexts and co-texts in which it is encountered." This group exposure of individuals to certain linguistic uses is what he calls priming, which eventually marks personal production. Hoey (2005, 15) insists on the individual dimension when he states: "Words are never primed *per se*; they are only primed for someone." Binding the group and the individual is the genre. Without much of an explicit explanation of this notion, Hoey (2005) argues that people engage in language exchanges within specific situations, where access to the production or reception of certain (specialized) genres is made possible. It is within these specific situations and through the reception of material belonging to concrete genres that language is acquired and priming occurs in two forms: productive priming (when the individual is expected to aspire to participate in the genre) and receptive priming (when the individual is not expected to participate in it). The stronger the priming (i.e. the more frequently an individual is exposed to linguistic uses characteristic of certain genres), the more likely co-communicants are to be primed to use linguistic items in certain ways within specific genres. Additionally, it is actually individuals who utter words (or syllables or groups of words) and who are therefore not just the target of priming but its main source.

Hoey's theory was originally devised to explain collocation, which, he argues, remains unaccounted for in other linguistic theories. However, his theory is further expanded to incorporate explanations of a wide range of linguistic phenomena from semantic and pragmatic associations, through colligations, to discoursal structural features. In his work, Hoey simultaneously adopts two perspectives: (a) that of the primed items ("for example […] all the primings associated with the word *consequence*"; Hoey 2005, 14) and (b) that of the relationship among primings ("all the primings that contribute to the production of a sentence"; Hoey 2005, 14). And since he believes that "the brain must be storing language in a manner analogous to (though obviously not identical to) the way a concordance represents language" (Hoey 2013, 155), it seems logical that he employs concordances (one of CADS's main tools of analysis) in his studies.

However, there is at least one more perspective, which Hoey seems to overlook: that of what I would call the prime per se (such as the word 'consequence' in our previous example). With Hoey's methods, we indeed end up knowing in-depth information about the use of concrete elements (e.g. collocations, colligations, and discoursal features of specific units such as 'consequence'). But which precise units we study becomes a matter of intuition (for a defence of the term see Hoey 2005, 29) or is bound to specific texts and sentences (which work as cues for prime selection). Moreover, with Hoey's methodology we are unable

to produce a repository (or overall map) of those particularly characteristic linguistic items (or primes) exchanged within certain genres, as used in specific environments and/or as produced by individuals. This third perspective, which is admittedly more extensive than intensive, can be said to constitute a possibly "fairly blunt" (Gabrielatos and Baker 2008, 28) yet globally informative first gateway to group and/or personal repositories of (most characteristic) primes. It may also shed some light upon the overlap between (characteristic) linguistic production at the individual and the group levels. It is precisely this third perspective that I intend to pursue here. To do so, I am employing an important tool in corpus linguistics: keywords.

The choice of keywords to identify prime repositories of group and personal communication seems as logical as Hoey's decision to incorporate concordances in his studies from perspectives (a) and (b) (see above). If, for Hoey, language is stored in concordance-like compartments and it is through concordances that he accesses priming uses and relations, keywords are generated through relational and stereotyping processes that recall those of cognitive categorisation. I agree with McEnery (2016, 31), that "[s]ome techniques are more likely to spot some things than others," and I want to argue that keywords are particularly useful tools for identifying prime repositories and, consequently, for taking the first (most necessary) steps towards studying personal and group communication.

Keywords are relational in that they result from comparison. They are defined as "words whose frequency is unusually high in comparison with some norm" (Scott 1999, 53). More specifically, corpus software (such as WordSmith Tools 7.0, WST 7.0, used in this article) produces keyword lists after statistically comparing the terms of a given (sub)corpus A with those of a "reference or benchmark" corpus (O'Keeffe and McCarthy 2010, 127). Furthermore, keywords are stereotypical in that the literature (for example, Scott 2017) considers them to be the most characteristic, idiosyncratic terms in (sub)corpus A. As with cognitive categorisation, it is precisely because keywords are relational that they are stereotypical. Mike Scott (2009), who introduced the notion of keyness (as we know it today) to corpus linguistics, stated that any reference/benchmark corpus would do to statistically generate a list of stereotypical words. However, as with cognitive categorisation, stereotyping is particularly nuanced (details are finer) if comparisons are carried out between similar, proximal, salient corpora.

The (relational and stereotypical) processes of categorisation that result in keywords are currently of interest to a variety of scholars, including McEnery (2016) and Gabrielatos (2018). McEnery (2016) is, in my view, particularly successful in preserving the quality aspects of keyword protocols which, he explains, are not limited to the comparison of a (sub)corpus A with an external reference/benchmark corpus, but also occur, for example, between related (sub)corpora A

and B. The wide range of comparative possibilities in corpus linguistics (CL) is already presented in previous research such as that of Partington et al. (2013, 13). However, McEnery does well to stress this point regarding keywords, because while different types of comparison produce equally valid keyword lists, these lists are of different kinds, leading to dissimilar results. So, for example, and most pertinent to this paper, a direct comparison between corpora A and B will automatically elicit differences between these two. However, if researchers are interested in similarities, they will be better equipped if they undertake a two-stage comparison, wherein corpus A (and then B) is first independently set against a reference/benchmark corpus (resulting in Keyword List A, and then Keyword List B), and then Keyword Lists A and B are compared to identify similarities (and differences). In sum, keyword generation is not monolithic; there are many possibilities for how it may be carried out, and the choice of approach depends on the object(s) of study.

