The words that are making Europe

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Abstract

The discourse that buoys the European construction should accumulate symbolic notions. The creation of a success story such as the European construction should represent a formidable potential for optimism and excitement. The patterns of thought around which the European construction is organized must show something of the European identity. In order to test these three hypotheses, we analyze and compare 93 speeches made by President Delors over the period 1985-1994, and 28 by President Santer over the period 1995-1997. We have all these speeches (N = 121) concorded and statisticized —which words are used, how often, where, and when— with the help of a computer-aided content analysis package. Finally, using data-driven statistical techniques, we attempt to find out if there exist cutoff points that signal shifts in a process.

The words that are making Europe

The main issue of the project is that it provides Europeanists with a state of European discourse. Most European studies are principally about economics, politics, and laws; this one is about speeches made over the period 1985-1997 by political leaders of the European Community, President Jacques Delors (1985-1994) and President Jacques Santer (1995-). The knowledge gained by interrogating Europe in words cuts both backward and forward: It rests on memory (the inherited past to be organized) to make expectations (the future). Our business is current affairs of institutions that humans create and talk about, not history. However, to see the shape of a conception is not to have it. There are two crucial moves in our conception. One is from the construction of Europe (Urwin, 1995) to the words that made it. The other is from these words to the reconstruction of the trajectory of these words through time.

This paper finds its prompts in the following argument. If there is enough information in the texts available to historians to add intelligibility to archives, then there should also be sufficient information for behavioral scientists, using the quantitative methods of text analysis, to understand the changes of thought over time in contemporary speeches. The major advantage of analyzing those words that are making Europe is that such monitoring of speeches —a version of the history of the everyday — gives us firsthand experience of the content whereof Europe is made.

A fine start in this quest is about the sense in which the European construction is accompanied by parallel changes in the words used to express it. Institutions can be viewed, in part, as regular producers of words over the long duration. Institutions usually repeat their claims (Searle, 1995) until these claims have the inevitability of traditions. Analyzing the words that make an institution such as Europe blurs the distinctiveness of such traditions. These words can be analyzed by appropriate methodologies. The benefit of these analyses is a reconstruction of the recent past of the institution.

From the confrontation between the official version of the European construction and a text-based version of that construction, we expect to reap two kinds of benefits.

First, because the official version of the European construction and the text-based one might be out of sync, unexpected fractures in the European discourse may be evidenced; conversely, such a confrontation allows one to evaluate the extent to which apparently genuine developments in Europe are merely variations on an old theme. In every respect, the expected outcome is a new version of the construction of Europe distinct from a myth-making process. Secondly, a renewal of attention can be noted recently for the question of identities both in the work of social and behavioral scientists (Tajfel, 1981; Turner, Oakes, Haslam & McGarty, 1994) and in that of historians of Europe (Anderson, 1992; Girault, 1994; Pocock, 1991). This is particular so in view of the increasing distance (including increasing income inequalities) created between highly abstract, knowledgeable, and symbolic spheres (as in the economic milieus or the financial markets) and spheres of society concerned with basic questions of fag end survival and low paid services (Lasch, 1995; Reich, 1991). If European elites speak mainly to one another, the question is that of the suitability of an estranging European construction to respond to the full diversity of human nature.

The justification for analyzing the words that are making Europe is no doubt the light it sheds on the semantic content of the European construction. Of course, it is of assessing these words we are talking about. A study of the European construction which is silent on its symbolic elaboration, on the mood of the enterprise, or on the structure of thought that organizes that reality, none of which is a particularly European matter, would be as truncated as a discourse of social psychology which would have nothing to say about intergroup relations. Our thrust at the words that made Europe is three-pronged. The first prong concerns the extent to which the discourse that buoys the European construction accumulates symbolic and conceptual notions. The second prong concerns the affect that the creation of a success story necessarily generates. The third prong concerns the themes around which the European construction is built. We now expound on each of these approaches.

The use of symbolic notions (first approach), in political discourses as in science, is limited for three reasons. First, abstract words are difficult to understand (Hayes, 1992). Secondly, reduced circumstances due to geopolitical contingencies may always jeopardize an intellectual construction. One may think, for example, that the BSE (bovine spongiform encephalopathy) crisis, beyond its damaging effects on the health of citizens, jeopardized the capacity of Europeans to identify themselves to the European ideal. Thirdly, there are intrinsic limitations to the capacity for abstraction of the human mind (Thorngate, 1990). The European construction is also, as any other great visionary project like that of science (Snow, 1959/1993), the source of a formidable potential for optimism and excitement (second approach). Despite the dismay of our societies in the end of this century (Galbraith, 1992; Glyn-Jones, 1996; Hogenraad & Grosbois, in press; Kennedy, 1989, 1993), one may expect the project of the European construction to reflect a massive dose of a priori optimism. The pattern of change in pleasantness and arousal of the words that the European discourse is made up of should indicate something of that achievement. The first two approaches concern components of rational thought and of motivation likely to characterize the discourse of the European construction. The third approach addresses the structure of that thought. What, one wants to know, are the patterns around which the European construction is organized. The first two approaches see the words as a copy of meaning. The third one is a search for hidden contingencies (Handelman, 1985; Spence & Owens, 1990). There is indeed suspicion that sign and meaning may not coincide —that the text may mean something else than what it says (de Man, 1993).

We tackled these questions by examining how the speeches of former President Jacques Delors and President Jacques Santer changed about Europe during the period 1985-1997. We focused on 93 public speeches made by Jacques Delors between 1985 and 1994, and 28 made by Jacques Santer between 1995 and 1997. The tradition of analyzing political discourse is a long-honed one in social and behavioral science (Lasswell & Kaplan, 1950/1963; Namenwirth & Weber, 1987; North, Holsti, Zaninovich & Zinnes, 1963, to name a few). The field has been picking up steam since these pioneering

works (see for example Gallhofer & Saris, 1996; Hunt, 1997; Levasseur & Kevin, 1996; for more information on content analysis resources, see at "http://www.gsu.edu/~wwwcom/content.html"). Rarely, however, was the monitoring of the words of a supranational body such as the European Community forcefully undertaken to reconstruct the trajectory of its construction.

The relation of textual to historical data

Unable to control the manufacturing of the received version of the construction of Europe, we opted for controlling the material deriving from the speeches —the condensation chamber of Europe— that run in parallel to its construction. Do European leaders think at random or not? In the latter case, do they think in foggy phrases or not? Does each speech absorb the features and themes of the preceding ones and build upon it by accretion? We shall raise these questions when we shall have sorted out the facts from these speeches and set them off in the right arrangement. Yet, the very act of handling texts distributed over time entails some consequences. It is worth examining them before we get to methodological issues. For example, we will do well to remind ourselves that when one looks at data, textual or not, over time, there is almost always change (Kenny & Campbell, 1984, p. 129). However, the issue of the amount of change that takes place between the beginning and end of a DNA-like series of texts may cause us to suspect biasing effects due to the presence of serial dependencies (autocorrelations) in the texts (Hogenraad, McKenzie & Martindale, in press). Looking at texts over time invites one also to the next question of where does change occur in the text. Finally, when we follow a text over time as a historical event, that event is likely to be a unique one. But how can one repeat, as standard scientific procedure requests, a unique historical event?

Methods

Monitoring texts

The Delors and Santer speeches were those that were available, in French or in a French translation, early March 1997 at "http://www.europa.eu.int/rapid/cgi/rapcgi.ksh". Some early speeches by Jacques Delors, not available at this address, were scanned. The first Delors text is dated 25 February 1985, the last one, 5 December 1994; the first Santer's text is dated 9 May 1995, the last one, 28 April 1997. We had all these speeches (N = 121) concorded and statisticized —which words were used, how often, where, and when. These 121 speeches were further classified as to the three major audiences they were addressed to: 52 speeches addressed to the parliamentaries and other official bodies of the institution itself (in Brussels, Luxembourg, or Strasbourg), 50 addressed to non-EC institutions but located within the EC (as for example the G7 Conference on Employment addressed by J. Santer on 1st April 1996 in Lille, France), and a last batch of 19 speeches addressed to audiences outside the frontiers of the EC (as a speech addressed by J. Delors to the Council on Foreign Relations on 24 April 1991 in New York). The 52 speeches addressed to the EC institution were dubbed institutional, the remaining 69 ones, non-institutional.

