



Investigating 'Greenspanese': from Hedging to 'Fuzzy Transparency'

Catherine Resche

► To cite this version:

Catherine Resche. Investigating 'Greenspanese': from Hedging to 'Fuzzy Transparency'. *Discourse & Society*, 2004, 15 (6), pp.723-744. hal-04055407

HAL Id: hal-04055407

<https://hal.sorbonne-universite.fr/hal-04055407>

Submitted on 2 Apr 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Investigating ‘Greenspanese’: from Hedging to ‘Fuzzy Transparency’

Catherine RESCHE

Université Panthéon - Assas – Paris 2

Introduction

Judging by the countless comments in the media after the U.S. Federal Reserve Board Chairman’s every speech, lecture or remark, Mr Greenspan seems to have developed a style of his own. It is often referred to as ‘evasive’, ‘nebulous’, ‘opaque’ or even ‘oracular’ and ‘Delphic’. It is true that discretion is an essential feature for the Chairman of the world’s leading Central Bank: Mr Greenspan himself once remarked that ‘if people could understand what he was saying, he would not be doing his job’ (*Time*, May 31, 1999: 41). In a survey on the world economy (*The Economist* September 25, 1999), he is said to have ‘made the obfuscatory language of central banks into something of an art form’. In the same survey, we are reminded that in the course of his first term in office, he once replied to a congressman: ‘If I seem unduly clear to you, you must have misunderstood what I said’. *Business Week* also reports a humorous exchange that took place during the Humphrey-Hawkins semi-annual testimony before Congress on July 22, 1999, when Representative Barney Frank (D-Mass) asked Mr Greenspan: ‘At what rate can we grow without giving you *agita*? When the Chairman replied that he would ‘answer that in a very unusual way’, Frank asked: ‘like, directly?’. Mr Greenspan’s reply was: ‘No, that would give you a heart attack’. These few anecdotes about Mr Greenspan’s elliptical manner seem to confirm the idea of a secretive Fed from which news must be extracted with care. More generally, they reflect the traditional reputation of central banks for secrecy. However, although Mr Greenspan still describes his technique as ‘mumbling with great incoherence’, it must be noted that most central banks have recently become more transparent and that the Fed Chairman’s speeches, though still somewhat opaque, have yielded to interpretation in recent years.

Our goal in this study is precisely to focus on the remaining haze that leads observers to consider this ‘double-talk’ an essential component of ‘Greenspanese’ and, more precisely, to assess the relevance of the discursive choices made by the author / speaker. Our approach is founded on the pragmatic theory of enunciation and communication (Chandler 2002, Kerbrat-Orecchioni 2002) which highlights the importance of the mode of address, the addresser’s position and the assumptions made by the addresser about his intended audience. We start with general statistical considerations in order to give an idea of the readability of the texts in our corpus, taking into account the particular genre we are studying. As language is never neutral, the addresser’s intended message may well be altered in the process of interpretation and creation of meaning, thus misunderstood by the addressees. Obviously, caution is *de rigueur* for Mr Greenspan who has ample cause for constantly resorting to the rhetorical technique of hedging under various guises. Our final step takes us beyond hedging in order to investigate the potential additional ingredients that make up his ‘fuzzy transparency’ recipe. In so doing, we discuss the notions of transparency, disclosure, openness and predictability.

1. Corpus, genre and readability

1.1 Corpus

Our concern when compiling our corpus was to avoid restricting our scope to one type of text or potential readership. We felt that a wider range of texts would be a guarantee against the risk of an overly focused approach. Therefore, in addition to the inescapable core sample, i.e., semi-annual reports on monetary policy (Appendix 2C), we included a series of other speeches and remarks delivered before Congress (Appendix 2A), as well as a number of lectures addressed to various audiences (Appendix 2B). As evidenced in the corpus references, our selection was guided by our desire to maintain some thematic harmony: all the texts pertain to monetary policy, the economic outlook and the risk of financial crises – even though these topics are considered from different angles. The resulting corpus consists of 22 texts, comprising some 65,762 words.

1.2 Genre

What also accounts for the homogeneity of the corpus is the particular genre (Swales 1991: 62) on which it is based, i.e., prepared texts to be read aloud before audiences, made public on the Federal Reserve's website and recorded as printed matter as well. As a result, the distinction between written and oral discourse becomes blurred. Yet, given the official settings in which the reports and lectures are given, and the position of authority of the speaker-author, we are undoubtedly dealing with a formal, rhetorically complex 'secondary speech genre', which has more in common with written discourse, according to Bakhtin (1986), than an informal and conversational 'primary speech genre'. In addition, while the speeches or reports presented in this study are all given or read to limited audiences, they matter to a great many other groups. Before reaching the layperson, the news is analysed by many different influential economic players, then becomes widely circulated in the specialised and general press and is obviously used as information by the markets. As Bazerman reminds us (2001), information, a human creation for human purposes, is not neutral. It is rhetorical, created in particular circumstances for the use of particular individuals and groups. The various groups targeted here include government, the business sector, the media, organised labour, academic economists – both in universities and in private-sector think-tanks –, participants in and commentators on financial markets, as well as the general public (Smart 2003). The Federal Reserve Board Chairman's pronouncements are then bound – and designed – to have a substantial impact on people's reactions and on the course of economic events. In order to support and convey the desired message, form must be in harmony with content. Not only can his language be expected to be quite sophisticated, but the audiences and readers that he has in mind when preparing his speeches undeniably influence a number of his linguistic and rhetorical choices.

Strikingly, a common denominator can be found in the semi-annual reports on monetary policy which are all structured along the same lines. They start with a review and interpretation of recent events so as to introduce a presentation and analysis of the current context, before mentioning likely future developments. They conclude with an official statement concerning the Federal Open Market Committee's position as regards monetary targets and policy for the coming period and provide hints about potential hikes or cuts in interest rates. All the other lectures and remarks in our corpus share some of these structural elements, though they may be organised more flexibly. Actually, the different moves mentioned here can also be found in the Federal Reserve's press releases on monetary policy, which may help the addressees or readers to know what to expect as far as the general structure of the texts / speeches is concerned. By this, we mean that they can gradually acquire some rhetorical awareness of the ways in which this genre functions, although this may not help them to understand the real meaning of the message any better. Before even trying to analyse what makes decoding

the discourse difficult, we start our investigation by assessing the readability of Mr Greenspan's texts. For this purpose, we refer to another formal genre, that of the research article that can be read aloud at conferences (Goffman 1981), as it shares quite a few traits with the texts in our corpus: serious topics, formal settings, prepared texts, structured textual organization.