With regard to qualitative aspects of keyword generation, McEnery (2016) reminds scholars of another very basic, yet fundamental, fact of keyword studies: automatic keyword lists are often insufficient for analysis and require further (qualitative) methods from (manual) discourse studies. For example, and again pertinent to this paper, after coming up with a list of keywords, McEnery (2016) proposes organising them further, by putting them into groups according to semantic fields or part-of-speech (POS; grammatical) labels that help highlight both similarities and differences between corpora, and thus lead to pertinent conclusions.

As far as quantitative/statistical techniques are concerned, current research is introducing major adjustments in keyword protocols. One of the most critical (and illuminating) voices in this respect is Gabrielatos (e.g. 2018; see also Gabrielatos and Marchi 2012). Gabrielatos explains how keyword comparison has often been performed using null hypothesis significance testing, such as log-likelihood ratios or chi-squared tests (for more on statistics and corpus linguistics, see McEnery and Hardie 2012). However, these procedures do not actually measure the size of the difference in frequency of terms between two corpora; instead they assess how likely it is that a particular keyword result is simply due to chance. Gabrielatos (2018) discusses alternative, more pertinent, effect size metrics (such as %Diff and Log Ratio), which, in his view, need to be applied (in combination with significance testing) for the best keyword results.

To recapitulate, then, it is argued here (as in both SIT and SCT) that society and individuals are inextricably linked via mechanisms such as categorisation, which have an effect not just upon the ways in which language is used (as Hoey argues) but also upon the pool of (most characteristic, priming-exposed) potential choices that eventually make their way into individual production. It is further

hypothesised here that keywords derived via corpus linguistics techniques may help researchers in the analysis of personal/group language behaviour. What follows is a case study that implements and discusses a CADS method of analysing parliamentary group and personal language production, in an attempt to answer the questions proposed in the introduction.

2. Analysis of European Parliament plenary interventions and MEP David Martin's production via keyword analysis

2.1 Demarcation of context and genre

Given the theoretical premises of SIT, SCT, and priming theory, it can be argued that the first step in exploring group and personal language production is delimiting a concrete contextual setting and a specific genre for analysis. Briefly put, the wider contextual setting of the present discussion is that of the European Parliament (EP), the only directly elected body of the European Union (EU), representing 500 million citizens, whose "needs and aspirations" EP President Tajani vowed to "champion" (European Parliament 2016). In fact, the EP's most decisive original role was (and is) to "foster economic cooperation, the idea being that countries that trade with one another become economically interdependent and thus more likely to avoid conflict" (European Union, n.d.). The EP plays other important functions, summarised by the EP itself (European Parliament 2016) in three terms: "laws, budget, control." Together with these basic functions, the EP gives itself the more elevated role of being "a guardian of liberties, human rights and democracy, both in Europe and beyond."

To fulfil these functions, the EP deploys a wide range of genres (such as linguistic exchanges at committee meetings, political party headquarters and the plenary) whose affiliated texts exert priming impacts on EU politicians and citizens in a more or less open manner. The most visible and influential of EP genres is undoubtedly the plenary debate intervention (exchanged in either Brussels or Strasbourg), used by the 751 MEPs to participate in the EU's decision-making process while expressing their stance towards other EU institutions, such as the Commission and Council. This paper focuses on plenary interventions because of their importance and high visibility.

2.2 Selection of a specific individual for analysis

The discussion of group/personal linguistic behaviour requires the selection of a concrete co-communicant. Out of the 751 politicians productively primed at the

European Chambers of Strasbourg and Brussels, this paper examines the personal production of the most veteran UK MEP, the Socialist and Democrat (S&D) David Martin. Born in 1954 in Edinburgh, Martin has been Leader of the British Labour delegation (1987–88) and EP Vice President (1989–2004). He has also held positions regarding development and aid for trade (e.g. coordinator for the European Parliament International Trade committee), foreign affairs (e.g. substitute member of the Foreign Affairs committee), human rights (e.g. full member of the Human Rights subcommittee), and animal welfare (e.g. Vice-President of the Animal Welfare Intergroup), as reported on his personal website (http://www.martinmep.com/biography).

2.3 The European Comparable and Parallel Corpus as archive of corpora for analysis

The set of subcorpora used for our twofold study of EP priming and David Martin's production comes from the European Comparable and Parallel Corpus (ECPC) Archive. Compiled at the Universitat Jaume I (Castellón, Spain), the archive contains transcribed speeches and writings from: (i) the EP in (original and translated) English and Spanish; (ii) the UK House of Commons (HC); and (iii) the Spanish Congreso de los Diputados (CD). The specific subcorpora selected for this research are:

> EP_EN: MEPs' speeches and written interventions (26,959,446 tokens), as published in the *Official Journal of the European Union* (OJEU) from 2004 to 2011. Notice that, in July 2011, access to all interventions in non-original language was stopped by the EP. This corpus shows a standardised type/token ratio (STTR) of 38.99 and a standard deviation (SD) of 60.78.
>
> SandD_david_martin: All speeches and written interventions (116,781) by MEP David Martin as published in the *Official Journal of the European Union* (OJEU) from 2004 to 2011. This corpus shows a standardised type/token ratio (STTR) of 39.50.
>
> HC: British MPs' speeches and written interventions (70,567,728), as published in *Hansard* from 2004 to 2011. This corpus shows an STTR of 39.14 and an SD of 60.50. Notice that HC is chosen as reference/benchmark subcorpus in the first and second stages of analysis (see below). With it, both EP_EN and SandD_david_martin can be confronted against a common standard. This allows for subsequent direct comparisons between EP_EN and SandD_david_martin keywords. It also puts reasonably proximal groups face to face.

