

# **A multi-dimensional study of diachronic variation in British newspaper editorials\***

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## ***1 Introduction***

The present study is an analysis of diachronic change in 20th-century newspaper editorials based on the multi-dimensional framework as presented in Biber (1988, 1995). This investigation is a follow-up of Westin (2001), which investigates the diachronic development of a large number of grammatical features. In Biber's multi-dimensional model, dimensions of linguistic variation are formed by linguistic features which co-occur in texts. The dimensions reflect situational, social, and cognitive functions shared by each group of co-occurring linguistic features.

The aim of the study is to analyze 20th-century British newspaper editorials with regard to five dimensions: involved versus informational production, narrative versus non-narrative concerns, the degree of referential elaboration, persuasive/argumentative focus, and abstract versus non-abstract style. The investigation is based on editorials published between 1900 and 1993 in the three upmarket newspapers the *Guardian*, the *Daily Telegraph* and *The Times* (cf Westin 1997 and 2001).<sup>1</sup>

The dimension score analysis shows that, through the 20th century, British newspaper editorials became more argumentative but less narrative. Furthermore, the texts gradually relied less on complex postmodification and a more non-abstract style developed.

## ***2 Material***

The corpus used for the study is a subset of the tagged version of CENE (Corpus of English Newspaper Editorials). The CENE comprises 864 editorials sampled

at ten-year intervals between 1900 and 1993 in the *Guardian*, the *Daily Telegraph* and *The Times* (for further information about the corpus, see Westin 2001: 6–14, 181–197). All in all, the untagged version of the corpus comprises just above half a million words. Since the editorials vary considerably in length (between 113 and 1 761 words), the investigation was based on a reduced dataset, where no text falls below 400 words. Thus the number of samples was reduced to 554, and the total number of words to just above 402 000, as shown in Table 1 for the three sub-periods distinguished:

Table 1: Sampling of the editorials in CENE: text samples with more than 400 words

Time period (sampling of decades)		<i>The Times</i>	<i>The Daily Telegraph</i>	<i>The Guardian</i>	Total
Period 1: (1900, 1910, 1920)	Word count	61 062	53 618	36 202	150 882
	Average sample size	969	1 072	823	961
	Number of samples	63	50	44	157
Period 2: (1930, 1930, 1950)	Word count	48 681	31 162	24 921	104 764
	Average sample size	798	567	779	708
	Number of samples	61	55	32	148
Period 3: (1960, 1970, 1980, 1993)	Word count	70 806	20 068	56 101	146 975
	Average sample size	605	502	610	590
	Number of samples	117	40	92	249
Total word count		180 549	104 848	117 224	402 621
Overall average sample size		749	723	698	727
Total number of samples		241	145	168	554

In Westin (2001), the diachronic development of Biber’s features was analyzed across the ten decades of the 20th century. The results presented below, however, are based on a comparison of the dimension scores for the five dimensions across three time periods. The division into three period groups raised the question where to make the breaks. The most logical division involved the Second World War. A division into a pre-war, a war-time, and a post-war period was finally adopted, which means that Period 1 comprises the decades between 1900 and 1920 (sampled as the years 1900, 1910 and 1920), Period 2 those between 1930 and 1950, and Period 3 those between 1960 and 1993. In using the three-way periodization of the data, we were able to reduce the wide range of variability in the editorials: the original ten-group alternative in Westin (2001) gave more precise information about when exactly a change took place, while the

three-group alternative gave a clearer indication of general tendencies of change in so far as a great amount of random fluctuation across time was leveled out.

*Table 2:* Linguistic features used for the calculation of dimension scores

Dimension 1: Involved versus informational production	Dimension 2: Narrative versus non-narrative concerns	Dimension 3: Elaborated reference versus situation-dependent reference
Positive features: private verbs contractions present tense verbs 2nd person pronouns <i>not</i> -negation demonstrative pronouns emphatics 1st person pronouns pronoun <i>it</i> main verb <i>be</i> causative subordination discourse particles	Positive features: past tense verbs 3rd person pronouns perfect aspect verbs public verbs <i>no</i> -negation  <u>No negative features</u>	Positive features: <i>wh</i> -relatives pied piping nominalizations  <u>Negative features:</u> time adverbials place adverbials other adverbs
indefinite pronouns hedges amplifiers <i>wh</i> -questions  possibility modals stranded prepositions <i>that</i> -deletion  <u>Negative features:</u> nouns word length prepositions type/token ratio attributive adjectives	Dimension 4: Overt expression of persuasion  Positive features: prediction modals suasive verbs conditional subordination  necessity modals split auxiliaries infinitives  <u>No negative features</u>	Dimension 5: Impersonal versus non-impersonal style  Positive features: agentless passives <i>by</i> -passives other adverbial subordinators  conjuncts  <u>No negative features</u>