1.3 Readability

In drawing such a parallel, we wish to compare the data we have gathered with the findings of other researchers. Bazerman (1984) found that the average sentence length in research articles was around 25 words, confirming the conclusions of other researchers before him (Barber 1962; Huddleston 1971). The average sentence length in our corpus is slightly above 26 words (Appendix 1). However, as Harrison and Bakker (1998: 132) point out, 'in the context of sentence length, an average tells us nothing about either deviations or variability'. What may be more telling, though, is the fact that 48% of the sentences in our corpus have 26 words and over, with up to 67 words for the longest sentence. A more sharply focused count points out that over one-fifth of the sentences in our corpus (21.2%) contain 35 words and over. Still, such statistics fail to give an accurate and satisfactory assessment of readability: assuredly, a very short sentence may remain opaque – if, for example, it is not properly related to the context – while a very long sentence may still be readable, provided it is broken up by means of punctuation into what Harrison and Bakker call 'packets'. Their definition, they insist, is purely mechanical: packets are 'groups of words between syntactical punctuation marks' – full stops, commas, colons, semicolons, exclamation marks, question marks, long dashes and parentheses. We proceeded to count the number of words per packet across a corpus of 28,996 words – corresponding to the semi-annual reports on monetary policy over a period of three years – in order to have another criterion for assessing the readability of our corpus: we found an average packet length of 10.7 words, which is impressively much higher than the 7.74 words per packet found by Harrison and Bakker across a corpus of 14,397 words compiled, it is true, from the press, namely *The Economist*. Obviously, our results confirm that Mr Greenspan's language is closer to that found in research articles than that used by the economic press, even though *The Economist* is known for the formality of its language. On both counts, however, our figures are above average, which seems to indicate that the texts in our corpus are not within just anybody's reach.

An even more precise assessment can be achieved by measuring lexical density, which, as defined by Halliday (1989) is the number of lexical items per clause. Logically, written discourse contains a higher ratio of content words to structural items than spoken discourse. The next two examples from our corpus, in which the lexical items have been italicised, will convey a clearer idea of what is meant by lexical density:

[1] We at the *Federal Reserve*, recognising the powerful forces of productivity growth and global restraint on inflation, have not perceived the need to tighten policy in response to strong demand beyond what has occurred through falling inflation's upward pressure in the real federal funds rate and the modest increase in the nominal rate that we initiated in March of 1997. (An update on economic conditions in the United States, June 10, 1998)

[2] But, we are monitoring the evolving forces very closely to determine whether the recent acceleration of costs, albeit moderate, is likely to prove transitory or the start of a more worrisome pattern that may well require a response. (Id.)

Sentence [1] has 3 clauses and contains 33 lexical items, yielding a lexical density of 11, against 16 lexical items for 3 clauses in sentence [2], and a much lower lexical density of 5.3. Obviously, the second sentence is not only shorter, but also less complex and therefore it is more easily readable. Other elements may be at play to make sentence [1] appear more difficult, such as the long string of words that separate the subject 'We' from its verb 'have not perceived'. Actually, the crux of the message in the first sentence is: 'we have decided to leave policy unchanged for the moment'. Sentence [2] suggests that if the situation starts deteriorating, the authorities will take the appropriate measures. What could be said in a handful of words is thus extended into a long passage, and deliberately so. What pushes the author to lengthen his message to such a point is analysed in the following part.

2. Hedging

2.1 Mr Greenspan's reasons for hedging

Besides the conventions linked with any formal discourse, the reasons why a central banker should resort to hedging are mostly due to his 'occupational responsibility [which] is to stay on the lookout for trouble', in Mr Greenspan's own words. In the press conference at the White House after the announcement of his re-nomination as Chairman of the Federal Reserve (January 4, 2000), he himself insisted on how challenging a responsibility it is for him to 'put broad theoretical and fairly complex conceptual issues to a test in the marketplace.' A central banker, as Mr Greenspan underlines, is aware 'that actions matter, (...) that actions have consequences', and that 'it is crucially important to try to determine in advance what those consequences are'. What is at stake is the future of the economy, which will affect the American public at large and the rest of the world as well, as no economy is an isolated island in today's global context. Obviously, wrong decisions or poor timing involve major risks and any means to avoid them must be used. Hedging, or covering against risk, is a familiar notion for economists. The Federal Reserve Board's Chairman is fully aware that it can be achieved through language as well, especially when he is given so many opportunities in his public appearances to reach large audiences. Erroneous assessments of the situation, resulting in inaccurate decisions and irrelevant reactions by the public, can only lead to a loss of credibility. As Dornbusch and Fischer (1988: 681) point out: "Individuals' reactions to policy decisions depend so much on their interpretations of what future policy decisions are implied that believability of policy becomes crucial."

A second risk involved, once the situation has been carefully analysed, concerns the way the analysis, its interpretation and the subsequent decisions are announced. In this respect, wording can be considered crucial. Signals need to be sent in advance so as to avoid surprising or shocking the economic agents whose disproportionate reactions might disturb the markets, which would obviously ruin the intended goal of the decision – stabilising the economy. Mastery of the language and its subtleties is undeniably an asset and the impact of words can sometimes be counted on to influence households and individuals in their choices to consume, save or invest. "Talking up the economy" is a telling phrase that points out how essential it is for Mr. Greenspan to know "how to do things with words" (Austin 1962). If his warnings or hints have the expected effect on the economic agents, he will be spared the need for more aggressive measures. Clearly, careful wording is to be considered a tool, a weapon that can serve a given strategy. This leads to hedging which, as a strategy, comes under various guises, many of which

result in greater complexity in the structure of the language, as illustrated in the next section.