All these corpora are analysed with the aid of WordSmith Tools 7.0, a pioneering software in keyword generation designed by corpus linguist Mike Scott.

2.4 Stages of analysis

As explained above, the analysis in this paper is performed in three stages:

Stage 1: Comparison of proximal groups (EP_EN and HC) → Keyword List A: Stereotypical (key) group priming
Stage 2: Comparison of proximal groups (SandD_david_martin and HC) → Keyword List B: Stereotypical (key) personal priming
Stage 3: Comparison of EP_EN Keyword List A and SandD_david_martin Keyword List B → the group in the self and various selves in stereotypical personal production

In other words, first, independent Keyword Lists A and B (for the EP_EN and SandD_david_martin subcorpora) are generated against reference/benchmark corpus HC with the aid of WST 7.0. The identified terms would constitute a pool of the most characteristic primes of EP_EN and SandD_david_martin.

For this task, drawing on Gabrielatos (2018) and Gabrielatos and Marchi (2012), two different kinds of statistical measures are employed: log likelihood, with p-value set at 0.000001 and log ratio (based on Gabrielatos and Marchi's 2012 %DIFF) set at 2.0. A p-value of 0.000001 is generally considered a stable threshold of significance (in our field, a p-value below 0.05 is already considered statistically significant). In fact, this p-value means that there is a one in a million possibility of results being due to chance. A log ratio of 2 means that the words in the EP_EN or SandD_david_martin subcorpora are at least four times more frequent than in the HC reference/benchmark subcorpus.

Then, Keyword Lists A and B are compared manually, to measure their overlap and to spot similarities and differences between the most stereotypical productions in EP_EN and SandD_david_martin. Below is a discussion of the results of each of these stages.

3. Results of analysis

3.1 Stage 1: Comparison of proximal groups (EP_EN and HC) → Keyword List A: Stereotypical (key) group priming

Keyword List A (included in the Appendix and sorted according to effect size, measured by log ratio) comprises 47 terms that are especially characteristic of

the EP_EN subcorpus (vis-à-vis the HC subcorpus), and represent the EP's most stereotypical linguistic priming in English.

In line with the recommendations of McEnery (2016), these 47 keywords are initially grouped according to POS (grammatical) categories: nouns, verbs, adjectives, and others. Then these items are further grouped by sorting them according to the content conveyed.

There is a total of 31 nouns, meaning that 65.95% of EP_EN's idiosyncratic language focuses on participants of interest within the EP or the EU. Depending on their semantic content, these nouns can be subdivided further. The first group of key nouns comprises the main agents who ensure the functioning of the EU in general and compliance with the EP's three main functions in particular (that is 'laws, budget, control'). Here we encounter EU individuals ('Rapporteur', 'President', and 'Commissioner'), and institutions ('Presidency', 'Union', 'Europe', 'EU', 'Commission', 'institutions', and 'Parliament'). Also featured are participants from the national scene who occupy important positions in the EU. These participants may again be divided into individuals ('citizens') and institutions ('states' and 'countries'). It must be noted that the focus on individuals is particularly salient in EP communication (when compared with HC interventions). Key agents sorted by log ratio (from largest to smallest difference from HC) are presented in Table 1.

Table 1. EP key agents sorted by log ratio

Keyword	Frequency	Log R
RAPPORTEUR	13253	8.87
PRESIDENT	79008	5.13
PRESIDENCY	13620	4.40
COMMISSIONER	25267	3.47
CITIZENS	26490	3.41
UNION	71678	3.36
STATES	70930	3.35
EUROPE	59145	3.33
EU	70553	3.33
COMMISSION	81694	3.28
INSTITUTIONS	12320	2.63
COUNTRIES	47360	2.45
PARLIAMENT	62142	2.09

Idiosyncratic language in the form of nouns also refers to the objects of actions of the various participants identified above. These objects are especially related to proposing and implementing laws, one of the EP's main functions.

There are two kinds of stereotypical objects here. The first kind is legal instruments ('Directive', 'Lisbon [Treaty]', 'Resolution', and 'Opinion'). These are expressed in the singular, suggesting that discussion at the EP tends to be specific rather than general (e.g. referring to a particular directive rather than to directives in general, a communicative behaviour that seems to agree with the salient preference for individuals seen above). The second kind of objects are components (elements or stages) of the legislative procedure ('implementation', 'Framework', 'objectives', 'Initiative', and 'Proposal'), most of which are again found in the more concrete, singular form (save for 'objectives', as each legislative instrument tends to respond to more than one objective). The key objects sorted by log ratio (from largest to smallest difference from HC) are presented in Table 2.

Table 2. EP key objects sorted by log ratio

Keyword	Frequency	Log R
DIRECTIVE	19362	4.05
LISBON	11981	3.60
RESOLUTION	15376	2.85
IMPLEMENTATION	9522	2.73
FRAMEWORK	14190	2.44
OBJECTIVES	7887	2.39
INITIATIVE	7416	2.33
OPINION	9367	2.25
PROPOSAL	21730	2.02

The third set of EP_EN key nouns identified refer to issues discussed at the Euro Chamber. Most of these ('cooperation', 'negotiations', 'market', 'agreement', 'protection') revolve around the EU's original aim to 'foster economic cooperation, the idea being that countries that trade with one another become economically interdependent and thus more likely to avoid conflict'. Other key terms ('rights', 'freedom', 'efforts') are related to the EP's role as "a guardian of liberties, human rights and democracy, both in Europe and beyond." Finally, in light of the economic crisis in the EU since 2007, it is no wonder that 'crisis' occupies a prominent place in the EP's idiosyncratic vocabulary. The key issues sorted by log ratio (from largest to smallest difference from HC) are presented in Table 3.