A study like the present one might be better served if, when assessing variables, we compare the target speeches to other ones similar in most respects, yet different in a few. To this effect, we used a set of 34 governmental declarations made by successive Belgian governments over the period 1946-1992 (396,629 words) and three State of the Union addresses made by President Clinton in 1994, 1995, and 1996 (23,245 words). In assessing readability, we analyzed and contrasted these two sets of speeches to the 121 Delors and Santer's speeches.

The program of text analysis itself could only be achieved through a versatile engine tuned to snorkelling in the texts. The PROTAN (PROTocol Analyzer) software (Hogenraad, Daubies & Bestgen, 1995) was used to carry out these analyses. Content analysis with PROTAN involves at least the following three procedural steps, i.e. entering the text, pruning it, and arranging it into a frequency

table. After the text has been entered into its natural sequential order, pruning somewhat brings down the number of different word entries. Table 1 summarizes the frequency characteristics of the Delors and Santer's speeches analyzed in this study.

Insert Table 1 about here

Most content analysis does not stop with counting words. In PROTAN, the two procedures for analyzing the content of a text are the categorizing one (concept-driven) and the contextual one (data-driven). The concept-driven procedure is based on conceptual dictionaries while the data-driven one allows identification of the main themes present in a discourse (Iker & Klein, 1974). We use both procedures here. Categorizing words is a quasi-experimental procedure in the sense that, having selected a list of relevant words —such as a list of abstract words— that fit a given hypothesis, we retrieve from the text only those words that match the list. Categorizing words consists of comparing all the words of the Delors and Santer corpus (divided into 121 speeches, 93 by Delors and 28 by Santer) to all the words of a dictionary (usually organized into some number of categories). A dictionary, in textual analysis, is no more than a semantic trawl that we drag through the text —looking for matches between words in a dictionary and words in a text. The words of the text then either are caught in the trawl, or they aren't. When we apply a dictionary to a text, we consider only the text words that are caught in the trawl. The shape and size of the trawl characterize each dictionary. Each time a match is found between a word in the dictionary and a word in the text, the event is recorded in the unit in which it occurred. When all the comparisons have been made, recorded matches are totaled by category.

The value of such a procedure lies unquestionably in the value of the comparison lists (the technical word for which is dictionaries). Three lists (or dictionaries), all in French, were used in the

present study, one to assess pressure towards novelty and emotion in texts, one to evaluate their degree of affect (pleasantness and arousal), and one to evaluate their imagery contents.

To ferret out pressure towards novelty, we employed Martindale's (1975) Regressive Imagery Dictionary (RID for short). The RID is a content-analytic measure of two basic cognitive processes, the primordial and symbolic thought contents. In its French version, the RID pits 2,019 words tagged in concrete (primordial) thought content against 745 ones tagged in symbolic thought; 599 other ones are tagged in emotions. Primordial thought processes are driven by fantasy and free association, and by the ignorance of what are institutions and societies: These processes are nontemporal cognitive modes that suspend logical and critical thought. Conceptual thought processes are called symbolic and abstract by contrast with primordial thought processes that do not go beyond the world of appearances, sensates, percepts, and other regressive cognitive mechanisms. Symbolic thought processes are time-oriented, involving logical and critical thinking: They are effective each time we manipulate representations. The construct validity of the RID has been established by measuring the presence of primordial and symbolic thought content in texts supposed to contain them. The folktale of less versus more developed societies contains for example more primordial thought content (Martindale, 1976) while words belonging to the primordial thought content are characterized by older dates-of-entries into the language (Benjafield & Muckenheim, 1989). Other validation studies of the RID are expounded upon in Martindale (1979, 1990).

Affect (pleasantness and arousal) was assessed using a dictionary composed of 2,998 entries. This dictionary (Leleu, 1987) results from ratings of evaluation (pleasant-unpleasant) and arousal (active-passive) on 7-point intensity scales. The construct validity of this dictionary rests upon the principle that the weight of a text on an affective dimension can be derived from the weight of its component words on that dimension, as was shown by Johnson-Laird and Oatley (1989), Miall (1988, 1992), and Bestgen (1994). The Ottawa dictionary of imagery (Desrochers & Bergeron, 1992) is made up of 1,916 French nouns for each of which we know its weight of imagery. This weight results from

ratings of the ease with which a given word elicits a mental image. Weights are reported as values (multiplied by 10) on 7-point scales.

Comparing a text to a semantic dictionary is not the only way to extract information from a text in PROTAN. Another powerful scheme (contextual) consists of analyzing the statistical relationships words of a text have with each other. However, where categorizing words puts a dictionary between the analyst and the text, the contextual scheme for analyzing a text allows no such cordon sanitaire between the analyst and the text (because the relations between the words of the text lie in the text and not in some intermediate instrument). The word-word contiguity approach is expounded upon in Iker and Klein (1974) and Weber (1983). The purpose of analyzing the traceries of connections between text words is to gain knowledge of the patterns of distribution of soft-fingered themes as the speeches unfold. The idea is that the themes that characterize a text can be made to appear by analysis of the contiguities existing between given sets of words (Ide, 1989; Iker, 1974a; Iker & Klein, 1974; Klein, 1976). Sufficient information, explain Iker and Klein (1974, p. 430), exists within the word and within the temporal associations among and between words to allow data-generated elicitation of major content themes. Separate factor analyses of the same text yield striking resemblance in the factors even when different sets of words are used (Iker & Harway, 1969; Iker & Klein, 1974). Words are selected by a procedure that emphasizes words that are highly correlated with other words (Iker, 1974b).

Readability

We plumb readability in PROTAN through the Gunning index (Gunning, 1968; Mailloux, Johnson, Fisher & Pettibone, 1995). The Gunning index, a variation of the Flesch (1948) readability index, considers both the average sentence length and the average word length. This combined measure of average sentence length and average word length is then multiplied by a coefficient of .4. Gunning (1968, p. 38) observed that this coefficient yields a good approximation of the grade system in the

North-American educational structure when applied to texts with known graded reading difficulty. A text is more difficult to read as its Gunning index increases. Gunning indices of 8, 12, and 15 correspond respectively to easy, difficult, and very difficult texts.

A tool to hatch into the structural duration of the European construction

Formal acts of commemoration, says Stern (1992, p. 217), are not always the best occasion for arriving at historical truth, for they often serve to create myths. We examined factor scores for landmarks from within the actual data using the CART (Classification And Regression Trees) system of statistical decision-making (Breiman, Friedman, Olshen & Stone, 1993; Efron & Tibshirani, 1991; McKenzie & Low, 1992). CART belongs to the family of nonparametric techniques aimed at building trees by recursive statistical decisions. Tree-building is particularly appropriate for, as in the present case, uncovering multiple unspecified change-points that may be hidden in the data.

CART is a tree-building technique which we expect will split each series of factor scores into subgroups that are homogeneous regarding the content of the factor. In other words, the goal of a regression tree is to partition data into homogeneous (low standard deviations) terminal nodes. CART first grows as large a tree as possible, subject to the default restriction that no subgroup with five or fewer observations (speeches) can be further split. When a maximum tree is built, CART starts pruning the tree combining subgroups until it finds the smallest tree that has an error-rate within one standard error of the error rate of the largest tree that was originally grown.

Results

A series of speeches has an inherent temporal order, which raises the question of serial dependency. Before carrying out polynomial regression (Cohen & Cohen, 1975, pp. 213-231), we removed any autocorrelational dependencies from the series (Gottman, 1981). The effect of autocorrelation is to inflate or deflate the real differences that may exist among different parts of text

being compared. Such autocorrelation also affects nonparametric tests such as the Mann-Whitney test (Zimmerman, 1993). The solution consists of removing effects due to autocorrelation, even if the latter are not statistically significant (Crosbie, 1993; Hogenraad et al., in press). In the present case, we used the SAS procedure AUTOREG (SAS Institute, 1993) to detect and remove first- and higher-order autocorrelation from the series.

The tally of the rate of conceptual thought content in the 121 discourses of Delors and Santer put together yields an elaborate quartic profile composed of a sequence of two U-shaped positive evolutions [$\underline{R}^2 = .10$, $\underline{F}(4, 116) =, 3.19$, $\underline{p} < .05$]. However, this change over time seems essentially due to the 52 institutional speeches [$\underline{R}^2 = .14$, $\underline{F}(3, 48) = 2.71$, $\underline{p} < .05$] (Figure 1) while the 69 non-institutional ones exhibit no such change. Tallying the rate of primordial thought content in the same 52 institutional speeches yields a significant change over the passing of time [$\underline{R}^2 = .16$, $\underline{F}(3, 48) = 3.02$, $\underline{p} < .05$] (Figure 2); the non-institutional speeches too exhibit change in primordial thought content over time [$\underline{R}^2 = 14$, $\underline{F}(3, 65) = 3.44$, $\underline{p} < .05$] (not shown in Figure 2). The emotional content shows a cubic profile [$\underline{R}^2 = .11$, $\underline{F}(3, 65) = 2.67$, $\underline{p} < .05$] for the 69 non-institutional discourses (Figure 3) and for the total (not shown in Figure 3); no change in emotional content is recorded for the institutional speeches (note 1).