2.2 *The manifestations of hedging*

Although it would be vain to ignore content altogether, our focus in this study is on language and, as space is limited, we would like to insist on those aspects of hedging that bear more directly on sentence length and structural complexity. Obviously, Mr Greenspan exploits all the resources offered by language, including the traditional linguistic features investigated by researchers in the field of hedging. In this respect, his speeches and reports share a number of traits with research articles. Because these aspects have been widely studied (Markkanen & Schröder 1997, Hyland 1998) and because we wish to concentrate on other tools for hedging, we shall limit our illustration of these devices in context to two extracts:

[3] *Some recent evidence suggests* that the labour markets bear *especially* careful watching for signs that the return to *more* normal patterns *may* be in process. The Bureau of Labour statistics *reports* that people were *somewhat more* willing to quit their jobs to seek other employment *in January* than previously. (26 February 1997)

[4] *To be sure, since last year*, surveys have *indicated* that the proportion of workers fearful of layoff has stabilised and the number of voluntary job leavers has *edged up*. And, indeed, *perhaps* as a consequence, wage gains have accelerated *some*. But increases in the Employment Cost Index still trail behind what previous relationships to tight labour markets would have *suggested*, and a lingering sense of fear or uncertainty *seems* still *to* pervade the job market, though *to a somewhat lesser extent*. (22 July 1997)

Both passages contain hedging devices mentioned in the list drawn by Dudley-Evans (1994: 131). In context [3], we find a modal (*may*), non-factive verbs to report claims (*report, suggest*) and approximators (Rounds 1982) such as ‘*some*’ and ‘*somewhat*’. Reference to an official body (*The Bureau of Labor Statistics*) is also meant to guarantee the reliability of the sources. Context [4] illustrates some of those categories further (*indicate, edge up, to a lesser extent*) and resorts to other elements such as adverbs (*perhaps*) and semi-auxiliary verbs (*seems to*). It also evidences an additional feature, i.e., a ‘fertilised hedge’ (Banks 1994), by compounding two approximators into ‘*to a somewhat lesser extent*’. The italicised words in the passages are our own and those that have not yet been mentioned draw our attention to various linguistic devices that help the author to be more cautious in other respects. In context [3], adverbs of a different kind (*especially*) or comparative forms (*more* normal, *more* willing *than* previously) are introduced to either stress or qualify the message. In example [4], elements such as ‘*indeed*’, or ‘*to be sure*’, which enable the author to forestall any contradictory argument by potential opponents or critics, show that he has carefully analysed the situation: they logically prepare the way for a few restrictive arguments introduced by ‘*But... and...*’.

These examples also illustrate a different category of hedging devices that are based on terms that are not hedges by nature but that are used in a particular context with a view to hedging (Salager-Meyer 1994: 154). Given the possibility of using a variety of these items jointly, the impact on packet, clause and sentence length, and on a far more complex and sophisticated language structure is undeniable. If the author is to provide an accurate image of the situation, it is vital for him to mention positive as well

as negative aspects and to consider both optimistic and pessimistic scenarios. Consequently, decoding the actual message – ‘the bottom line’ – requires some thinking on the part of the reader. The likely confusion may, of course, be intended at times, especially when a non-committal attitude is deemed safer. Whatever the motivation, however, if some of the arguments were left in the shade, or if Mr Greenspan failed to express his concerns or to warn the public against potential dangers, he would most certainly be criticised for his lack of insight or honesty. This leads us to consider the use of connectors as hedging devices. Though they may not be hedges as such, connectors such as *although*, *yet*, *however*, *nonetheless*, *besides*, *moreover*, *while*, etc. are especially convenient to introduce alternative explanations (Selinker 1979), to suggest more cautious interpretations and to qualify statements.

Other items can be considered as hedging devices, namely those elements in a sentence that are added for the sake of precision, so that critics will not be given the opportunity to question or contradict the author’s statements. Referring again to contexts [3] and [4], we feel that it is possible to regard ‘*in January*’ and ‘*since last year*’ as ‘shields’ (Rounds 1982) that enable the author to explicitly limit the scope of his assertions. The following example illustrates this point further: The two expressions italicised in [5] conveniently suggest that what is stated is undeniably true for the time being, while they leave open the possibility of different future developments.

[5] While the various price indexes show some differences, the basic message is that inflation *to date* has remained low. *So far this year*, our economy has continued to enjoy a virtuous cycle. (21 July 1998)

Indications of time are also used by Mr Greenspan to underline the coherence of his approach and to guarantee cohesion. He has made a habit of linking his various speeches by alluding to former remarks, thus suggesting that he had forewarned the public, forecast dangers, or simply raised hypotheses that have since proved right:

As I have noted in *previous* appearances before Congress,
As I have stated in *previous* testimony,
As I have indicated on *numerous* occasions,
In February 1996, I raised before this committee a hypothesis ...

By so doing, he emphasises the continuum in his approach and goals, using his long experience of ‘half a century of daily observation of the American economy’ (10 June 1998) as a shield against criticism and a guarantee of sound, reliable analysis. This repetitive mode also allows him to proceed with small strokes, hinting and suggesting rather than painting too blunt a picture of the situation, which, as mentioned above, could cause major disruptions. Again, these repetitions can be considered essential components of his hedging strategy.

Likewise, one of his leitmotifs – referring to history – serves to introduce words of caution and wisdom, and even defuse potential counter arguments:

[6] *Perhaps, as some argue*, history will be less of a guide than it has been in the past. Some of the future is always without historical precedent. New records are always being made. Having said all that, *however, my experience* of observing the American economy day by day *over the past half century* suggests that most, *perhaps substantially most*, of the future can be expected to rest on a continuum from the past. Human nature, *as I indicated earlier*, appears immutable over the generations and inextricably ties our future to our past. (4 September 1999)

Incidentally, the accumulation of hedging devices in context [6] is worth noting. It is an opportunity for Mr Greenspan to answer those who might blame him for over-emphasising the lessons of history, and to re-assert his own viewpoint. In the next two examples, he uses the historical argument to reach a twofold goal. On the one hand, he means to justify his choice of pre-emptive measures [7], and on the other hand, he takes this opportunity to call upon people to be more realistic and reasonable [8]:

[7] *History teaches us* that monetary policy has been its most effective when it has been pre-emptive. [...] *As history counsels*, it is unwise to count on any string of good fortune to continue indefinitely. (24 February 1998)

[8] *History demonstrates* that participants in financial markets are susceptible to waves of optimism [...] Excessive optimism sows the seeds of its own reversal in the forms of imbalances that tend to grow over time. [...] But, regrettably, *history is strewn with* visions of such ‘new eras’ that, in the end, have proven to be a mirage. In short, *history counsels caution*. (26 February 1997)

In order to avoid being criticised for being too vague, Mr Greenspan is also led to resort to a number of techniques – enumerating, defining concepts, quoting well-known theoreticians and even giving additional explanations of terms – that all contribute to lengthening his sentences and influencing his style, as evidenced in [9]:

[9] The American economy, *like all advanced capitalist economies*, is continually in the process of *what Joseph Schumpeter, a number of decades ago*, called ‘creative destruction’. *Capital equipment, production processes, financial and labour market infrastructure, and the whole panoply of private institutions that make up a market economy* are always in a state of flux – *in almost all cases evolving into more efficient regimes*. (4 September 1998)