Out of the 47 EP_EN key terms, only 2 are verbs (4.25%), sorted in Table 4 by log ratio (from largest to smallest difference from HC). These two key verbs represent undoubtedly the most characteristic processes in parliamentary chambers, whose main purpose is to vote on or adopt legal instruments. What is particularly remarkable here is that both processes are expressed in either the past or

Table 3. EP key issues sorted by log ratio

Keyword	Frequency	Log R
COOPERATION	19557	9.27
NEGOTIATIONS	10273	2.82
CRISIS	17689	2.66
RIGHTS	39899	2.40
MARKET	28565	2.34
AGREEMENT	23554	2.24
FREEDOM	10451	2.16
EFFORTS	9235	2.04
PROTECTION	17936	2.03

the passive form, suggesting that the EP is either particularly indirect in its attribution of agency or that it largely reports on prior action rather than describing present actions or anticipating future behaviour.

Table 4. EP key verbs sorted by log ratio

Keyword	Frequency	Log R
ADOPTED	10976	3.47
VOTED	14353	3.01

Out of the 47 EP_EN key terms, 5 are adjectives, meaning that 10.63% of EP_EN idiosyncratic language focuses on description. Of these adjectives, 3 are EU-related ('internal', 'European', 'common'), showing that the idiosyncratic agents, participants, and issues discussed at the EP are, logically, those from the EU stage. The remaining 2 adjectives ('human' and 'fundamental') point to areas of maximum interest, one of which, 'human' (a quick concordance query shows that it is used in connection with 'rights', a key noun in Table 3), is closely related to the EP's elevated role as 'a guardian of liberties, human rights and democracy, both in Europe and beyond'. The adjectives are presented in Table 5, sorted by log ratio (from largest to smallest difference from HC).

Table 5. EP key adjectives sorted by log ratio

Keyword	Frequency	Log R
INTERNAL	35264	3.80
EUROPEAN	9331	3.73
COMMON	13531	2.37
HUMAN	6695	2.36
FUNDAMENTAL	35264	2.14

Presented in Table 6 are 9 unclassified key terms (19.14% of the total idiosyncratic texture). Among them, the strongest trend is that of argumentative pointers such as vocatives ('Ladies', 'Gentlemen', 'Madam') and oral deictic pronouns ('you' and 'your'), as well as a structural link ('Finally'). After a meticulous concordance query, 'favour' was also placed in this category because it is mostly used in the expression 'in favour (of)', which is typical of parliamentary speeches in which reports are assessed and votes are cast. One interesting finding is that 'favour' is at least 4 times more frequent in the EP_EN subcorpus than in the HC subcorpus. This may merit further research which, due to space constraints, we are unable to pursue here. The same is true of the possessive apostrophe 's'.

Table 6. Other EP key items sorted by log ratio

Keyword	Frequency	Log R
LADIES	16351	7.28
GENTLEMEN	16385	6.56
S	85256	5.17
YOU	70689	3.11
MADAM	15668	2.98
YOUR	18917	2.85
FIGHT	7639	2.56
FAVOUR	14896	2.56
FINALLY	9338	2.00

3.2 Stage 2: Comparison of proximal groups (SandD_david_martin and HC) → Keyword List B: Stereotypical (key) personal priming

Keyword List B (included in the Appendix and sorted according to effect size, measured by log ratio) is the result of comparing all the words in the SandD_david_martin subcorpus with those in the HC benchmark subcorpus using WST 7.0. The list comprises 47 items especially characteristic of David Martin's production (vis-à-vis the HC subcorpus). Once more, these key terms are both statistically significant, at a p-value of 0.00001, and highly idiosyncratic, with a log ratio of 2.0. As in the previous section, key items are sorted according to grammatical (i.e. noun, verbs, adjectives, and others) categories first, and then with regard to semantic content.

Of the 47 SandD_david_martin key terms, 28 are nouns, meaning that 59.57% of David Martin's idiosyncratic language focuses on participants of various kinds. As in the EP_EN subcorpus, David Martin's idiosyncratic language (nouns) refers to the main agents who ensure the functioning of the EU in general and

compliance with the EP's three main functions ('laws, budget, control') in particular. Primarily these agents are from the EU/EP scene. Some of them are individuals ('President' and 'Commissioner') and some of them are institutions ('EU', 'Commission', 'Europe', 'Union', and 'Parliament'). Other nouns refer to agents from the national scene who also occupy important positions in the EU, be they individuals ('citizens') or institutions ('states' and 'countries'). These key participants are presented in Table 7, sorted by log ratio (from largest to smallest difference from HC).

Table 7. David Martin's key agents sorted by log ratio

Keyword	Frequency	Log R
EU	643	4.40
PRESIDENT	154	3.98
COMMISSIONER	111	3.49
COMMISSION	365	3.33
STATES	279	3.21
COUNTRIES	308	3.04
CITIZENS	84	2.96
EUROPE	172	2.76
UNION	166	2.46
PARLIAMENT	282	2.15

David Martin's idiosyncratic language (nouns) also refers to objects of actions at the EP. As in the EP_EN subcorpus, these objects are especially related to proposing and implementing laws. One group of objects is types of legal instruments ('Resolution', 'Directive', 'Report', 'Recommendations', 'Regulation', and 'Rules'), which are mostly expressed in the singular, suggesting that Martin's interventions are characteristically specific. Still, some key objects are in the plural ('Recommendations' and 'Rules'), evidencing more generic discussion. Other key objects in David Martin's speeches are components (elements or stages) in the legislative procedure ('Proposal' and 'Framework'), again in the more concrete, singular form. The key objects sorted by log ratio (from largest to smallest difference from HC) are presented in Table 8.