Insert Figures 1, 2, and 3 about here

The polynomial analysis of variable "arousal" yields a significant U-shaped profile followed by an inverted U-shaped one [$\underline{R}^2 = .23$, $\underline{F}(3, 65) = 6.50$, $\underline{p} < .001$) for the non-institutional speeches (Figure 4) and for the total (not shown in Figure 4). Finally, the Ottawa dictionary of imagery uncovers a degradation of the imagery [$\underline{R}^2 = .07$, $\underline{F}(1, 65) = 4.82$, $\underline{p} < .05$] in the non-institutional speeches (Figure 5 and note 2) and for the total (not shown in Figure 5).

Insert Figures 4 and 5 about here

The profile of readability (Figure 6) of the 121 speeches showed an inverted U-shaped curve [$R^2 = .22$, $F(4, 116) = 8.06$, $p < .001$]. Readability has deteriorated from 1987 to 1992 but improved after that. It is a strength of the Santer Presidency (1995-) that it has done readability some immediate good: There is a statistically significant difference (Tukey test) between the mean readability of the Delors ($M = 16.94$, $n = 93$) and Santer speeches ($M = 15.05$, $n = 28$). The readability profiles of the institutional versus non-institutional speeches are similar. However, given the generally low levels of readability of the speeches, there is ground for doubt that European elites write for anyone else than for one another. It would take highly selective quotations to sustain the view that either Delors or Santer's estranged sentences have in view a larger audience in which not so elites can share the European impulse with them. Incidentally, the mean readability value of the three Clinton's State of the Union addresses is 9.94, which compares very favorably with the readability value of 17.27 of the 34 Belgian governmental declarations.

The rate of uniqueness of the vocabulary is the ratio of the number of original words per year —words that never appeared before nor after a given year— to the total number of words for that year; this ratio is further centered on the average uniqueness score computed over all the years. The rate of vocabulary uniqueness of the 52 institutional speeches, aggregated into 12 years (Figure 7) (no speech was available in this category for the year 1987), shows an increase in vocabulary originality. One may observe *en passant* the towering increase in uniqueness of the year 1989, and the (expected) increase in uniqueness of the year 1995, with the new Presidency of Jacques Santer. The speech given by Jacques Delors in Strasbourg on 17 January 1989 at the European Parliament on the guidelines for the European Commission and his press conference on the European Monetary Committee Report in Luxemburg on 17 April 1989 are examples of such uniqueness of vocabulary. The speech on the

European Council of Madrid before the European Council in Strasbourg on 13 December 1995 is an example of Santer's uniqueness of vocabulary in 1995. At the opposite, vocabulary uniqueness of the 69 non-institutional speeches, aggregated into 13 years (Figure 8), exhibits a regular decrease: Over the years, the two Presidents of the European Community tend to be less creative in the words they use in addressing non-institutional audiences. Delors' speech at the "Sylva" conference (Paris, 7 February 1986) epitomizes originality of speech addressed to non-institutional audience (for that year).

Insert Figures 6, 7, and 8 about here

Meeting Delors and Santer on their own terms

Meeting European leaders on their own terms is undertaken in the co-word analysis of the speeches. Frequent occurrences of stock phrases in the speeches cause many words to be systematically present together within the same speech (clichés such as "Governors of Central Banks", "central and oriental Europe", "Single European Act", "common interests", "veterinary embargo" and others). Such co-occurrences, when systematic, are enough to generate a factor dimension by themselves. A two-step procedure was developed to avoid generating spurious factor dimensions. First, we ran a cluster analysis on a batch of 150 words richly associated with each other through the 121 speeches. This analysis allowed us to identify 114 clusters. Some clusters were composed of single words and other ones of two or more words systematically present together (stock phrases). The correlations between the words in clichés were .87 or more. Then, we ran a factor analysis, actually a second order one, not on the 150 words, but on the 114 clusters obtained from the cluster analysis. The factor analysis of the cluster-cluster correlations between the 114 clusters steered a path between three major themes (Table 2). At the risk of foreclosing what additional significance of these three clusters of clusters, we blocked in their meaning using three sets of nouns, respectively "Security vs. Unemployment", "Institutions vs.

European Citizenry", and "A Europe of Regions". Bipolar factor 1 ("Security vs. Unemployment", 7.52% of variance) shows a quartic evolution (i.e. two U-shaped profiles) [$R^2 = .15$, $F(4, 116) = 5.17$, $p < .001$]: Concern with security and cooperation, at its highest around 1991 and 1992, is presently running out of steam, despite multiple, but perhaps patchy, references to Eastern Europe, to the benefit of its opposite on the dimension, unemployment. Factor 2 "Institutions vs. European Citizenry" (7.35% of variance), also a bipolar factor, shows a cubic evolution (i.e. inverted U followed by an U-shaped profile) [$R^2 = .14$, $F(3, 117) = 6.48$, $p < .001$]: The institutional focus has been high during the Delors-I years, low during the Delors-II years, and then high again during the Santer's Presidency. Note that when the institutional focus is removed from the wings, its polar opposite, dubbed "European citizenry", is put on the stage. Unipolar factor 3 ("A Europe of Regions", 6.15% of variance) [$R^2 = .32$, $F(2, 118) = 27.35$, $p < .001$] is presently soaring with a strong U-shaped profile.

Insert Table 2 and Figure 9 about here

Decomposing the European construction into homogeneous groups

We paid a second full visit to the three factors by using the CART resampling technique to ferret out the significant change-points in the development of the themes etched out in Figure 9. Factor 1 ("Security vs. Unemployment") splits into a first period, running from 25 February 1985 to and including the declaration made by Santer at the death of the French president François Mitterand on 8 January 1996, and into a second period covering the remaining speeches. The first partition is itself split into the speeches before and including that pronounced by Delors on 6 April 1989 (address to the seminar on "Post-1992 Statistical Information Systems", Brussels), and those pronounced after that. The second main split divides the speeches delivered between 31 January 1996 ("European Agreement to have Confidence in Employment") and 18 February 1997 (speech about the BSE enquiry

commission, Strasbourg), and those delivered after 27 February 1997 (included) (address to the Economic and Social Committee, Brussels).

Dates	Av. loading on Factor 1	n
25 Feb. 85 - 8 Jan. 96	.12	104
25 Feb. 85 - 6 Apr. 89	-.44	18
8 Apr. 89 - 8 Jan. 96	.23	86
31 Jan. 96 - 28 Apr. 97	-.74	17
31 Jan. 96 - 18 Feb. 97	-1.26	10
27 Feb. 97 - 28 Apr. 97	.02	7

Factor 2 ("Institutions vs. European Citizenry") could not be partitioned at all. Factor 3 ("A Europe of Regions") bears the definite mark of Santer, even if the last three speeches of Delors, from 14 June 1994 to his last speech of 5 December 1994, belong to the second partition. The theme "A Europe of Regions" is mostly under the average during the Delors years. Give or take three speeches, the split of 90 versus 31 speeches perfectly matches the two Presidencies.

Dates	Av. loading on Factor 3	n
25 Feb. 85 - 28 May 94	-.30	90
14 Jun. 94 - 28 Apr. 97	.89	31

There is a certain "onceness" (Bakan, 1966, p. 4) in the profiles of Figure 9 in the sense that a single statistical test for each profile carries the burden of an inference that concerns the text-based

history of a whole series. Cohen's (1994) recent paper exposed various myths concerning null hypothesis significance testing, with Bakan (1966) having earlier exposed the same myths. The point is that both Bakan and Cohen agreed upon the value of replication studies, as are for example being explored by Thompson (1995) to compensate for the "onceness" of every inference model. But how indeed can one repeat a unique historical event such as the Delors and Santer's series of speeches?