Context [9] could admittedly be shortened to ‘Though many sectors are being thoroughly affected by creative destruction, our economy will be stronger and more competitive in the end.’ This would imply ridding the original passage of a number of elements intended to soften the statements, to explain facts or terms, or to introduce comments. In the present example, the author deliberately insists that the American economy is not an exception (*like all advanced capitalist economies*). Likewise, he chooses to remind the reader that this process is not new and was already studied by a famous economist (*Schumpeter*) ‘*a number of decades ago*’. The exact date is not vital, but what matters is to highlight that this is not a new phenomenon. If he draws a long list of all the sectors and agents affected by the change, it may also be with a view to indicating that he is aware that all these people feel threatened with restructuring and redundancies. It may be a means of reassuring them that they will later benefit from a more efficient system. It also reminds us that he constantly has his varied target audience in mind. He cannot afford to be too categorical in his assertion, hence the need to soften ‘all cases’ by using ‘*almost*’.

The Federal Reserve Chairman’s systematic use of such additional elements is obviously dictated by his responsibility to guarantee the stability of the system, which involves doing his best to remain trustworthy and reliable. It is important to recall that he is accountable to the nation and to all the economic agents, hence the detailed data as justification for his decisions and actions.

2.3 The paradoxical effect of hedging

A common denominator in the hedging techniques we have just reviewed is the paradoxical effect they may have on the reader. While they are initially meant to add precision and thus clarity by bringing more information, they often result in an accumulation of complex structures and an intricate pattern of entangled clauses. Adding information concerning time, place, sources, definitions, comments, does show respect for the public and translates a desire to provide as accurate and objective a picture as possible, but it requires resorting to parentheses, dashes [10], strings of words, long noun phrases, not to mention subordinate and embedded clauses [11].

[10] Economists have long recognised a ‘wealth effect’ – *a tendency for consumption to rise by a fraction of the capital gains on existing assets owned by households* – though the magnitude of this effect remains difficult to estimate accurately. (20 January 1999)

[11] We have some evidence from recent years *that* all or most of the decline in the saving rate is accounted for by the upper income quintile *where* the capital gains have disproportionately accrued, *which* suggests *that* the wealth effect has been real and significant. (20 January 1999)

Consequently, the structure of the language becomes much more complex and can convey an impression of ‘fog’, which may confuse the reader. For example, in [12], deleted relative pronouns combined with ellipsis of ‘be’ are another likely source of confusion, especially when repeated in a same sentence:

[12] Still, a strong signal of inflation pressures *building because of compensation increases markedly in excess of productivity gains* has not yet clearly emerged in this expansion. (10 June 1998)

A second reading of [12] may be necessary to realise that two virtual pauses should be considered respectively after ‘*pressures*’ and ‘*increases*’. The long string of words between the grammatical subject ‘*signal*’ and the verb ‘*emerge*’ can add to the impression of intricacy. In many instances, the complex structure seems to give sentences a Latin ring, which surely plays a role in conveying the idea of a difficult, opaque language. Such sentences do sound more sophisticated and authoritative. Circumlocutions, obviously motivated by the need for caution, should also be mentioned. Quite tellingly, translations of Mr Greenspan’s official statements into ‘plain English’ are frequently suggested in the press in order to help the reader see through the fog:

Greenspan said, “the key question going forward is whether the restraint building from the turmoil in Asia will be sufficient to check inflationary tendencies that might otherwise result from the strength in domestic spending and tightening labor markets”. That’s Fedpeak for “if Asia doesn’t slow the economy, we’re going to have to”. (*Business Week*, 9 March 1998)

The contrast between the Federal Reserve’s Chairman’s sophisticated, official language and the journalist’s translation into oral-written style is striking, underlining the need for simplification. Actually, new measures and new codified terms to ensure more ‘transparency’ have recently been announced by the Fed, but, before discussing this issue, other elements have to be taken into consideration that justify the oxymoron ‘fuzzy transparency’.

3. Fuzzy transparency beyond hedging

3.1 Lexical choices

In his approach to lexical density, Halliday (1989) considers a more sophisticated level at which he advises considering the frequency criterion: the more frequently used terms would be given a lower weighting while less frequent words would carry a higher weighting. As this paper is not strictly focused on readability, we have not carried our statistical investigation so far. However, we have paid attention to the lexical choices made by Mr Greenspan in his various public appearances, and we have confronted them with F. G. Fowler's five traditional rules for the standard use of English as reported by Raftroidi (1978: 101):

- a) Prefer the familiar word to the far-fetched
- b) Prefer the concrete word to the abstract
- c) Prefer the single word to the circumlocution
- d) Prefer the short word to the long
- e) Prefer the Saxon word to the Romance

Most characteristically, a great number of examples in our corpus evidence deviations from the norms described here. Though the genre at stake in this study dictates the use of formal language, the frequent use of long, abstract, sophisticated words – some of which have Latin roots – evidences a taste for a more elaborate style. We should also mention some Latin expressions such as '*ex ante*', or '*prima facie*'. A telling example of the author's preference for more complicated or longer lexical items can be found in the following context [13]:

[13] The newer technologies have *facilitated* a dramatic *foreshortening* of the lead times on the delivery of capital equipment over the past decade, presumably allowing businesses to react more *expeditiously* to an actual or expected rise in nominal compensation costs ... (23 February 1999)

Not only is '*facilitate*' fairly formal, but it is longer than 'help' and its Latin root is more sophisticated than 'make easier'. It echoes other verbs such as '*elevate*', '*necessitate*' or '*reiterate*' almost systematically preferred to 'raise', 'require', or 'repeat'. Likewise, '*augment*', '*engender*', '*envisage*', '*portend*', '*presage*', '*profess*' or '*surmise*' are given priority over 'increase', 'foster', 'consider', 'foresee', 'foretell', 'declare' and 'infer'. Nouns and adjectives are also given special attention: '*advertence*', '*cessation*', '*harbinger*', '*paucity*', '*verities*' are quite representative; so are '*desirous of*', '*extant*', '*incumbent on*' or '*manifest*', not to mention adverbs like '*heretofore*', '*thereafter*' or '*notwithstanding*'. A few illustrations will give a better idea of the potential impact of some of these lexical items in context:

[14] The Federal Reserve will have to act as promptly and forcefully so as to *preclude* imbalances from arising ... (22 July 1999)