David Martin's idiosyncratic language (nouns) also refers to issues discussed at the EP. Most of these ('cooperation', 'trade', 'agreement', 'market', 'protection', 'safety', and 'standards') may revolve around the EU's original goal of fostering economic cooperation. Other key terms ('aid', 'rights', and 'development') are related to the EP's role as a guardian of liberties and democracy. Notably, Martin shows greater explicit interest in areas beyond the EU through the key nouns 'aid'

and 'development'. These key issues are presented in Table 9, sorted by log ratio (from largest to smallest difference from HC).

Table 8. David Martin's key objects sorted by log ratio

Keyword	Frequency	Log R
RESOLUTION	175	4.24
DIRECTIVE	89	4.14
REPORT	987	3.59
PROPOSAL	158	2.77
RECOMMENDATIONS	77	2.66
FRAMEWORK	66	2.54
REGULATION	93	2.54
RULES	84	2.36

Table 9. David Martin's key issues sorted by log ratio

Keyword	Frequency	Log R
COOPERATION	100	9.51
TRADE	323	3.71
AGREEMENT	225	3.38
AID	111	2.79
RIGHTS	226	2.78
MARKET	152	2.64
DEVELOPMENT	240	2.59
PROTECTION	96	2.34
SAFETY	74	2.22
STANDARDS	87	2.11

Out of the 47 SandD_david_martin subcorpus key terms, only 2 are verbs (4.25%), sorted in Table 10 by log ratio (from largest to smallest difference from HC).

Table 10. David Martin's key verbs sorted by log ratio

Keyword	Frequency	Log R
VOTED	539	6.13
IMPROVE	79	2.01

Martin's key verbs are quite different from each other. 'Voted' is, again, a matter-of-fact action of parliamentary chambers, expressed in the indirect passive or past form. By contrast, 'improve' is a very positive process, with some evaluative tones (Martin and White 2005; Munday 2012), which the speaker uses in a transitive manner, with clear subjects and objects, pointing at very active material processes, as Figure 1 illustrates (note that this verb may also be used in an intransitive manner, conveying events rather than material processes, in Hallidayan terms; see Halliday 1985).

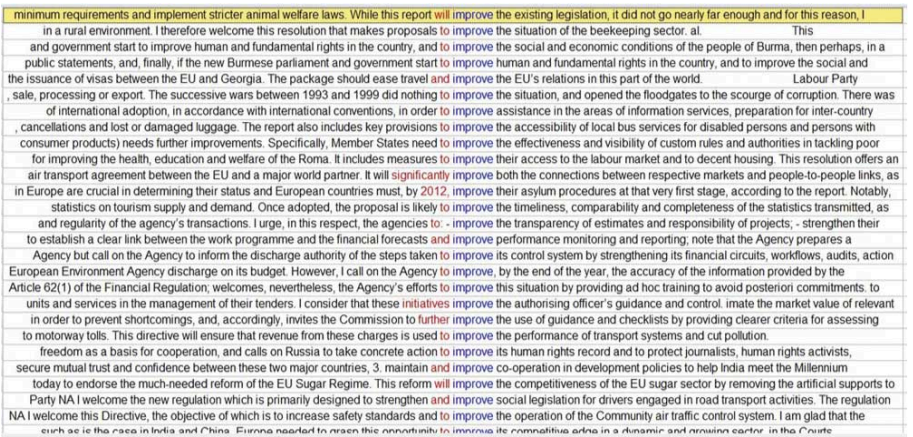

Figure 1.

There are 10 adjectives in this subcorpus, making up 21.27% of David Martin's total idiosyncratic production. These include items that describe nouns both at a European ('European' and 'Common') and a broader level ('global' and 'international'). Maximum areas of interest for the speaker are 'developing' (as in 'developing countries'), 'environmental', 'human' (as part of 'human rights'), 'free', and 'economic'. Like some of the nouns discussed above, these adjectives reinforce the EU's original desire to foster economic cooperation and/or the EP's role as a guardian of liberties and democracy. Finally, David Martin's production is also characterised by an openly evaluative adjective (Martin and White 2005; Munday 2012): 'pleased'. These adjectives are presented in Table 11, sorted by log ratio (from largest to smallest difference from HC).

Table 11. EP key adjectives sorted by log ratio

Keyword	Frequency	Log R
DEVELOPING	100	3.37
EUROPEAN	536	3.20
ENVIRONMENTAL	89	3.18
GLOBAL	84	2.88
HUMAN	155	2.79
INTERNATIONAL	158	2.15
FREE	94	2.14
ECONOMIC	165	2.10
COMMON	64	2.05
PLEASED	69	2.03

Presented in Table 12 are 7 unclassified key terms (14.89% of the total idiosyncratic texture). Like 'pleased', these items are used to convey evaluative meaning through a variety of forms ('favour', 'welcome', and 'fully'). They also evidence particularly idiosyncratic stylistic uses ('calls' and 'call', see below) and direct interpellation ('you'). Once again, the abundant possessive apostrophe 's' may be of interest to future studies.