### **3 The multi-feature/multi-dimensional approach**

As mentioned above, this study is based on the multi-feature/multi-dimensional approach as presented by Biber (1988, 1995). Since its introduction, this model has frequently been used for the study of synchronic linguistic variation (eg Biber 1987, 1988, 1994, 1995; Finegan and Biber 1994) as well as of diachronic variation (eg Biber and Finegan 1988, 1989, 1992, 1997; Atkinson 1992; Geisler 2000, 2001a, 2001b). The idea behind this approach is that features that often co-occur in texts have a shared situational, social, or cognitive function. In Biber (1988: 104–115), seven such sets of features (dimensions) are identified; five of them are used for the present analysis, namely involved versus informational production (Dimension 1), narrative versus non-narrative concerns (Dimension 2), elaborated versus situation-dependent reference (Dimension 3; ‘explicit versus situation-dependent reference’ in Biber 1988), persuasive/argumentative focus (Dimension 4; ‘overt expression of persuasion’ in Biber 1988), and abstract versus non-abstract style (Dimension 5). The lexico-grammatical features representing each dimension are given in Table 2. For a study based on a different set of grammatical features, see Biber (2001).

Compared to the features used by Biber (1988), the sets of features are somewhat shorter: such features that could not be reliably extracted with the aid of computer programs were not included in the present study. Those excluded are:

- Dimension 1: *do* as proform of verb, sentence relatives, non-phrasal coordination (positive features) present participle WHIZ-deletion (negative feature).
- Dimension 2: present participial clauses.
- Dimension 3: phrasal coordination.
- Dimension 5: past participial clauses and past participial WHIZ-deletion.

Dimensions 1 and 3 have both positive and negative features in Table 2, which assumes complementary distribution of the features. For instance, texts with high negative scores on Dimension 1 contain more nouns, prepositions, and attributive adjectives, but fewer contractions, private verbs, and other features with positive loadings.

The calculation of dimension scores (factor scores) follows the steps outlined in Biber (1988: 93–97 and 1995: 117–119). It should be stressed that the

dimension scores for Dimensions 3 and 5 have reversed polarity in Tables 7 and 9, as well as in Figures 3 and 5; that is, the negative scores have been turned into positive ones, and vice versa. The reason for this is that, in this way, it is possible to show similarities between Dimensions 1, 3, and 5, since a positive dimension score on one of these three dimensions represents a loading on the oral/informal end, whereas a negative score represents a loading on the literate/formal end (see Biber et al 1998: 194, 201 note 3).

#### ***4 Analysis of dimension scores***

The statistical significance of the five dimensions is summarized in Tables 3 and 4: the tables give F-values of ANOVA tests with the probability associated with a particular F-value, and R-square values.<sup>2</sup> In addition, Tables 3 and 4 include the results of the Newman-Keuls multiple comparison test indicating which category is significantly different from the others.

*Table 3:* Statistical significance of the dimension score analysis across time period

Dimension	F-value	Probability	R-square (r <sup>2</sup> )	Newman-Keuls groupings
Dimension 1	1.16	0.31	–	–
Dimension 2	7.86	<0.001	0.03	Period 3
Dimension 3	32.98	<0.001	0.11	Period 3
Dimension 4	9.17	<0.001	0.03	Period 3
Dimension 5	74.80	<0.001	0.03	Period 2

Table 3 shows the statistical significance of the five dimensions across time periods. Four of the five dimensions are statistically significant, as is shown by the column ‘Probability’. On Dimensions 2, 3, and 4, time Period 3 stands out as different from the other two. This indicates that several of the diachronic changes in British newspaper editorials belong to the post-war period (1960–1993). As far as Dimension 5 is concerned, period 2 is different from the other periods.