[15] The inflation risks accompanying the continued strength of domestic demand and the tightening of labour markets *necessitated* that the FOMC place itself on heightened inflation alert. (23 February 1999)

[16] Monetary policy cannot be done without *advertence* to the world economy. (16 September 1998)

[17] A persistent residual upward drift in velocity over the past few years and its apparent *cessation* very recently underscores our ongoing uncertainty... (24 February 1998)

[18] The role of technology in damping inflation is *manifest* (23 February 1999)

Circumlocutions, apart from being dictated by a need for hedging, also attest to a taste for more elaborate language and do play a role in conveying an impression of intricacy:

[19] In many respects the fundamental underpinnings of the recent U.S. economic performance are strong. [...] But, after eight years of economic expansion, the economy appears *stretched in a number of dimensions, implying considerable upside and downside risks to the economic outlook*. (23 February 1999)

[20] For most of last year, the evident strains on resources were sufficiently severe *to steer the Federal Open Market Committee (FOMC) toward being more inclined to tighten than to ease monetary policy*. (24 February 1998)

3.2 Grammatical metaphors

Although Halliday intended to describe written scientific discourse when he referred to ‘a nominalised world with high lexical density and packed grammatical metaphors’ (1987: 149), his definition would not prove irrelevant in the case of Mr Greenspan’s language. What is meant by ‘grammatical metaphor’ is the fact of conveying meaning through a form that is not the most basic one, using a noun form, for example, where a verb would appear more suitable. Martin (1992) underlines the fact that a process is more basically expressed through a verb. In the following context [21], the process ‘to continue’ is actually nominalised into ‘continuation’ and, rather than using ‘to gather information’, Mr Greenspan seems to prefer the noun form ‘intelligence gathering’:

[21] With the *continuation* of a remarkable seven-year expansion at stake and so little precedent to go by, the range of *our intelligence gathering* in the weeks ahead must be wide and especially *inclusive* of international developments. (24 February 1998)

This feature is not an isolated element in the corpus, as other examples point out:

[22] *Maintenance* of such a pace would put even greater pressures on the economy’s resources, threatening the balance and longevity of the expansion. [...] The essential precondition for the *emergence* and *persistence* of this virtuous cycle is arguably the decline in the rate of inflation to near price stability. [...] The potential for abrupt *acceleration* of nominal hourly compensation is surely greater. (21 July 1998)

Grammatical metaphors involve adjectives as well as nouns. In context [21], we can notice that priority was given to the adjective ‘*inclusive*’ over the verb ‘include’. By opting for the adjective, as is the case with ‘*suggestive*’ instead of ‘suggest’ in the following example [23], the author takes some distance with standard usage, which lends an impression of greater complexity:

[23] “The revisions of these estimates should be *suggestive of* changes in underlying economic forces” (22 July 1999)

3.3 Syntactic choices

The consequences of grammatical metaphors as defined in the former section are to be considered in relation to syntax. Since nouns can be post-modified by means of prepositional phrases, relative clauses, etc., giving them preference opens the way for long noun phrases, not only in subject but also in object positions, as illustrated in the following example:

[24] There are certain conditions precedent to establishing *a viable environment for international capital investment, one not subject to periodic systemic crises*. [...] The sharp rise [in equity prices] induced *a major portfolio adjustment out of then perceived fully priced investments in western industry into the perceived bargain priced, but rapidly growing, enterprises and economies of Asia*. (16 September 1998)

Other particular features of discourse evidence more sophisticated syntactic choices that seem to faithfully reflect the more formal lexical options mentioned so far. Three types of structure are recurrent enough in the corpus to draw our attention. The first one, which consists of ‘that-clauses’ used as the subject of verbs, is characteristic of a refined language:

[25] *That a number of foreign economies are currently experiencing difficulties* is not surprising (21 July 1998)

[26] *That the American economy would be affected to some degree by spill-over from the problems in Asia* was never in doubt (...) (10 June 1998)

[27] *That American productivity growth has picked up over the past five years or so* has become increasingly evident. (22 July 1999)

The second feature involves ‘WH-cleft sentences’, also characteristic of greater complexity insofar as they, too, cause the grammatical subject to be quite long, as in the following contexts:

[28] *What is crucial to sustaining this unprecedented period of prosperity* is that it close reasonably promptly, given already stretched labour resources, and that labour markets find a balance consistent with sustained growth marked by compensation gains in line with productivity advances. *Whether these adjustments will occur without monetary policy action* remains an open question. (21 July 1998)

With the third structure, called ‘fronting’, word order is disrupted by the fact of placing an element at the beginning of the sentence for it to mark the ‘theme’. Consequently, subjects and main verbs are inverted:

[29] *Critical to this process* has been the rapidly increasing efficiency of our financial markets. (24 February 1998)

[30] *Of even greater importance* is that all Americans believe that they are part of a system they perceive as fair and worthy of support. (8 September 1999)

[31] *Doubtless at the head of the list* is reinforcing the capabilities of banking supervision in emerging market economies. (16 September 1998)

Similarly, inversion can be noted when a negative or near-negative adjunct is fronted, and in most cases the effect is one of added sophistication:

[32] *Not so well understood*, in my judgement, *is the impact* that fear of growing protectionism would have on profit expectations, and hence on the current values of capital assets. (20 January 1999)

[33] *No longer can one expect* to obtain all of one's lifetime job skills with a high-school or college diploma. (26 February 1997)

Other frequent cases of inversion in the corpus result from the deletion of 'if' with a view to stressing the uncertainty surrounding the hypothesis that is raised, which results in a more refined, literary style:

[34] *Should* demand for new workers continue to exceed new supply, we would expect wage gains increasingly to exceed productivity growth, squeezing profit margins and eventually leading to a pickup in inflation. *Were* a substantial pickup in inflation to occur, it could, by stunting economic growth, reverse much of the remarkable labour market progress of recent years. (24 February 1998)

A characteristic feature of Mr Greenspan's language is that the various marks of sophisticated structures that we have just reviewed alternate with more common forms such as direct questions, or contrast with standard language use. As we shall now see, the same surprising mix can be noticed from one paragraph to the other at the level of discourse, depending on the audience targeted by the author-speaker.