A partial solution is provided by the SIMSTAT software package (Péladeau, 1996). We treated the regression data in Figure 9 as if they were the population, recreated 200 samples from it, and calculated from such samples the estimators we were concerned with, i.e. polynomial regressions. This methodology, a.k.a. bootstrap simulation, has been described by Efron and Tibshirani (1991), Péladeau and Lacouture (1993), Stine (1989), and more recently by Thompson (1995) and Young (1994). Simulating the scores of each factor allowed us to settle each series. Out of 200 simulations, 3 failed the test at $p < .05$ for factor 1, 10 failed it for factor 2, and none failed it for factor 3.

Discussion and conclusions

We attempted in this paper, not to argue for another verdict on the construction of Europe, but to reopen judgments on the 13 years past of Europe. We hold up and then interrogated scraps of evidence drawn from the speeches of two alpha leaders of the European construction to see what this evidence might yield by way of understanding Europe. How well did our cameo give a coherent account of this Europe in words of the last 13 years? This part of the paper draws the strands of the study together.

Knowledge and heritage

We must beware both of reading what we know into the past and of extrapolating short-term tendencies into long-term perspectives. Still, with the passing of time, symbolic and conceptual thought content of the speeches of Delors and Santer seems to develop unstoppably, hardly showing signs of

resilience (Figure 1). Tension (arousal) is releasing since 1995 (Figure 5), which suggests that business could be more facile: To the brouhaha of the 1990-1994 period succeeds relaxation. As time is now turning slow, the imaginal contents of the speeches inch downwards (Figures 2 and 5) and the end is not yet. Accretion of abstractions and attrition of images in turn spill over, perish the thought, into a deteriorating readability, yet with a marked improvement since 1995 (Figure 6). Canetti (1984) has a dig at the use of abstractions in language. Among the most sinister phenomena in intellectual history, he writes, is the avoidance of the concrete (p. 31): A language that crackles with so many thick words and long sentences is not within the reach of the people.

The above big points of the study conceal one momentous consequence. The issue is an epistemological one: Of what is history, so much turned towards concrete and individual things (Schopenhauer, 1958/1818), to do with these abstractions. Is this unquestionably the real thing? The highly symbolic construction of Europe should not deter historians from reconsidering the profits and risks of that construction. The increasingly symbolic construction of Europe grants European statements the universality they need to travel unspoiled, being made to worry simultaneously about the lost and found of such a metabolism. There is a challenge here, and a prescriptive role for historians. The challenge is to cause symbolic innovation to succeed while securing the assent of the citizens amid a degradation of the symbolic thought content in the business and management milieus (Hogenraad, McKenzie, Morval & Ducharme, 1995). As to the prescriptive role for historians, it has to do with the lost and found of the symbolic construction of Europe. Unlike what happens in the hard sciences where old knowledge is regularly pronounced dead, concepts and ideas of the past of the European construction never vanish: They cease to matter. As Judith Schlanger (1974, p. 49) has it (about innovation in social science), legitimacy of the past does not depend on the validity of the present. How historians will, without reticence, supply Europeans with new visions of their familiar past which shall be both usable and relevant in contemporary and tomorrow's Europe is anyone's guess.

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Notes

1. As a comparison, President Clinton's three State of the Union addresses for 1994, 1995, and 1996 ("http://www.lawresearch.com/history.htm") average scores of thought processes are 7.1, 4.3, and 11.3 respectively in the primordial, emotional, and symbolic modes. Figures for 34 Belgian Governmental Declarations from 1946 to 1992 are 6.3, 3.2, and 10.7 in the same modes, and 6.4, 3.0, and 9.9 for the 121 speeches made by Presidents Delors and Santer.

2. Two environmental speeches on forests protection by J. Delors, on 7 February 1986 and 17 September 1991, were withdrawn from the regression because that theme accumulated high imagery terms (forest, tree, etc) resulting in an exceptionally high level of imagery (outliers) as can be seen from inspection of Figure 5.

Table 1. Frequency characteristics of Delors and Santer's speeches[1]					
Id		Number of:			
	time range covered	speeches analyzed	words	different words before pruning	different words after pruning
Jacques Delors	25 Feb. 85/ 5 Dec. 94	93	279,036	14,879	11,215
Jacques Santer	9 May 95/ 28 Apr. 97	28	73,856	7,202	5,274
Total		121	352,892	16,530	12,534

[1] Either originally appearing in French (i.e. most of them) or available in a French translation

Table 2. Factor loadings (Varimax) of 114 clusters of words (second order factor analysis) from 121 speeches by Delors and Santer (1985-1997). [Original French word in italics].

Cluster of words	Load	Cluster of words	Load
Factor 1 "Security versus Unemployment" (7.52%)			
paix, continent (peace, continent)	.60	*CSCE* (CSCE)	.42
communauté (community)	.60	*intégration* (integration)	.41
central, oriental (central, oriental)	.59	*pays, banque* (country, bank)	.40
coopération (cooperation)	.56	*commune* (common)	.40
sécurité (security)	.45	*modèle* (model)	-.40
peuple (people)	.44	*éducation, professionnelle* (education, professional)	-.41
démocratique (democratic)	.44	*emploi, chômage* (employment, unemployment)	-.46
Europe (Europe)	.42	*vie* (life)	-.51
économique (economic)	.42	*société* (society)	-.51
accord (agreement)	.42	*travail* (work)	-.55
Factor 2 "Institutions versus European Citizenry" (7.35%)			
Conseil, Ministre (Council, Minister)	.71	*rapport* (report)	.42
décision (decision)	.57	*Parlement* (Parliament)	.40
Traité (Treaty)	.55	*défi* (challenge)	-.40
Commission (Commission)	.51	*solidarité* (solidarity)	-.42
étranger (foreign)	.47	*société* (society)	-.44
gouvernement (government)	.45	*effort* (effort)	-.44

Table 2. Factor loadings (Varimax) of 114 clusters of words (second order factor analysis) from 121 speeches by Delors and Santer (1985-1997). [Original French word in italics].

Cluster of words	Load	Cluster of words	Load
intergouvernementale (intergovernmental)	.45	*développement* (development)	-.49
monétaire (monetary)	.45	*monde* (world)	-.51
Acte, Unique (Act, Single)	.43		
Factor 3 "A Europe of Regions" (6.15%)			
local (local)	.71	*acteurs* (actors)	.49
niveau, communautaire (level, community)	.62	*citoyen* (citizen)	.49
territorial (territorial)	.60	*régional* (regional)	.45
régions (regions)	.56	*union* (union)	.44
cohésion (cohesion)	.55	*fonds, structurels* (stocks, structural)	.43
Etats, membres (States, members)	.53	*pacte* (pact)	.41
autorité (autority)	.51	*commerce, mondial* (commerce, world)	-.43
structurelles (structural)	.50		

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Figure captions

Figure 1. Observed and fitted profiles of conceptual thought content in the Delors (1985-1994) and Santer (1995-1997) institutional speeches (n = 52).

Figure 2. Observed and fitted profiles of primordial thought content in the Delors (1985-1994) and Santer (1995-1997) institutional speeches (n = 52).

Figure 3. Observed and fitted profiles of emotional thought content in the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 69).

Figure 4. Observed and fitted profiles of arousal value in the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 69).