Table 12. Other key items by David Martin sorted by log ratio

Keyword	Frequency	Log R
S	456	5.47
FAVOUR	204	4.22
CALLS	83	3.95
WELCOME	408	3.05
CALL	86	2.66
FULLY	71	2.17
YOU	153	2.11

3.3 Stage 3: Comparison of EP_EN Keyword List A and SandD_david_martin Keyword List B → The group in the self and various selves in stereotypical personal production

In manually comparing EP_EN Keyword List A (generated in stage 1) and SandD_david_martin Keyword List B (generated in stage 2), we perform two tasks. First, we isolate common keyword production in the two subcorpora, which

may be labelled, 'key group priming in key self-production', 'shared production', or 'the group within the self'. Second, we isolate those key terms that differ in both subcorpora, which could be labelled David Martin's 'unshared', personal, stereotypical production.

As shown in Table 13, 'shared production' (in black type) makes up 55.3% of David Martin's key production. By contrast, 44.7% of David Martin's production is not accounted for by key EP priming, and will be referred to as 'unshared production' (in red type in Table 13).

Table 13. David Martin's 'shared production' and 'unshared production' with EP priming, sorted by content proximity

Noun-agents	Noun-objects	Noun-topics	Verbs
INDIVIDUALS	Proposal	(Human) Rights	Voted
President	Framework	Cooperation	
Commissioner	Directive	Protection	
Citizens	Resolution	Agreement	
		Market	
INSTITUTIONS			
EU	Report	Trade	Improve
Europe	Recommendations	Safety	
Union	Regulation	Standards	
States	Rules	Aid	
Commission		Development	
Parliament			
Countries			

Adjectives	Others
LEVEL OF DISCUSSION	You
European	(in) favour (of)
Common	s
Global	Welcome
International	Fully
FOCUS OF DISCUSSION	Call
Human	Calls
Developing	
Environmental	
Free	
Economic	
EVALUATION	
Pleased	

With regard to nouns, all of David Martin's agents coincide with EP priming in portraying national/EU individuals/institutions. Of the key objects, 50% are shared; the other 50% refer to legal instruments that Martin focuses on, but which are not particularly stereotypical of the EP_EN subcorpus ('Report', 'Recommendations', 'Regulation', and 'Rules'). With regard to issues, 50% of Martin's production is a clear example of the group within the self, echoing the EU's original goals, and the EP's role as guardian of altruistic principles ('[human] rights', 'cooperation', 'protection', 'agreement', and 'market'). The remaining 50% of Martin's key terms in this category show that he is particularly keen on trade ('trade', "safety', and 'standards') and economic/humanitarian development ('aid' and 'development').

With regard to verbs, Martin's production is 50% shared with EP priming. Through the use of the form 'voted', he behaves in an institutional, indirect, impersonal (passive/past) manner. In his unshared production in the form of 'improve', he becomes more evaluative, positive (and hence personal), active, and direct.

Regarding adjectives, the EP_EN and SandD_david_martin subcorpora share 30% of their key terms. These locate participants within EU terrain ('European' and 'Common') or focus on the very institutional concern of 'human' rights. The remaining 70% of unshared production suggests that qualification is a more personal task. Martin's key adjectives show that some of his interests transcend the EU sphere ('global' and 'international'), while some specialise in certain EU areas such as trade ('free' and 'economic'), development ('developing'), and the environment ('environmental'). This unshared production is also particularly evaluative, as in the key adjective 'pleased'.

Last, unclassified EP priming accounts for 42.9% of David Martin's production, having to do with oral argumentation in the form of approving expressions ('[in] favour [of]'), deictic appellative pronouns ('you') and the possessive apostrophe ''s'. Martin's unshared production here (57.1%) is again particularly emotional, containing more evaluative expressions such as 'Welcome' and 'Fully'. Of interest is his particular use of 'call' and 'calls', which may be seen as idiolectal (see Figure 2).

It seems appropriate to highlight yet again that more than half of Martin's key terms reproduce EP priming. While the rest is unshared production, this does not mean that it is all monolithic, personal, unique communication, unaffected by any other external sources of priming. If we consider Martin's biography and his work as a representative (see above), we will notice that most of this unshared production might be the result of his relationship with certain (parliamentary/ideological) subgroups. For instance, Martin's key terms associated with trade and aid may have been primed, for example, at the International Trade committee. His idiosyncratic use of 'global' and 'international' could be traced back to all those

Figure 2.

subgroups, as well as the Foreign Affairs committee. His particular focus on 'environmental' issues might be related to his position as Vice-President of the Animal Welfare Intergroup. In summary, Martin's exposure to various sources of group priming resulted in a wide variety of shared and unshared key terms that reveal his 'various selves'.

4. Conclusions

The present paper stems from two main sources of interest: personal/group behaviour and corpus linguistics methods. Out of this twofold interest, the following research questions were developed: Can a CADS method be used to analyse (parliamentary) group and personal production? Does this method provide a valid complement to SIT and SCT? Does this method yield useful data to help map personal performance onto group influence?

I believe that the three-stage CADS methodology proposed and demonstrated here proves to be a valid complement to pre-established theories on the topic of personal vs. group identity. The methodology helps to produce repositories of categories. It also allows for the quantification of the impact of priming on personal linguistic production. Some of the methodology's main strengths are: it enables the examination of large quantities of linguistic priming from a perspective unexplored by Hoey; it utilizes some of the most recent (and pertinent) quantitative and qualitative recommendations for conducting CADS analysis; and it produces specific data that reveal shared and unshared areas of stereotypical language (in our case related to the EP context and its plenary intervention). However, this

paper only considers the tip of the research iceberg. It can be further refined by using Hoey's two perspectives, by employing detailed examinations of concordances (and other tools of analysis such as collocations, bundles, etc.) of some/all of the keywords identified here, and with the help of further theoretical and methodological triangulation.