Table 4: Statistical significance of the dimension score analysis across newspapers

Dimension	F-value	Probability	R-square ( $r^2$ )	Newman-Keuls groupings
Dimension 1	18.83	<0.001	0.06	the <i>Guardian</i>
Dimension 2	1.99	0.14	–	–
Dimension 3	7.6	<0.001	0.03	the <i>Guardian</i>
Dimension 4	2.61	0.07	–	–
Dimension 5	10.73	<0.001	0.03	the <i>Guardian</i>

Besides the comparison across the three time periods, a comparison was also made across the three newspapers, as a certain degree of variation could be expected due to the fact that their readership profiles diverge. Among upper middle class and middle class readers, the *Daily Telegraph* is the most popular of the three, closely followed by *The Times*, whereas the *Guardian* attracts a broader readership (see Westin 2001). Table 4 provides statistical information on the five dimensions across newspapers. Two important points come out in Table 4. Firstly, the figures for Dimensions 1, 3, and 5 are statistically significant, suggesting that the crucial parameter distinguishing the three newspapers is that between oral and literate style. Secondly, the *Guardian* stands out as different from the *Daily Telegraph* and *The Times* on these three dimensions. This is also shown in Figures 1, 3, and 5, where the dimension scores for the *Guardian* are in many cases clearly different from those of the other two newspapers.

In Tables 5 through 9 below, details on the diachronic development of the individual newspapers are provided. The tables help to locate the variation more closely. For example, Table 3 shows that Dimension 4 is statistically significant ( $F = 9.17$ ,  $p. < 0.001$ ) and that Period 3 stands out as different from Periods 1 and 2. However, Table 8 (in section 4.4) identifies the exact source of the variation, since only the dimension scores for the *Daily Telegraph* reach statistical significance (in Table 8, the F-value for the *Daily Telegraph* equals 9.48, with  $p. = 0.0001$ ).

#### 4.1 Dimension 1: Involved versus informational production

As shown in Biber (1988), Dimension 1 differentiates between involved and informational production and is therefore associated with the oral/literate dichotomy as are Dimensions 3 and 5 (see sections 4.3 and 4.5). At the positive

end of the dimension, we find interactive or involved features such as present tense verbs, private verbs (for example *see, believe, think*), first and second person (personal) pronouns, and *wh*-questions. We also find features characteristic of affective discourse, such as emphatics (for example *a lot* and *such a*) and adverbial amplifiers (for example *completely, enormously, and very*) and features of generalized content, such as the pronoun *it*, demonstrative pronouns, and indefinite pronouns. Other features express uncertainty, for example, 'possibility' modals (the modals expressing permission, possibility, and ability; cf Quirk et al 1985: 221–223) and hedges, such as *almost, at about, and something like*. As examples of informal discourse, see (1) where contractions, another marker of involved discourse, and present tense verbs are italicized:

- (1) They *aren't* ideas men. They *are* get-things-done men ... *It's* a strength because it *means* the talks process *is* the hard practical stuff on which both editorials *thrive*. *It's* a weakness because neither *seems* quite to understand where the other *is coming* from ... But *don't* be mislead ... *There's* a lot more still going on behind the curtains ... *That's* a warning to Mr Major ... *There's* a pro-talks mood for including Sinn Feinn (which *is* just as well in the circumstances). But the largest single group in British public opinion about Northern Ireland *are* the *Don't Knows* ... The danger *is* that he *won't* be able to sell the result. (GUA93E30)

At the negative end of the dimension we find features associated with careful integration of information in a text: nouns, attributive adjectives, and prepositional phrases, marking noun phrase complexity, and word length and type/token ratio, which besides marking high information density also flag a varied vocabulary and precise lexical choice. As an example of informational discourse, see example (2), where nouns, attributive adjectives, and prepositional phrases are italicized:

- (2) The *European Community*, after a year of *self-inflicted turmoil* generated by the *over-ambitious Maastricht agenda*, must now end its *dream of "standing up" to America*, as *Jacques Delors* exhorts, and refashion *schemes for better co-operation with Washington*. If it is to reinforce the *humanising and liberating benefits of the collapse of communism*, the *West* cannot afford this *degree of confusion and disunity*. No *purpose* is served by *inflating conflicts of interest with Washington*. The *misery of the Balkans* is a *dreadful warning of the perils of assuming that European disorder can be managed without American political and military participation*. (TI93E1)

The pattern of development for Dimension 1 is irregular and difficult to interpret (see Table 5 and Figure 1). One reason might be that there is great variation between the three newspapers, another that features appearing at opposite ends of the dimension developed in the same direction, as was shown in Westin (2001). Features such as present tense verbs, *not*-negation, contractions, and questions, all with high positive loadings, increased in use but so did, for example, nouns and attributive adjectives with high negative loadings. Private verbs, first person pronouns, and the pronoun *it* with high positive loadings, on the other hand, and prepositional phrases with a high negative loading decreased in use. To judge from this, Dimension 1 might not be suitable for a diachronic study of one single genre, at least not of newspaper editorials.