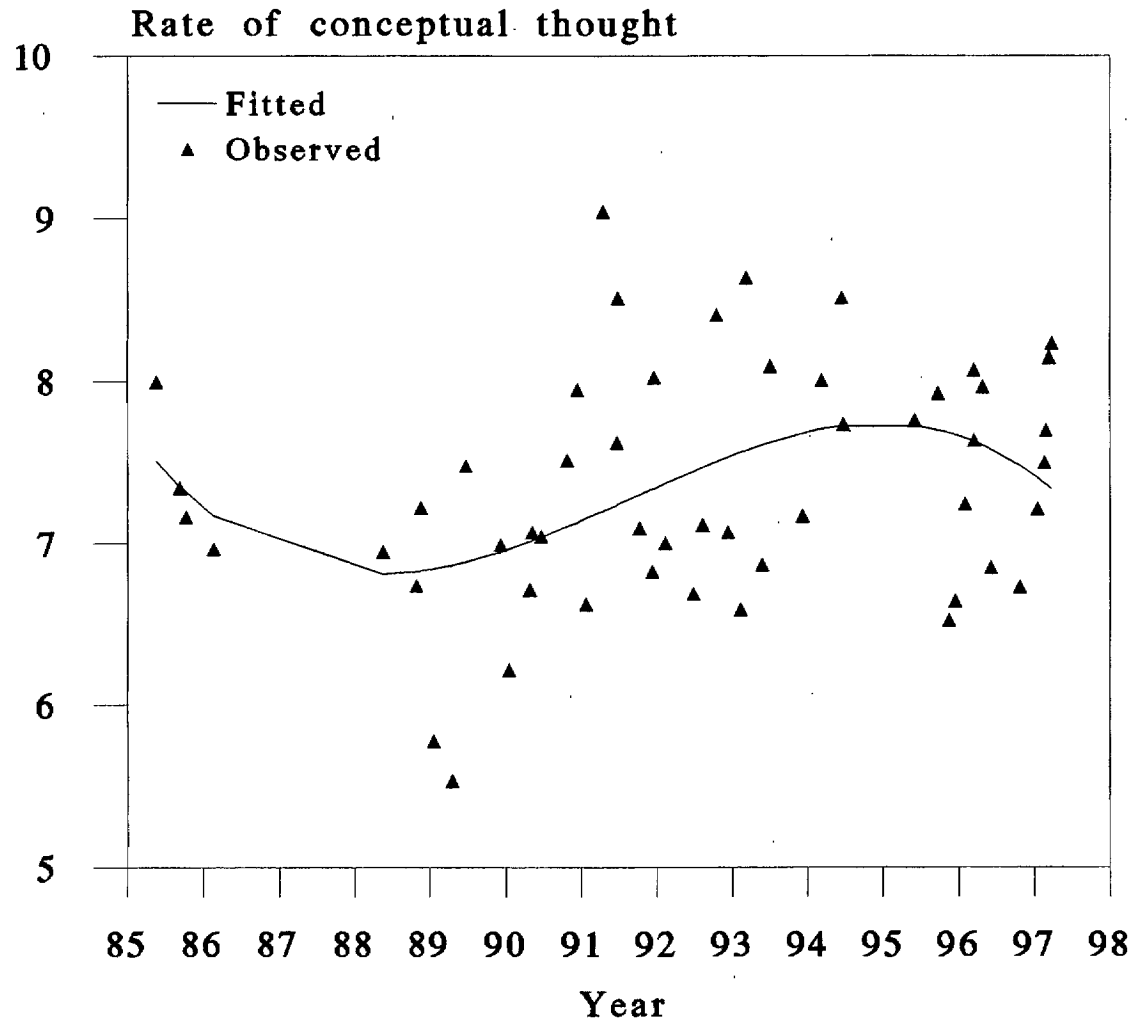
Figure 5. Observed and fitted profiles of imagery contents in the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 67).

Figure 6. Observed and fitted profiles of readability of the Delors (1985-1994) and Santer (1995-1997) speeches (N = 121).

Figure 7. Observed profiles of vocabulary uniqueness of the Delors (1985-1994) and Santer (1995-1997) institutional speeches (n = 52).

Figure 8. Observed profiles of vocabulary uniqueness of the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 69).

Figure 9. Fitted profiles of the factor scores of Factors 1, 2, and 3 in the Delors (1985-1994) and Santer (1995-1997) speeches (N = 121).



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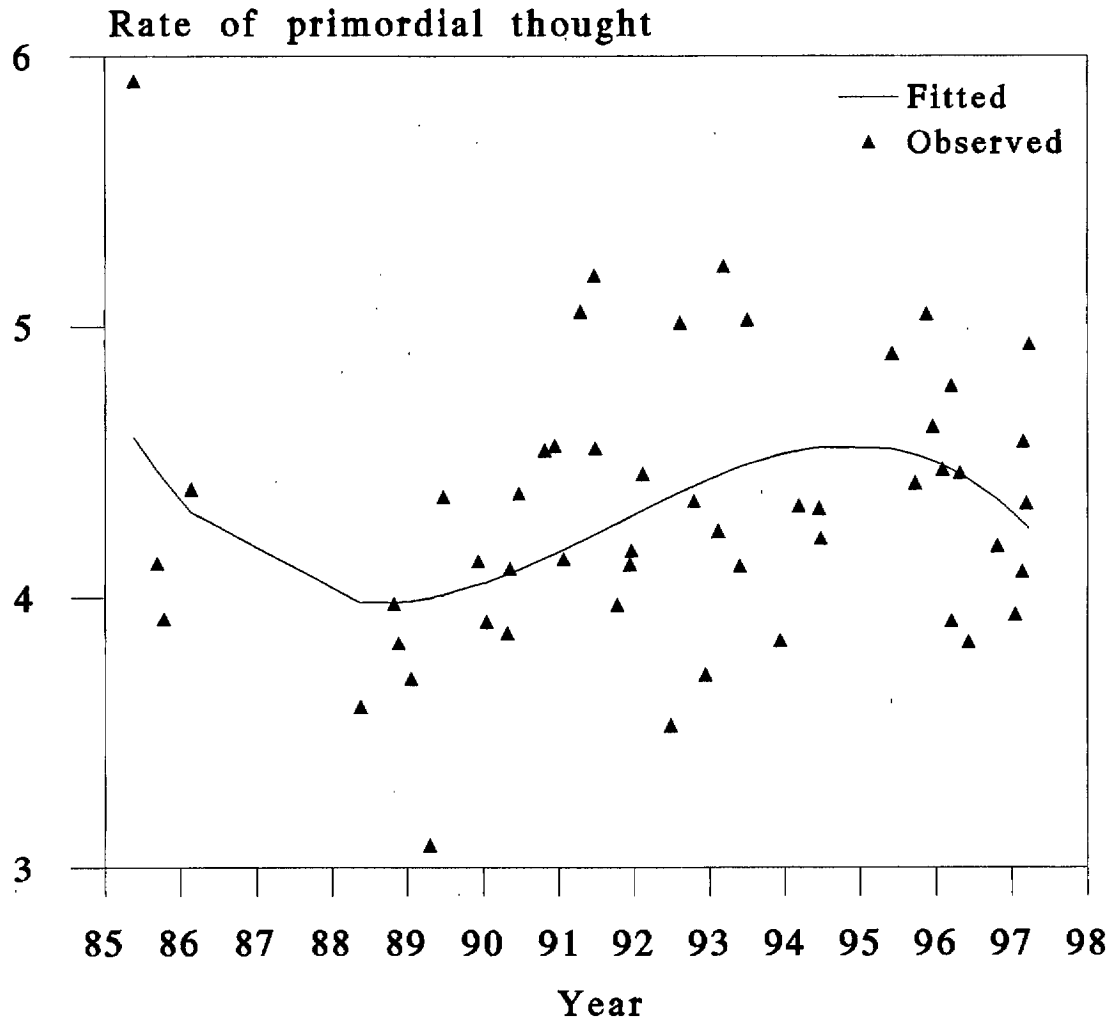


Figure 2. Observed and fitted profiles of primordial thought contents in the Delors (1985-1994) and Santer (1995-1997) institutional speeches (n = 52).