References

Ashforth, Blake, and Fred Mael. 1989. "Social Identity Theory and the Organization." *Academy of Management Review* 14 (1): 20–39. https://doi.org/10.5465/amr.1989.4278999

Baker, Paul, and Jesse Egbert (eds). 2016. *Triangulating Methodological Approaches in Corpus-Linguistic Research*. London and New York: Routledge. https://doi.org/10.4324/9781315724812

European Parliament. 2016. *The European Parliament: The Citizens' Voice in the EU. A Short Guide to the European Parliament*. Luxembourg: Publications Office of the European Union.

European Union, n.d. *The EU in Brief*. https://europa.eu/european-union/about-eu/eu-in-brief_en (accessed September 23, 2017).

Gabrielatos, Costas. 2018. "Keyness Analysis: Nature, Metrics and Techniques." In *Corpus Approaches to Discourse: A Critical Review*, ed. by Charlotte Taylor, and Anna Marchi, 224–257. London and New York: Routledge.

Gabrielatos, Costas, and Paul Baker. 2008. "Fleeing, Sneaking, Flooding: A Corpus Analysis of Discursive Constructions of Refugees and Asylum Seekers in the UK Press 1996–2005." *Journal of English Linguistics* 36 (1): 5–38. https://doi.org/10.1177/0075424207311247

Gabrielatos, Costas, and Anna Marchi. 2012. "Keyness: Appropriate Metrics and Practical Issues." In: *CADS International Conference 2012. Corpus-Assisted Discourse Studies: More Than the Sum of Discourse Analysis and Computing? University of Bologna (Italy)*, 13–14 September 2012. Bologna and Siena: Corpus Linguistics SiBol.

Halliday, Michael. 1985. *An Introduction to Functional Grammar*. London: Arnold.

Hoey, Michael. 2005. *Lexical Priming: A New Theory of Words and Language*. London: Routledge.

Hoey, Michael. 2013. "Lexical Priming and Translation." In *Corpus-Based Translation Studies: Research and Applications*, ed. by Alet Kruger, Kim Wallmach, and Jeremy Munday, 153–168. London: Continuum.

Hogg, Michael, and Domininc Abrams. 1988. *Social Identifications: A Social Psychology of Inter-Group Relations and Group Processes*. London: Routledge.

Lévi-Strauss, Claude. 1966. *The Savage Mind*. Chicago: University of Chicago Press.

Mautner, Gerlinde. 2009. "Corpora and Critical Discourse Analysis." In *Contemporary Corpus Linguistics*, ed. by Paul Baker, 32–46. London: Continuum.

Martin, James, and Peter White. 2005. *The Language of Evaluation: Appraisal in English*. New York: Palgrave Macmillan. https://doi.org/10.1057/9780230511910

McEnery, Tony. 2016. "Keywords." In *Triangulating Methodological Approaches in Corpus Linguistic Research*, ed. by Paul Baker, and Jesse Egbert, 19–32. London and New York: Routledge.

McEnery, Tony, and Andrew Hardie. 2012. *Corpus Linguistics*. Cambridge: Cambridge University Press.

Munday, Jeremy. 2012. *Evaluation in Translation: Critical Points of Translator Decision-Making*. New York: Routledge. https://doi.org/10.4324/9780203117743

O'Keeffe, Anne, and Michael McCarthy. 2010. *The Routledge Handbook of Corpus Linguistics*. London and New York: Routledge. https://doi.org/10.4324/9780203856949

Partington, Alan, Alison Duguid, and Charlotte Taylor. 2013. *Patterns and Meanings in Discourse: Theory and Practice in Corpus-Assisted Discourse Studies (CADS)*. Amsterdam/Philadelphia: John Benjamins. https://doi.org/10.1075/scl.55

Scott, Mike. 1999. *WordSmith Tools*. Oxford: Oxford University Press. https://doi.org/10.1016/S0346-251X(97)00011-0

Scott, Mike. 2009. "In Search of a Bad Reference Corpus." In *What's in a Word-List? Investigating Word Frequency and Keyword Extraction*, ed. by Dawn Archer, 79–92. Oxford: Ashgate Publishing.

Scott, Mike. 2017. *WordSmith Tools Help*. Stroud: Lexical Analysis Software.

Spears, Russell. 2011. "Group Identities: The Social Identity Perspective." In *Handbook of Identity Theory and Research*, ed. by Seth J. Schwartz, Koen Luyckx, Vivian L. Vignoles, 201–224, New York: Springer. https://doi.org/10.1007/978-1-4419-7988-9_9

Tajfel, Henri, and John Turner. 1979. "An Integrative Theory of Intergroup Conflict." In *The Social Psychology of Inter-Group Relations*, ed. by William G. Austin, and Stephen Worchel, 33–47. Monterey, CA: Brooks/Cole.

Tajfel, Henri, and John Turner. 1986. "The Social Identity Theory of Intergroup Behaviour." In *The Social Psychology of Intergroup Behavior*, ed. by Stephen Worchel, and William G. Austin, 7–24. Chicago: Nelson-Hall.

Trepte, Sabine. 2006. "Social Identity Theory." In *Psychology of Entertainment*, ed. by Bryant Jennings, and Peter Vorderer, 255–272. New York: Lawrence Erlbaum.

Van Dijk, Teun. 2014. "Discourse, Cognition, Society." In *The Discourse Studies Reader: Main Currents in Theory and Analysis*, ed. by Johannes Angermuller, Dominique Maingueneau, and Ruth Wodak, 388–400. Amsterdam/Philadelphia: John.