Table 5: Mean scores for Dimension 1: ‘Involved versus informational production’

Period	<i>The Times</i>	<i>The Daily Telegraph</i>	<i>The Guardian</i>
Group1 (1900–1920)	-0.57	-1.73	1.20
Group2 (1930–1950)	-3.09	-2.22	2.81
Group3 (1960–1993)	-2.29	-0.84	1.08
F-value	3.20	0.73	0.90
Probability	0.04	0.48	0.41
R-square ( $r^2$ )	0.03	–	–

The only clear pattern is the marked difference between the *Guardian* and the other two newspapers (as shown in Table 4). The *Guardian* stays at the positive end of the dimension throughout the whole period while the *Daily Telegraph* and *The Times* stay at the negative end (see Table 5 and Figure 1). *The Times* is the only newspaper to show a statistically significant change on Dimension 1 (in Table 5,  $F = 3.20$ , with  $p = 0.04$ ). The dip towards the negative end of the dimension between periods 1 and 2 indicates a change towards greater information density.

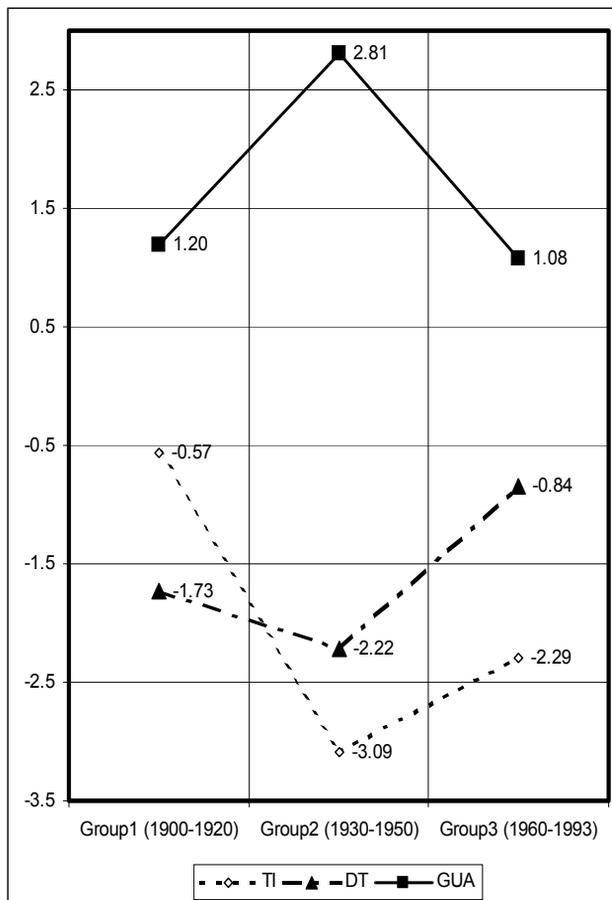


Figure 1: Mean scores for Dimension 1: 'Involved versus informational production'

#### 4.2 Dimension 2: Narrative versus non-narrative concerns

The most important features representing narrative discourse are past tense and perfect aspect verbs, both of which describe past events, and third person personal pronouns which, since the pronoun *it* is not included among them, are normally used with human referents.<sup>3</sup> Together, these features thus describe past events with people involved. Public verbs, also referred to as 'reporting verbs', are verbs such as *admit*, *comment*, *declare*, *reply*, and *say*. Their appearance

among the markers of narrative discourse can be explained by the fact that they often introduce indirect statements, which are frequent in such discourse. To get an idea of the ‘narrative’ structure that was so conspicuous in many of the editorials at the beginning of the 20th century, see example (3), an extract from the *Daily Telegraph*, April 5, 1900, where past tense verbs, perfect aspect verbs, third person pronouns, and public verbs are italicized:

- (3) *His Royal Highness the Prince of Wales has had the most providential escape from assassination. As the train in which he and the Princess were leaving Brussels yesterday evening on their journey to Copenhagen was starting, a miscreant who by some unaccountable mischance had been allowed access to the platform stepped upon the foot board of the carriage and fired two shots at the Prince at point-blank range. Mercifully the nerve of these ruffians does not always correspond with their wickedness, and, impossible as it seems in the circumstances, both shots missed their intended victim.* (DT00E5)

During the period studied, the language of the editorials moved towards the non-narrative end of the dimension (see Table 6 and Figure 2). The data showed a statistically significant difference between the first two periods and the third. It was thus confirmed that the language of the editorials became less narrative during the second half of the 20th century.