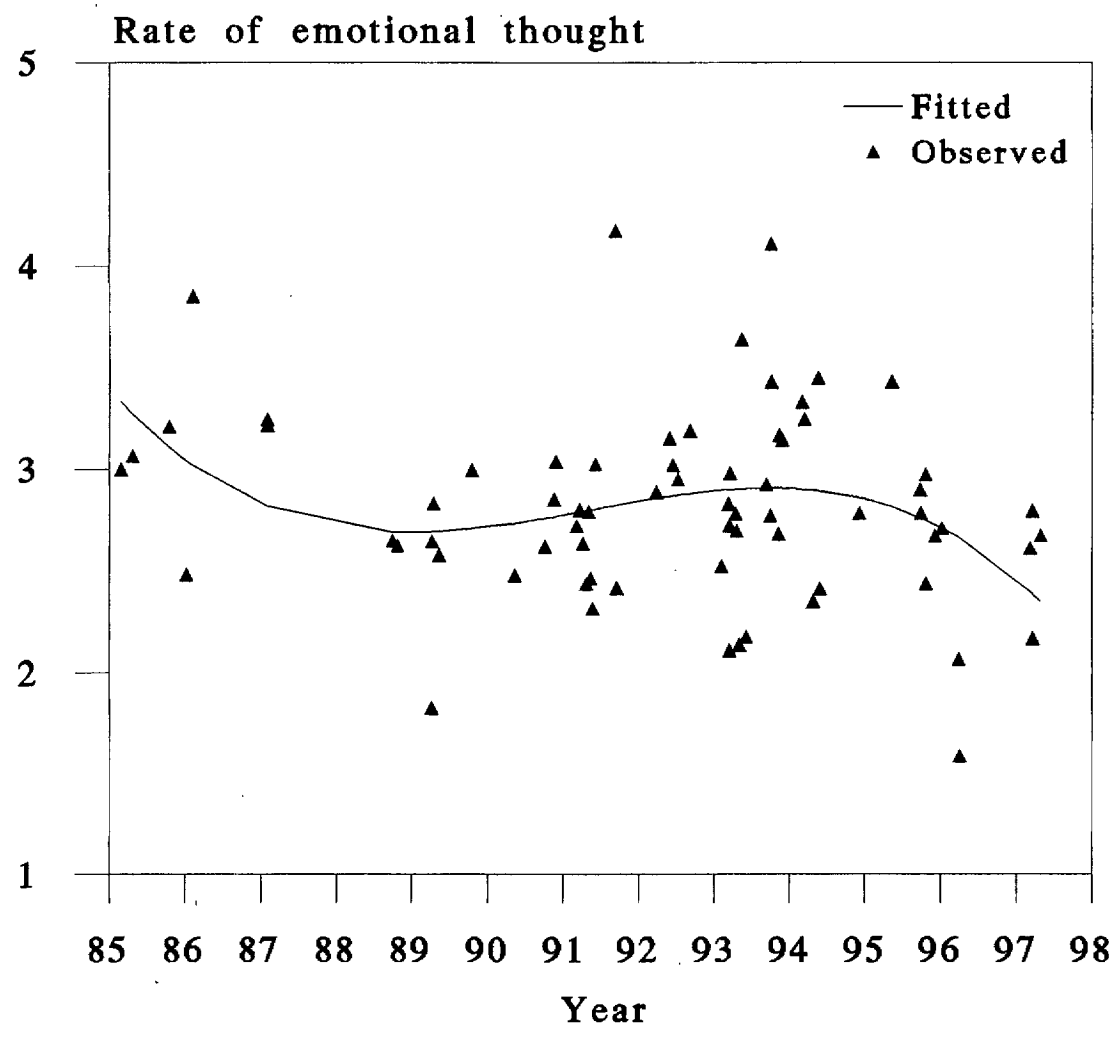


Figure 3. Observed and fitted profiles of emotional thought contents in the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 69).

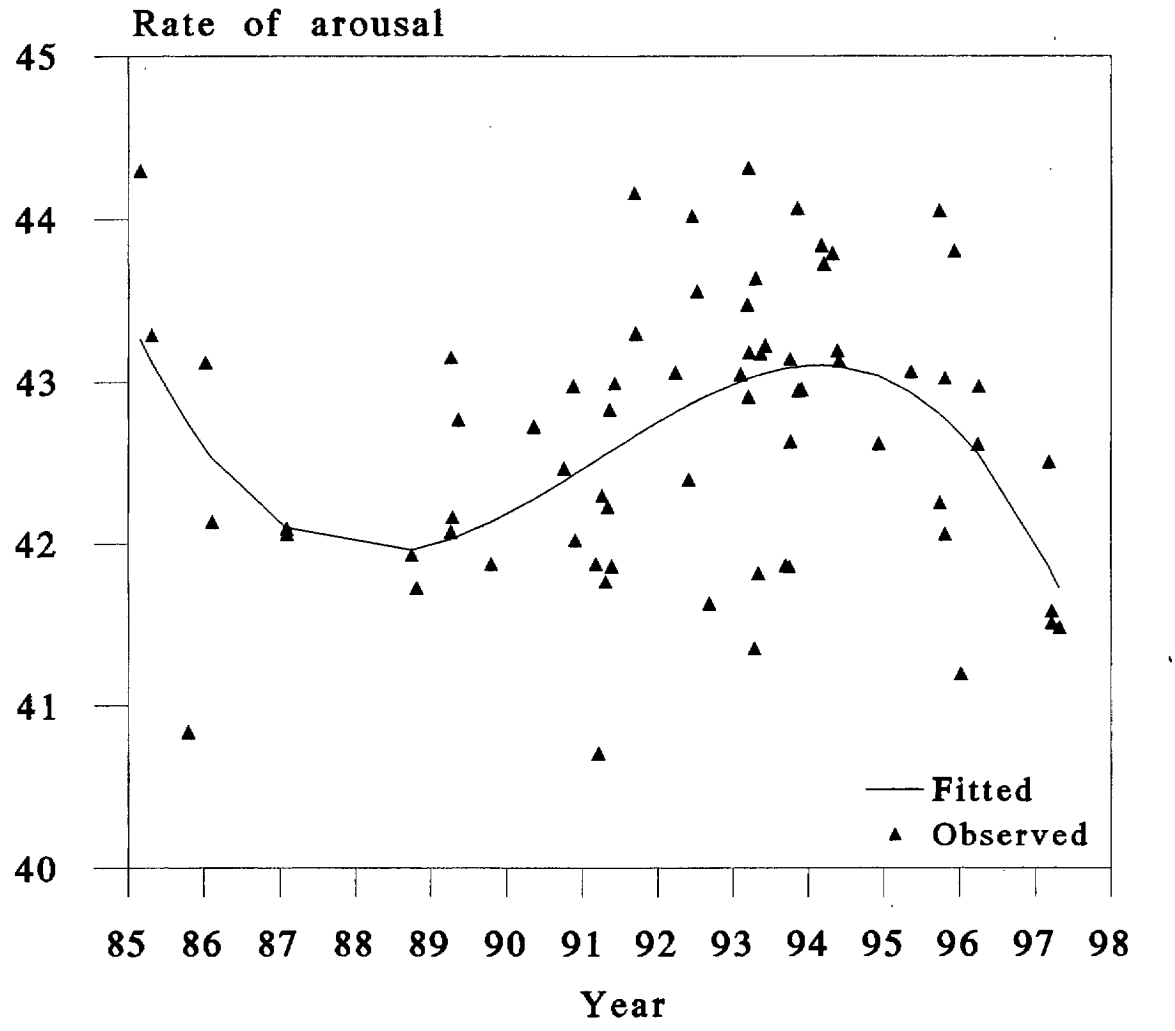


Figure 4. Observed and fitted profiles of arousal value in the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 69).