3.4 A patchwork of different types of discourse

What we have already said about Mr Greenspan's technique of proceeding by small strokes, just like a painter, seems to be confirmed at the level of discourse. In striking contrast with the sophisticated lexical choices already mentioned, some passages in his speeches evince his efforts to clarify the terminology used, in which cases the language is quite simple:

[35] Economists use the term 'time preference' to identify the broader trade-off that individuals are willing to make, even without concern for risk, between current consumption and claims to future consumption (4 September 1998)

Not only do terms require definitions but notions also need to be explained, when the message is to be made clearer. Accordingly, textbook explanations can be found here and there, which students in Economics 101 would not have any trouble understanding:

[36] The number of people willing to work can be usefully defined as the unemployed component of the labour force plus those not actively seeking work, and thus not counted in the labour force, but who nonetheless say they would like a job if they could get one. (23 February 1999)

Mr Greenspan's pedagogical tone is obvious in [37] when he analyses the reasons why, despite the favourable context, businesses refrain from raising their prices. 'Professor' Greenspan does not hesitate to resort to similes to support his explanations and to make sure that this part of his message is understandable to the layperson [38] and [39].

[37] Businesses believe that, were they to raise prices to boost profits further, competitors with already ample profit margins would not follow suit; instead they would use the occasion to capture a greater market share. (26 February 1997)

[38] Operating on uncertain forecasts, of course, is not unusual. People do it everyday, consciously or subconsciously. *A driver might tap the brakes to make sure not to be hit by a truck coming down the street, even if he thinks the chances of such an event are relatively low; the costs of being wrong are simply too high. Similarly, in conducting monetary policy, the Federal Reserve needs constantly to look down the road to gauge the future risks to the economy and act accordingly.* (22 July 1997)

[39] From time to time [...] investors suffer an abrupt collapse of comprehension of, and confidence in, future economic events. It is almost as though, *like a dam under mounting water pressure*, confidence appears normal until the moment it is breached. (27 August 1999)

The message may even be given a didactic touch, or even a moralistic ring, as in [40] below:

[40] I do not deny that many in our society appear to have succeeded in a material way by cutting corners and manipulating associates, both in their professional and in their personal lives. But *material success is possible in this world without exploiting others, and clearly, having a reputation for fair dealing is a profoundly practical virtue. Trust is at the root of any economic system based on mutually beneficial exchange.* (8 September 1999)

The Federal Reserve Board Chairman – turned Professor, then moralist – also knows when to let speak the experienced observer that he is. The result is a number of general statements, sounding like universal truths or words of wisdom scattered across his speeches, as illustrated in the example below [41]:

[41] When productivity is accelerating, it is very difficult to gauge when an economy is in the process of overheating. [...] Identifying a bubble in the process of inflating may be among the most formidable challenges confronting a central bank, pitting its own assessment of fundamentals against the combined judgement of millions of investors. [...] When we can be pre-emptive, we should be, because modest pre-emptive actions can obviate more drastic actions at a later date that could destabilise the economy. (22 July 1999)

Given the wide audiences that can have access to his numerous public utterances, Mr Greenspan takes any opportunity he is offered to send messages in different directions. In one speech, he flags a warning to the banking world, advising banks against being too complacent concerning repayment risk, while he enjoins investors to act cautiously [42]. And at the same time, he tries to talk the American government into resisting the dangerous temptation of resorting to protectionist measures in the field of trade [43]:

[42] Twelve or eighteen months hence, some of the securities purchased in the market could be looked upon with some regret by investors. (24 February 1998)

[43] If we were to cede our role as a world leader, or backslide into protectionist policies, we would threaten the source of much of our own sustained economic growth. (24 February 1998)

Although the central bank is independent, it is still important for it to develop close, harmonious contacts with political circles, insofar as inaccurate political measures could ruin the central bank's efforts to stabilise the economy. For this reason, Mr Greenspan's speeches also target Representatives or Senators. In [44], he adopts a very diplomatic tone in order to give them merit points:

[44] Administration and Congressional actions to curtail budget deficits have enabled long-term interest rates to move lower, encouraging private efficiency – enhancing capital investment. Deregulation in a number of industries has fostered competition and held down prices. (22 July 1997)

However, when necessary, Mr Greenspan can also prove to be polemical in order to answer his detractors and to justify his policy:

[45] The Federal Reserve is intent on gearing its policy to facilitate the maximum sustainable growth of the economy, but it is not, as some commentators have suggested, involved in an experiment that deliberately prods the economy to see how far and fast it can grow. The costs of a failed experiment would be much too burdensome for too many of our citizens. [...] Our objective has never been to contain inflation as an end in itself but rather as a precondition for the highest possible long-run growth of output and income – the ultimate goal of macroeconomic policy. (22 July 1997)

Naturally, Greenspan the economist reappears when dealing with such matters as money growth and monetary aggregates. In [46], the reader is given a technical commentary on the ranges of growth for money and credit, based on graphical analysis:

[46] With nominal income growth strong relative to the rate that would likely prevail under conditions of price stability, the growth of M2 is likely to run in the upper part of its range both this year and next, while M3 could run a little above its cone. (22 July 1997)

Although most of the contexts quoted in this section are not really difficult to understand as such, what may be more confusing is the constant shifting from one type of language to the other. Undeniably, given the number of definitions and explanations, the reader can be left with an impression of clarity, but it is only a surface impression. At other times, (s)he is plunged into technical passages and complex analyses that combine to make the message more difficult to grasp, not to mention the maze of hedges that hamper his / her progress towards a better understanding of 'Greenspanese'.

3.5 Towards more transparency

Mr Greenspan's ambivalent language reflects the dilemma facing the Federal Reserve: on the one hand, it is important to communicate the Central Bank's views of the evolution of the economic situation to the public, but on the other hand, deciding when and how to do so remains a vital question of strategy. Since 2000, when a policy of greater openness in matters of monetary policy was proclaimed, announcements of shifts toward tighter or looser monetary policy have been made regularly, a welcome change for the markets trying to anticipate changes. Admittedly, the new openness may be interpreted as a means to introduce a 'virtual' monetary policy. A likely scenario may unfold as follows: supposing the risk of overheating has been identified, a shift in the likely direction of future policy is announced; it immediately causes the markets to react as if the Fed had actually tightened monetary policy, so that the economy starts

slowing on its own before the Central Bank needs to react. However, even though the language describing the Federal Open Market Committee's assessment of future developments has undergone some changes – which, in itself, is enough to underline the impact of words on the public's interpretations and reactions – there is a limit to how much of the future policy intentions can be disclosed, as Mr Greenspan himself points out:

[47] The FOMC's objective is to release as much information about monetary policy decision-making, and as promptly, *as is consistent with maintaining an effective deliberative process and avoiding rolling markets unnecessarily*. (23 February 1999)