Table 6: Mean scores for Dimension 2: ‘Narrative versus non-narrative concerns’

Period	<i>The Times</i>	<i>The Daily Telegraph</i>	<i>The Guardian</i>
Group1 (1900–1920)	0.51	0.49	0.23
Group2 (1930–1950)	0.26	1.09	-0.05
Group3 (1960–1993)	-0.56	-0.53	-0.04
F-value	5.03	4.65	0.20
Probability	0.007	0.01	0.82
R-square ( $r^2$ )	0.04	0.06	–

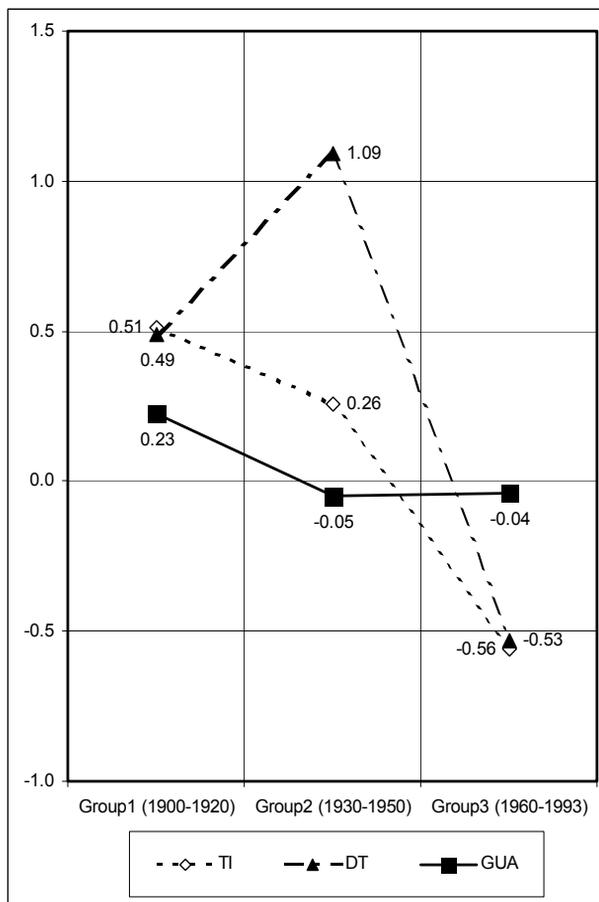


Figure 2: Mean scores for Dimension 2: 'Narrative versus non-narrative concerns'

No statistically significant difference between the three newspapers is recorded in Table 4. Table 6 indicates that the diachronic change noted in Table 3 actually involves only the *Daily Telegraph* and *The Times* (the probabilities of the F-values of both newspapers are below 0.05).

**4.3 Dimension 3: Elaborated reference versus situation-dependent reference**

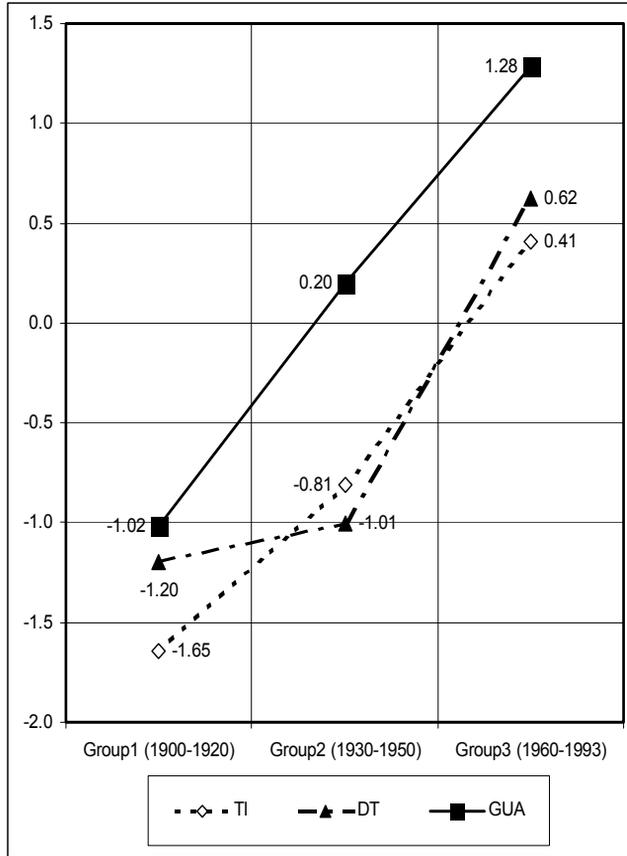
Dimension 3, labelled ‘Elaborated versus situation-dependent reference’ in Biber (1988), is dominated by relative constructions (*wh*-pronouns and pied piping constructions, that is, a relative pronoun preceded by a preposition) at the positive end of the dimension and time and place adverbials at the negative end. Relative constructions are used for noun phrase elaboration and integration of information, while time and place adverbials are used for spatial and temporal reference to the actual physical setting of the discourse. As an example of referential elaboration, see example (4), with relative clauses and nominalizations, another positive feature in this dimension, italicized:

- (4) Games establish a commonwealth among those *who* participate in them, a commonwealth so far ideal in its character that it affords an open career to *ability*, and leads almost inevitably to the *success* of merit; a *success which* occasions no heartburning, and is worn as their acknowledged due by those upon *whom* it falls. A passage through the outer suburbs of London on any fine half-holiday will show the *eagerness* with *which* cricket and other games are practised wherever *opportunity* is afforded for them; and the spectacle is one *which* justifies both *pride* in the rising members of an Imperial race and the hope that they may become worthy *inheritors* of the traditions *which* their fathers have bequeathed to them. (TI10E15)

The patterns of development for the three newspapers follow each other closely, and a straightforward development away from discourse marked by structural elaboration was observed (see Table 7 and Figure 3: the data have reversed polarity to enable comparison with Dimensions 1 and 5). This, in turn, means a development towards more informal language in so far as Dimension 3, like Dimensions 1 and 5 (cf sections 4.1 and 4.5), also distinguishes between oral and literate discourse.

Table 7: Mean scores for Dimension 3: ‘Elaborated reference versus situation-dependent reference’. (Note polarity reversal of the dimension scores)

Period	<i>The Times</i>	<i>The Daily Telegraph</i>	<i>The Guardian</i>
Group1 (1900–1920)	-1.65	-1.20	-1.02
Group2 (1930–1950)	-0.81	-1.01	0.20
Group3 (1960–1993)	0.41	0.62	1.28
F-value	14.44	6.94	9.56
Probability	<0.0001	0.001	0.0001
R-square (r <sup>2</sup> )	0.11	0.09	0.104



*Figure 3: Mean scores for Dimension 3: ‘Elaborated reference versus situation-dependent reference’*

The F-tests of the individual newspapers indicate a statistically significant decrease in the use of referential elaboration, and an increase in situation-dependent reference during the period studied (see Table 7 and Figure 3). Because of the reversal of positive and negative dimension scores in Table 7 and Figure 3, an increase in the dimension scores indicates greater use of situation-dependent reference. Again, Table 3 shows a clear difference between the first two periods and the third.

When the newspapers were compared, a statistically significant difference was attested between the *Guardian*, on the one hand, and the *Telegraph* and *The Times* on the other. The dimension scores for the *Guardian* were higher than those for the other two newspapers during almost the whole period covered by the study (see Figure 3).

#### 4.4 Dimension 4: Persuasive/argumentative focus

Among the features representing Dimension 4, we find markers of argumentative and persuasive discourse, such as prediction modals (*shall* and *will*), necessity modals (*must*, *should*, *ought to* and the marginal modals *need* and *have (got) to*), and suasive verbs (for example *suggest*, *demand*, and *insist*). Conditional adverbial subordinators (*if* and *unless*) are also found among the features marking persuasion or argumentation. Due to their grammatical structure, conditional sentences are well suited for argumentative discourse: if X happens, (then) Y follows. The subclause gives the condition that has to be fulfilled before what is stipulated in the main clause can happen. Examples (5)–(7) are chosen to illustrate persuasive/argumentative discourse in the editorials. In (5), we find necessity modals and infinitives, which are also found among the markers of persuasive/argumentative discourse, in (6) suasive verbs and infinitives, and in (7) a conditional clause and a prediction modal.