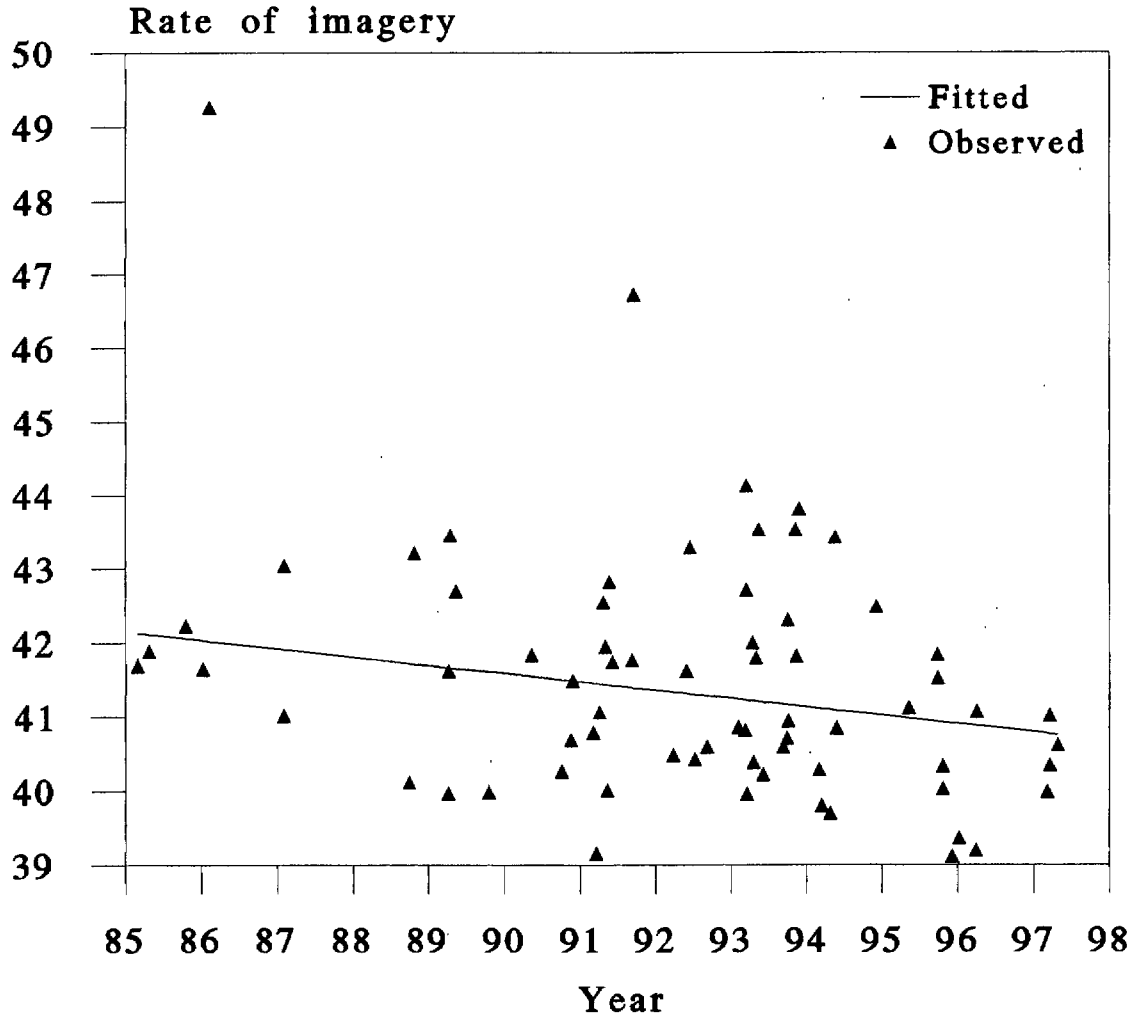


Figure 5. Observed and fitted profiles of imagery contents in the Delors (1985-1994) and Santer (1995-1997) non-institutional speeches (n = 69).

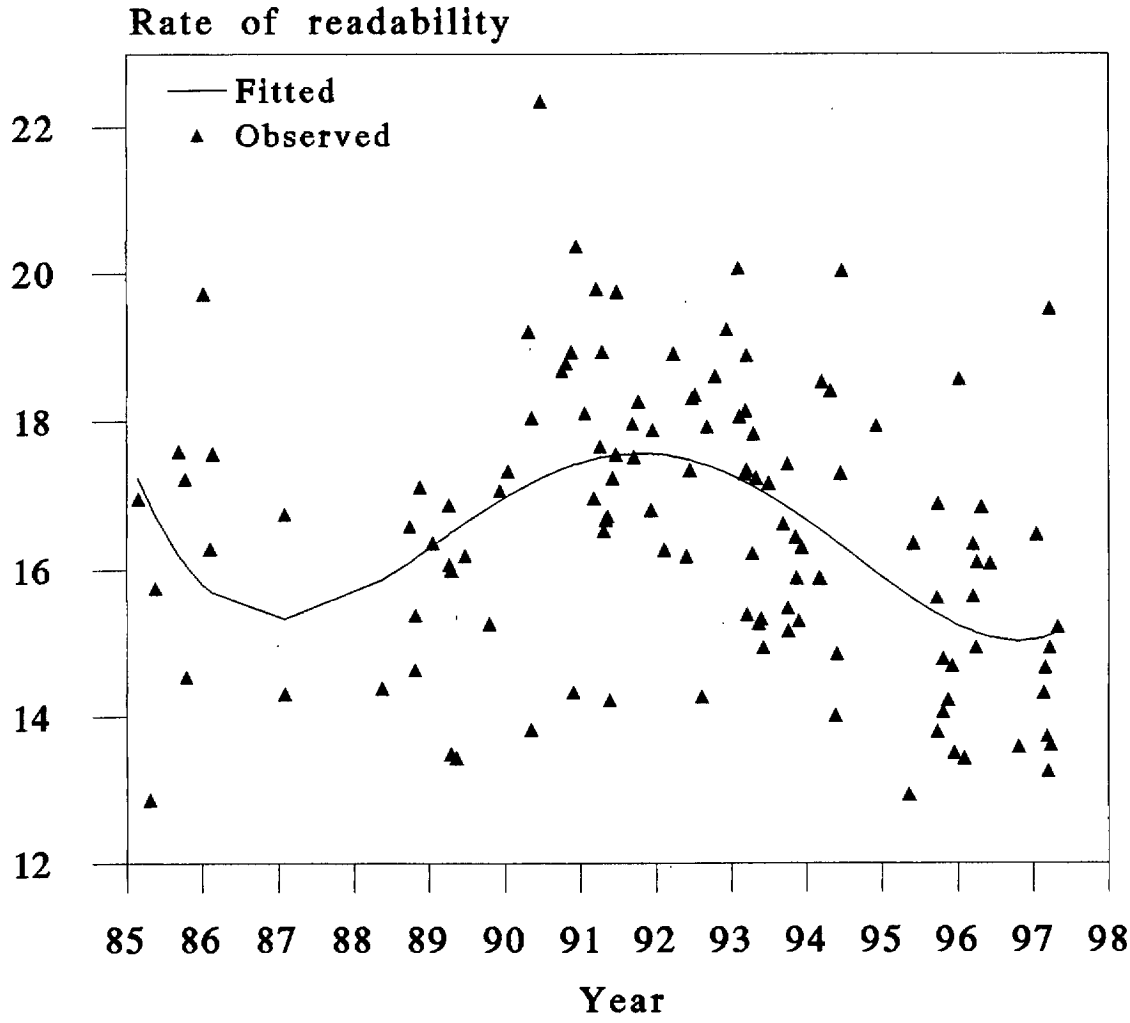


Figure 6. Observed and fitted profiles of readability of the Delors (1985-1994) and Santer (1995-1997) speeches (N = 121).