Accordingly, it is important for the Central Bank to maintain a veil of haze over its future monetary policy if the latter is to be efficient. The real meaning of transparency needs agreeing upon: Being more open, i.e., giving out more information does not necessarily mean being transparent and there is obviously a difference between drowning the public under heaps of details and selecting the relevant information that will enable people to make informed judgements and decisions. Mr Greenspan therefore cultivates the art of dropping hints rather than disclosing straightforward information, as is the case in context [48]. On the surface, it provides explanations, but it also leaves the door open for a change in policy and, actually, fails to give any indication as regards when – and by how much – interest rates might be raised:

[48] The FOMC has signalled a state of heightened alert for possible policy tightening since last July in its policy directives. But we have also taken care not to act prematurely. The FOMC refrained from changing policy last summer, despite expectations of a near-term policy firming by many financial market participants. If the FOMC were to implement such an action, it would be judging that the risks to the economic expansion of waiting longer had increased unduly and had begun to outweigh the advantages of waiting for uncertainties to be reduced by the accumulation of more information about economic trends. (26 February 1997)

This paragraph evidences what is meant by the oxymoron 'fuzzy transparency'. In another speech, Mr Greenspan himself resorts to this linguistic device when announcing the FOMC's decision to leave its stance unchanged, which he describes as an 'unbiased policy predilection' (23 February 1999), echoing the oxymoron 'neutral bias' so often used formerly. Although this may be viewed as an isolated example, it seems that his technique as a whole is rather oxymoronic as it is based on 'creative ambiguity'. It is the art of giving an illusion of transparency, while carefully preserving a dose of opacity. Paul Krugman, Professor of Economics at MIT, also appears to equate 'Greenspanese' with fuzziness. Consequently, when Mr Greenspan starts sending clearer warnings because he feels worried about a stock bubble inflating, Krugman (1999) writes: 'I wish he wouldn't worry so publicly: it makes me nervous when I understand what he's saying'. Yet, as the Federal Reserve's chairman himself once wittingly replied to an interlocutor, 'I know you believe you understand what you think I said, but I am not sure you realise that what you heard is not what I meant' (*The Economist*, 25 September 1999). It is, of course, difficult to tell whether he wanted to preserve the legend surrounding 'Greenspanese' or whether he was really speaking his mind on this occasion. Still, it is undeniable that, in spite of the constraints inherent in the formal genre of prepared written speeches, he has succeeded in evolving a language of his own.

Conclusion

In this paper, we have tried to investigate the peculiar features of ‘Greenspanese’ and we hope to have contributed to making the recipe of ‘fuzzy transparency’ a little clearer, even though the correct proportioning of the ingredients remains more difficult to assess. We have established that Mr Greenspan’s style cannot only be accounted for by the constraints of the formal genre. The particularly long, complex sentences that characterise his discourse do contain elements related to the conventions of formal discourse. Yet, beyond the traditional caution, politeness and formality, what is striking in Mr Greenspan’s speeches and lectures is the art of using all the resources of language available to perform his duty as best he can, living up to his reputation as an insightful and experienced captain at the helm of his ship, keen on steering the economy around any danger. To this end, hedging devices are conveniently exploited, sometimes with a view to softening the message – thus blurring it – and at other times in order to introduce precise information, in which case the reader is drowned in a sea of details. In most cases, the result is perplexing. As different groups are targeted, various messages are sent and the tone needs to be adapted accordingly, which accounts for the co-existence of different types and levels of language in the same speech, another source of confusion. In addition, while apparent clarity is sought by means of terminological and notional explanations, the reader may be destabilised by the author’s sophisticated lexical and structural choices. It is actually this multifaceted language, which seems at once to disclose and retain information, that leaves the reader puzzled. But is it precisely the only way for Mr Greenspan to play his role efficiently and retain his authority: Conscious that he is accountable to the nation, and expected to make accurate comments, accurate predictions, and accurate moves, he must sound credible at all times and calibrate his remarks for them to be self-fulfilling. In doing so, he yields to the rhetorical pressures linked to his function and performs his task masterfully. Going one step further, the question that may be raised at this point is whether the Central Banker’s prerogative to remain, so to speak, the master of information could pave the way for propaganda. If we take the initial meaning of propaganda into account, i.e., “sharing one’s faith”, it stands to reason that a Central Banker could not play his role efficiently if he had no faith in what he was doing and did not try to convey his ‘beliefs’ through the message he addresses to his fellow citizens. No attempt at communication can be completely neutral, and, in this respect, investigating ‘Greenspanese’ might also lead to analysing discourse from another angle, that of propaganda, or the art of guiding people onto the desired path, by sharing one’s convictions.

APPENDIX 1

Table 1. Testimonies and Remarks by Chairman Alan Greenspan

Data concerning sentence lengths

Text number Date	Words / text	Words / Sentence	Sentences ≥ 26 words	% of sentences ≥ 26 words
1. 29 Oct. 97	2061	27.1	40	52.6 %
2. 13 Nov. 97	1397	26.3	25	47.1 %
3. 10 June 98	3017	30.8	61	62.2 %
4. 16 Sept. 98	2447	26.9	45	49.4 %
5. 20 Jan. 99	2276	27.4	44	53 %
6. 14 June 99	1694	25.3	32	47.8 %
7. 17 June 99	1775	24.3	34	46.6 %
8. 26 Jan. 00	1295	27.5	23	48.9 %

9. 4 Sept. 98	4895	25.2	87	44.8 %
10. 27 Aug. 99	2503	25	44	44 %
11. 8 Sept. 99	2090	24.6	37	43.5 %
12. 27 Sept. 99	2847	25	48	42.1 %
13. 11 Oct. 99	2175	26.5	40	48.8 %
14. 14 Oct. 99	2044	24.3	32	38 %
15. 15 Oct. 99	1488	27.5	32	59.2 %
16. 19 Oct. 99	2762	24.9	47	42.3 %

Corpus: 36,766 words; Average sentence length: 26 words; Sentences with 26 words or more: 47.5 %

Table 2. Semi-annual Reports on monetary policy by Chairman Alan Greenspan :
Data concerning sentence lengths and ‘packet’ lengths

Text number	Words / text	Words / Sentence	Sentences ≥ 26 words	% of sentences ≥ 26 words	Words / ‘Packet’
17. 26 Feb. 97	4224	25.7	78	47.5 %	10.7
18. 22 July 97	5297	25.5	92	44.2 %	10.6
19. 24 Feb. 98	3990	27.9	76	53.1 %	11.4
20. 21 July 98	5911	27.1	109	50 %	10.3
21. 23 Feb. 99	5107	25.1	94	46.3 %	10.6
22. 22 July 99	4467	26.7	89	53.2 %	11

Corpus : 28, 996 words; Average sentence length: 26.3 words.
Sentences with 26 words or more: 48 %; Average ‘packet’ length: 10.7 words.