- (5) The first priority *must now be to persuade* those nuclear armed parts of the former Soviet Union Ukraine, Kazakhstan and Belarus – *to destroy* their strategic weapons and *become* non-nuclear parties to the Non-Proliferation Treaty. At the same time, pressure *must be maintained...* (DT93E1)
- (6) The commission did not feel strong enough to sweep its broom through so abnormal an annexe, but it did *recommend* that a committee *be specially appointed* for the purpose and left it the pregnant thought that the press might make a larger contribution to the finances of the university. (TI70E15)
- (7) *If Mr Khrushchev had really decided to return to Stalinism*, he would surely have returned to that dogma. (GUA60E25)

In Westin (2001: 103–117), the most notable increase in the use of persuasive/argumentative features occurred between 1950 and 1960. In the present three-group comparison, a statistically significant difference was shown between the first two periods and the third (see Table 3), which means that, also as far as Dimension 4 is concerned, the change did not set in until the latter part of the 20th century. However, as Table 8 indicates, the diachronic change actually

involves only the *Daily Telegraph* (see Figure 4). The same late change in Period 3 can also be seen in Dimensions 2 and 3 (compare sections 4.2 and 4.3).

*Table 8:* Mean scores for Dimension 4: ‘Persuasive/argumentative focus’

Period	<i>The Times</i>	<i>The Daily Telegraph</i>	<i>The Guardian</i>
Group1 (1900–1920)	-0.59	-1.10	-0.03
Group2 (1930–1950)	-0.14	-0.70	0.36
Group3 (1960–1993)	0.32	1.01	0.44
F-value	2.39	9.48	0.56
Probability	0.09	0.0001	0.57
R-square (r <sup>2</sup> )	–	0.12	–

No statistically significant difference was recorded for the three newspapers (see Table 4). The *Daily Telegraph*, however, shows a statistically significant change in the last time period in Table 8 (F = 9.48, with p. < 0.0001).

#### **4.5 Dimension 5: Abstract versus non-abstract style**

Dimension 5 is the third dimension that distinguishes between oral and literate discourse (together with Dimensions 1 and 3; see sections 4.1 and 4.3). The most important markers of abstract production are passive constructions (*by-passives* and *agentless passives*) which give a text an impersonal touch (see example (8) where agentless passives are italicized).

- (8) A state of affairs wholly satisfactory to national culture, to domestic life and to the B.B.C. is disclosed by its research into the habits of televiewers. They do not, *it is established*, neglect their reading, letter-writing or social contacts; they *are not chained* to the house, and even their cinema-going *is hardly affected*. The only sacrifice which the home screen claims is one *to be joyfully paid*: in television families less time *is devoted* to domestic duties in the evening. (DT50E6)

Even for the last dimension, we notice a statistically significant change (see Table 3), resulting in a less abstract style (as shown in Table 9 and Figure 5). The lines of development for the three newspapers follow each other fairly closely, even though the *Guardian* editorials turned out to be even less abstract than those in the other two newspapers during the whole period. The dimension scores for the *Guardian* in Period 3 (1960–1993) are different from those of the two previous time periods.

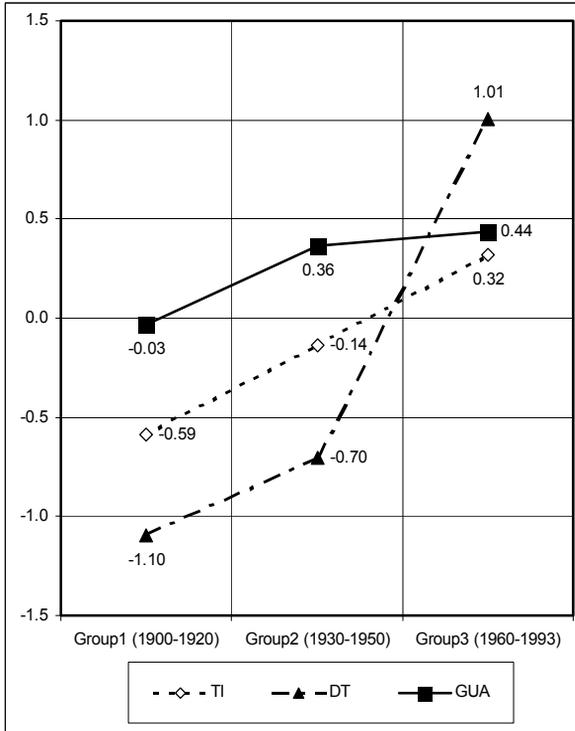
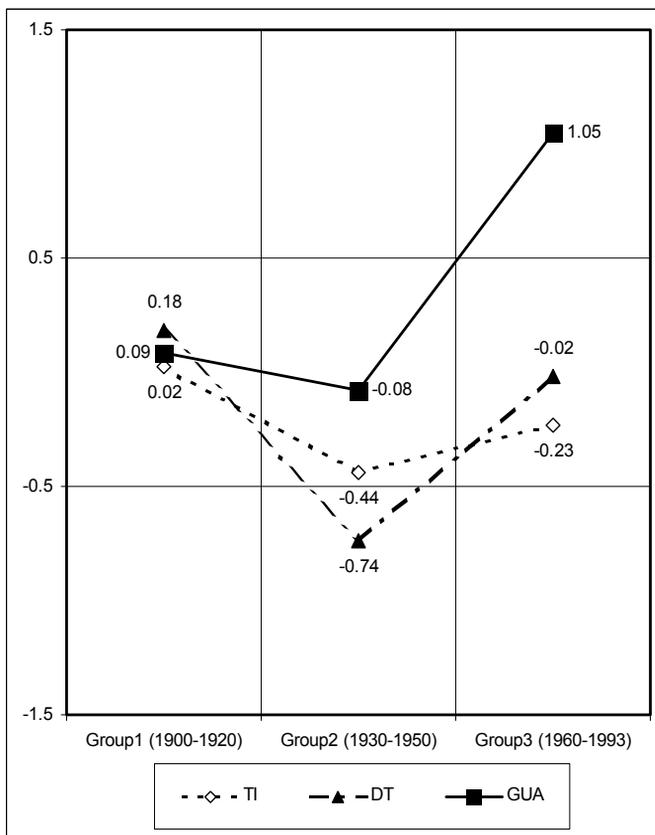