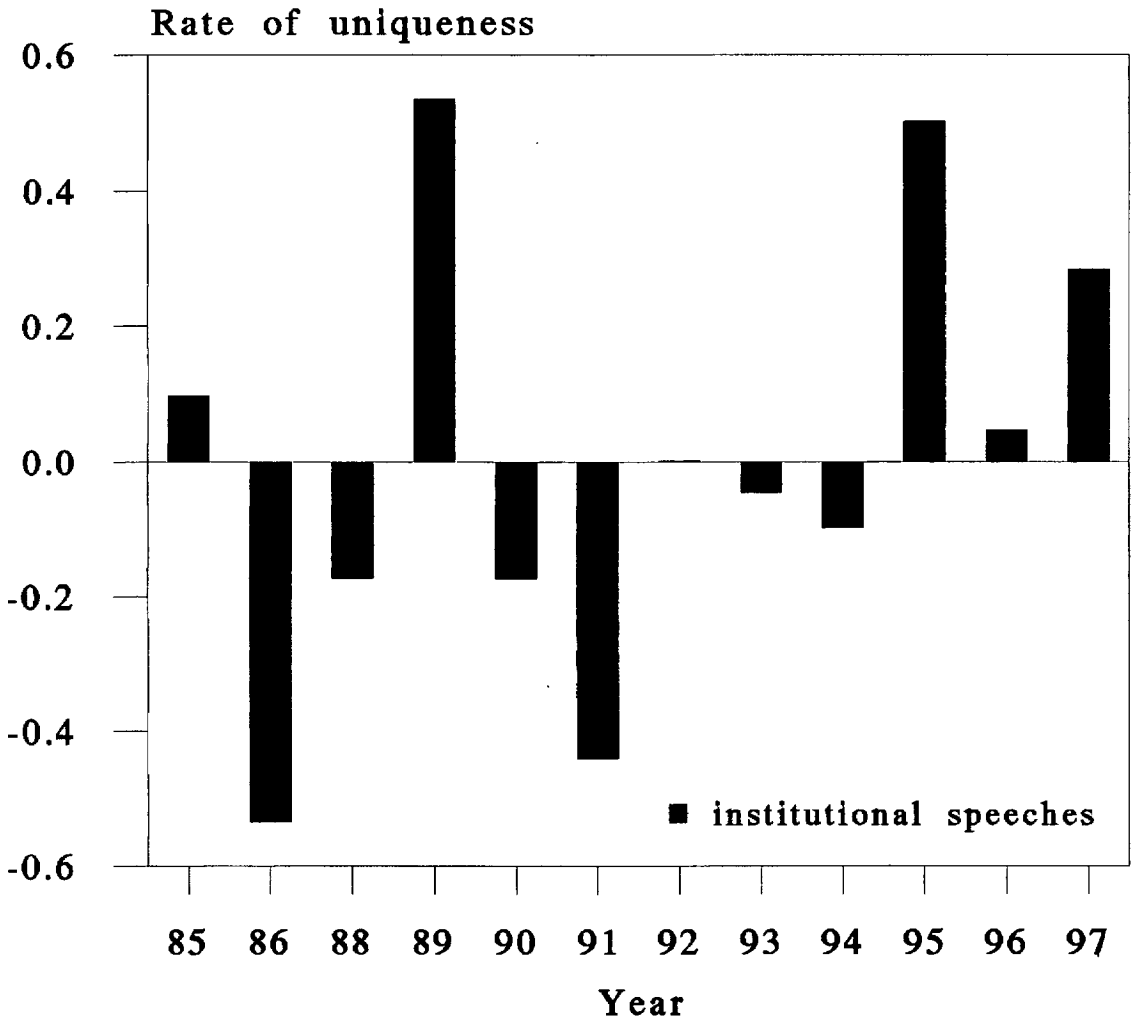
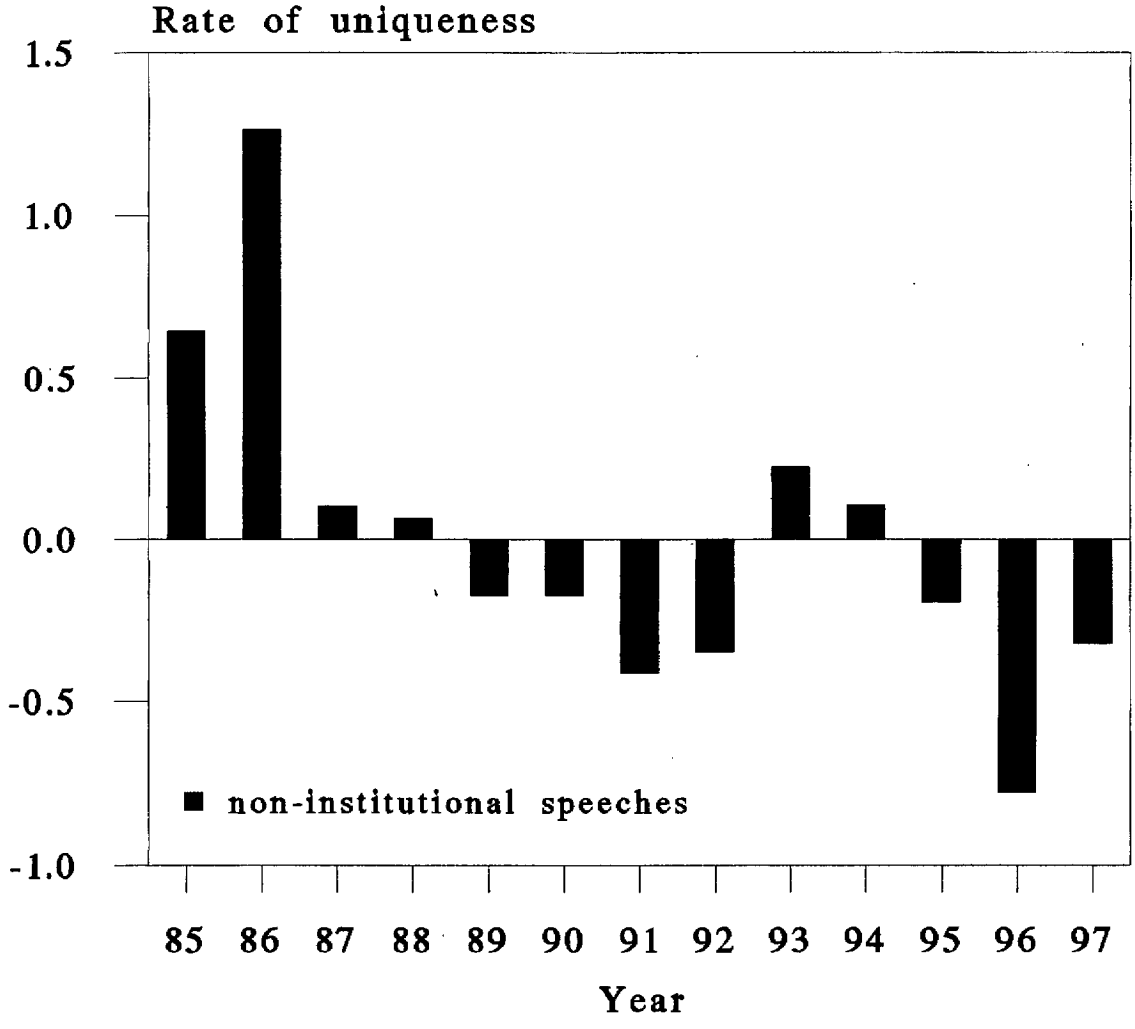


Figure 7. Observed profiles of vocabulary uniqueness of the Delors (1985-1994) and Santer (1995-1997) institutional speeches (n = 52).



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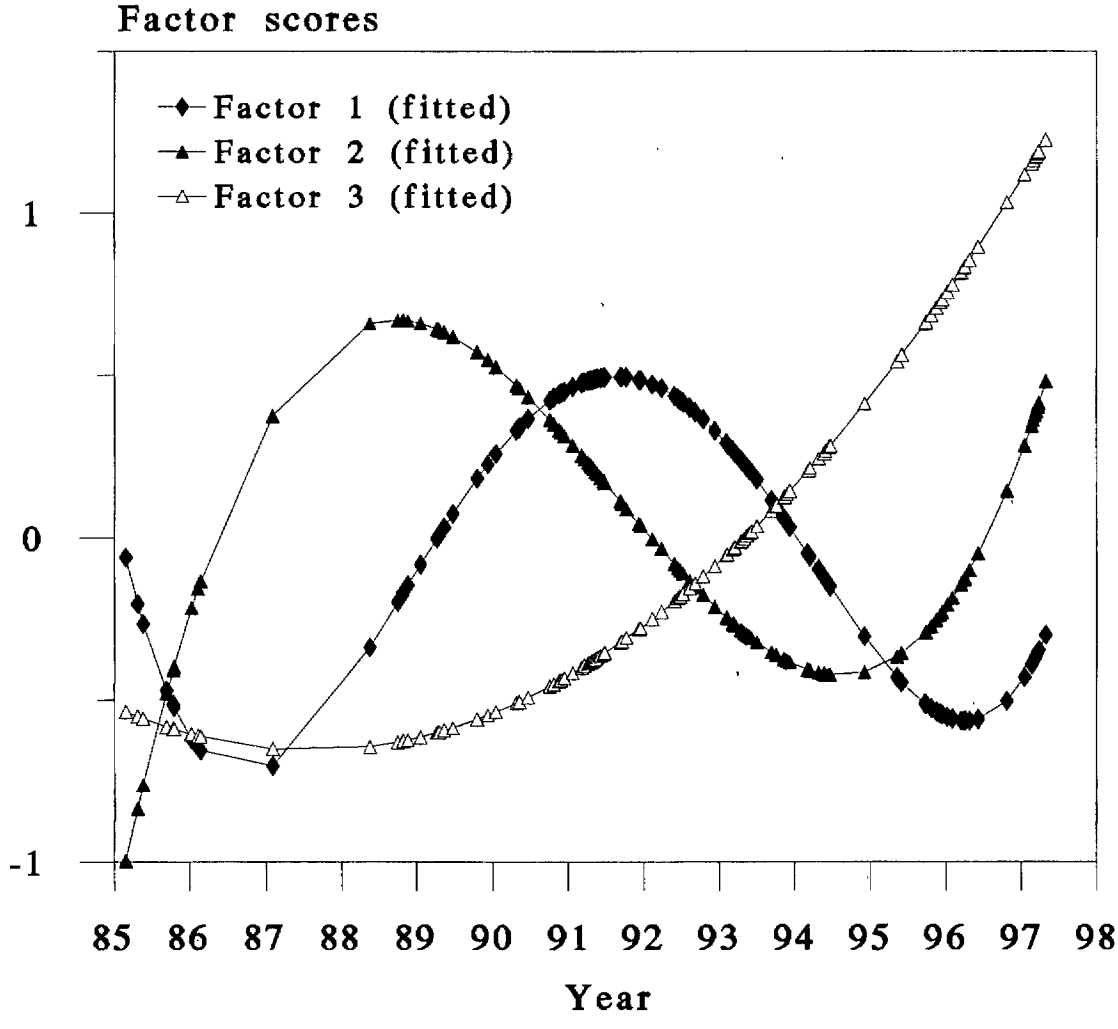

Figure 9. Fitted profiles of the factor scores of Factors 1, 2, and 3 in the Delors (1985-1994) and Santer (1995-1997) speeches (N = 121).