Appendix

Keyword list A

Key word	Freq.	%	Log_L	Log_R
COOPERATION	19,557	0.07	49,273.30	9.27
RAPPORTEUR	13,253	0.05	33,213.01	8.87
LADIES	16,351	0.06	39,417.05	7.28
GENTLEMEN	16,385	0.06	38,252.79	6.56
S	85,256	0.32	177,880.78	5.17
PRESIDENT	79,008	0.29	164,115.48	5.13
PRESIDENCY	13,620	0.05	25,483.80	4.40
DIRECTIVE	19,362	0.07	33,917.34	4.05
INTERNAL	9763	0.04	16,158.13	3.80
EUROPEAN	17,8791	0.66	291,039.50	3.73
LISBON	11,981	0.04	18,882.61	3.60
COMMISSIONER	25,267	0.09	38,372.96	3.47
ADOPTED	10,976	0.04	16,644.32	3.47
CITIZENS	26,490	0.10	39,579.59	3.41
UNION	71,678	0.27	105,392.77	3.36
STATES	70,930	0.26	104,055.62	3.35
EUROPE	59,145	0.22	86,156.39	3.33
EU	70,553	0.26	102,730.00	3.33
COMMISSION	81,694	0.30	117,275.69	3.28
YOU	70,689	0.26	95,581.71	3.11
VOTED	14,353	0.05	18,760.47	3.01
MADAM	15,668	0.06	20,233.09	2.98
YOUR	18,917	0.07	23,201.22	2.85
RESOLUTION	15,376	0.06	18,825.14	2.85
NEGOTIATIONS	10,273	0.04	12,448.23	2.82
IMPLEMENTATION	9522	0.04	11,110.56	2.73
CRISIS	17,689	0.07	19,960.48	2.66
INSTITUTIONS	12,320	0.05	13,700.75	2.63
FIGHT	7639	0.03	8232.19	2.56
FAVOUR	14,896	0.06	16,050.27	2.56

Key word	Freq.	%	Log_L	Log_R
COUNTRIES	47,360	0.18	48,218.73	2.45
FRAMEWORK	14,190	0.05	14,380.90	2.44
RIGHTS	39,899	0.15	39,532.40	2.40
OBJECTIVES	7887	0.03	7761.89	2.39
COMMON	18,397	0.07	17,928.15	2.37
HUMAN	26,486	0.10	25,662.58	2.36
MARKET	28,565	0.11	27,413.72	2.34
INITIATIVE	7416	0.03	7088.24	2.33
OPINION	9367	0.03	8527.37	2.25
AGREEMENT	23,554	0.09	21,277.04	2.24
FREEDOM	10,451	0.04	9014.39	2.16
FUNDAMENTAL	11,289	0.04	9618.70	2.14
PARLIAMENT	62,142	0.23	51,043.54	2.09
EFFORTS	9235	0.03	7358.26	2.04
PROTECTION	17,936	0.07	14,199.83	2.03
PROPOSAL	21,730	0.08	17,047.17	2.02
FINALLY	9338	0.03	7248.40	2.00

Keyword list B

Key word	Freq.	%	Log_L	Log_R
COOPERATION	100	0.09	1029.30	9.51
VOTED	539	0.46	3458.44	6.13
S	456	0.39	2536.62	5.47
EU	643	0.55	2679.18	4.40
RESOLUTION	175	0.15	692.15	4.24
FAVOUR	204	0.17	802.15	4.22
DIRECTIVE	89	0.08	340.36	4.14
PRESIDENT	154	0.13	557.25	3.98
CALLS	83	0.07	296.89	3.95
TRADE	323	0.28	1058.55	3.71
REPORT	987	0.85	3080.35	3.59
COMMISSIONER	111	0.10	333.22	3.49
AGREEMENT	225	0.19	643.52	3.38
DEVELOPING	100	0.09	285.22	3.37

Key word	Freq.	%	Log_L	Log_R
COMMISSION	365	0.31	1022.31	3.33
STATES	279	0.24	742.11	3.21
EUROPEAN	536	0.46	1415.49	3.20
ENVIRONMENTAL	89	0.08	233.15	3.18
WELCOME	408	0.35	1002.21	3.05
COUNTRIES	308	0.26	751.90	3.04
CITIZENS	84	0.07	197.94	2.96
GLOBAL	84	0.07	189.54	2.88
AID	111	0.10	239.12	2.79
HUMAN	155	0.13	333.25	2.79
RIGHTS	226	0.19	484.22	2.78
PROPOSAL	158	0.14	334.98	2.77
EUROPE	172	0.15	362.72	2.76
CALL	86	0.07	171.94	2.66
RECOMMENDATIONS	77	0.07	153.81	2.66
MARKET	152	0.13	299.42	2.64
DEVELOPMENT	240	0.21	459.95	2.59
FRAMEWORK	66	0.06	122.87	2.54
REGULATION	93	0.08	172.57	2.54
UNION	166	0.14	293.07	2.46
RULES	84	0.07	138.88	2.36
PROTECTION	96	0.08	156.50	2.34
SAFETY	74	0.06	110.99	2.22
FULLY	71	0.06	102.53	2.17
PARLIAMENT	282	0.24	403.27	2.15
INTERNATIONAL	158	0.14	225.68	2.15
FREE	94	0.08	133.13	2.14
STANDARDS	87	0.07	120.03	2.11
YOU	153	0.13	211.00	2.11
ECONOMIC	165	0.14	227.29	2.10
COMMON	64	0.05	84.62	2.05
PLEASED	69	0.06	89.63	2.03
IMPROVE	79	0.07	100.83	2.01

Publication history

Date received: 27 April 2018
Date accepted: 8 October 2018
Published online: 22 February 2019