Figure 4: Mean scores for Dimension 4: 'Persuasive/argumentative focus'

Table 9: Mean scores for Dimension 5: 'Abstract versus non-abstract style'  
(Note polarity reversal of the dimension scores)

Period	<i>The Times</i>	<i>The Daily Telegraph</i>	<i>The Guardian</i>
Group1 (1900–1920)	0.02	0.18	0.09
Group2 (1930–1950)	-0.44	-0.74	-0.08
Group3 (1960–1993)	-0.23	-0.02	1.05
F-value	0.96	3.41	7.22
Probability	0.39	0.04	0.001
R-square (r <sup>2</sup> )	–	0.05	0.08



*Figure 5: Mean scores for Dimension 5: 'Abstract versus non-abstract style'*

No statistically significant difference was observed between Period 1 (1900–1920) and Period 3 (1960–1993), which indicates that the language of the editorials was less abstract at the beginning and the end of the century than it was between 1930 and 1960 (cf Table 9 and Figure 5). The language of the editorials thus developed in the direction of a more non-abstract style during the second half of the century.

## 5 Summary and conclusion

The results of the dimension score analyses show that, during the 20th century, the language of British up-market editorials became less narrative (Dimension 2) but more persuasive and argumentative (Dimension 4). It also became less abstract (Dimension 5) and less dependent on referential elaboration (Dimension 3), which resulted in more informal language. As regards Dimension 1, which distinguishes between involved and informational discourse, no regular pattern was observed.

The analyses also indicate that it was mainly during the latter part of the 20th century that these changes took place, since on three of the dimensions, the last time period (representing the years 1960 through 1993) stands out as different from the preceding two periods.

A comparison between the three newspapers reveals clear linguistic and stylistic differences between the *Guardian* and the other two newspapers, in so far as the language of the *Guardian* is more involved and less explicit and abstract, in other words, more informal. The distinction in formality between the newspapers is probably due to the audiences that they direct themselves to.

Finally, the study has demonstrated how conclusions can be drawn from periodized data in a short-term perspective. Our investigation shows that by using different periodization strategies, we can stress different aspects of language change. When comparing groups at shorter intervals, such as the decade-wise comparisons in Westin (2001), we get more precise information about when a change takes place. The three-group alternative used in the present study, on the other hand, gives new insights into more general tendencies of change. Besides, it is a way of overcoming the great amount of variation across time that was often shown in the ten-group alternative in Westin (2001). Furthermore, the study shows that the division into a pre-war, a war-time, and a post-war period was rewarding, since, when a statistically significant difference was attested, the first two time periods stood out as different from the third.

## Notes

\* This paper was presented at the *Eighth Nordic Conference for English Studies*, Gothenburg, May 2001. We thank Merja Kytö for helpful comments on a previous version of the paper. All errors are our own responsibility.

1. The 'up-market' or 'quality' newspapers are mainly aimed at upper middle-class and middle-class readers as compared 'mid-market' and 'down-market' newspapers (see, for example, Jucker 1992).

2. R-square, or  $r^2$ , measures the amount of variation explained by the dependent variable. In our data, the R-square values are generally very low.
3. The pronoun *it* is found among the positive features in Dimension 1.

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