Total corpus : 65,762 words; Average sentence length: 26 words
Sentences with 26 words or more: 48 %

APPENDIX 2 CORPUS REFERENCES

A) Testimonies by Federal Reserve Chairman Alan Greenspan

1. October 29, 1997: Testimony before the Joint Economic Committee, U.S. Congress
2. November 13, 1997: Testimony before the Committee on Banking and Financial Services, U.S. House of Representatives.
3. June 10, 1998: *An Update on Economic Conditions in the United States*, Testimony before the Joint Economic Committee, U.S. Congress.
4. September 16, 1998: *International Economic and Financial System*, Testimony before the Committee on Banking and Financial Services, U.S. House of Representatives.

5. January 20, 1999: *State of the Economy*, Testimony before the Committee of Ways and Means, U.S. House of Representatives.
6. June 14, 1999: *High-tech Industry in the U.S. Economy*, Testimony before the Joint Committee, U.S. Congress.
7. June 19, 1999: *Monetary Policy and the Economic Outlook*, Testimony before the Joint Committee, U.S. Congress.
8. January 26, 2000: *On Nomination to Fourth Term as Chairman*, Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate.

B) Remarks by Federal Reserve Chairman Alan Greenspan

9. September 4, 1998: *Is There a New Economy?* Remarks at the Haas Annual Faculty Research Dialogue, University of California, Berkeley, California.
10. August 27, 1999: *New Challenges for Monetary Policy*, Remarks before a symposium sponsored by the Federal Reserve Bank of Kansas City in Jackson Hole, Wyoming.
11. September 8, 1999: *Maintaining Economic Vitality*, Millennium Lecture Series, sponsored by the Gerald R. Ford Foundation and Grand Valley State University, Grand Rapids, Michigan.
12. September 27, 1999: *Lessons from the Global Crises*, Remarks before the World Bank Group and the International Monetary Fund, Program of Seminars, Washington, D.C.
13. October 11, 1999: *The Evolution of Bank Supervision*, Remarks before the American Bankers Association, Phoenix, Arizona.
14. October 14, 1999: *Measuring Financial Risk in the Twenty-first Century*, Remarks before a conference sponsored by the Office of the Comptroller of the Currency, Washington, D.C.
15. October 15, 1999: *Business, the Economy, and the New Millennium*, Remarks before the National Italian American Foundation, Washington, D.C.
16. October 19, 1999: *Do Efficient Financial Markets Mitigate Financial Crises ?*, Remarks before the 1999 Financial Markets Conference of the Federal Reserve Bank of Atlanta, Sea Island, Georgia.

C) The Federal Reserve's Semi-annual Reports on Monetary Policy: Testimonies by Chairman Alan Greenspan

17. February 26, 1997: Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate.
18. July 22, 1997: Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate.
19. February 24, 1998: Before the Subcommittee on Domestic and International Monetary Policy of the Committee on Banking and Financial Services, U.S. House of Representatives.
20. July 21, 1998: Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate.
21. February 23, 1999: Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate.
22. July 22, 1999: Before the Committee on Banking and Financial Services, U.S. House of Representatives.

REFERENCES

- AUSTIN, J. L. (1962) *How to do things with words*, Oxford: Oxford University Press.
- BANKS, D. (1994) 'Hedges and How to Trim Them', in M. Brekke, O. Andersen, T. Dahl and J. Myking (Eds.) *Applications and Implications of Current LSP Research*, Vol.2: 587-592, Bergen, Fagbokforlaget.
- BAKHTIN, M. (1986) *Speech genres and other late essays* (Carlyn Emerson & Michael Holquist, Eds., & Vern W. McGee, Trans.), Austin : University of Texas Press.
- BARBER, C. L. (1962) 'Some Modern Characteristics of Modern Scientific Prose', in *Contributions to English Syntax and Phonology*, 1-23, Stockholm: Almqvist & Wiksell.
- BAZERMAN, C. (1984) 'Modern evolution of the experimental report in physics: spectroscopic articles' in *Physical Review*, 1893-1980, *Social Studies in Science* 14: 163-196.
- BAZERMAN, C. (2001) 'Nuclear information: one rhetorical moment in the construction of the information age'. *Written Communication* 18, 259-295.
- CHANDLER, D. (2002) *Semiotics : the Basics*. New York: Routledge
- DORNBUSH, R. & S. FISHER. (1988) *Macroeconomics*. New York: McGraw-Hill.
- DUDLEY-EVANS, T. (1994) 'Academic Text: The Importance of the Use and Comprehension of Hedges', *Asp* 5/6: 131-139, Bordeaux: Université de Bordeaux 2.
- GOFFMAN, E. (1981) *Forms of Talk*, Oxford: Basil Blackwell.
- HALLIDAY, M. A. K. (1987) 'Spoken and Written Modes of Meaning', in R. Horowitz and S. J. Samuels (eds) *Comprehending Oral and Written Language*. San Diego, CA: Academic Press.
- HALLIDAY, M. A. K. (1989) *Spoken and Written Language*, Oxford: Oxford University Press.
- HARRISON, S. & P. BAKKER (1998) 'Two New Readability Predictors for the Professional Writer: Pilot Trials', *Journal of Research in Reading* 2. 2: 121-138.
- HUDDLESTON, R. D. (1971) *The Sentence in Written English*. Cambridge: Cambridge University Press.
- HYLAND, K. (1998) *Hedging in Scientific Research Articles*, Amsterdam: John Benjamins.
- KERBRAT-ORECCHIONI, C. (2002) *L'énonciation*. Paris : Armand Colin.
- KRUGMAN, P. (1999) *Should the Fed Care about Stock Bubble?*
<<http://web.mit.edu/krugman/>>
- MARKKANEN R. & H. SCHRÖDER (Eds.) (1997) *Hedging and Discourse: Approaches to the Analysis of a Pragmatic Phenomenon in Academic Texts*, Berlin: Mouton de Gruyter.
- MARTIN, J. R. (1992) *English text. System and structure*. Philadelphia / Amsterdam: John Benjamins Publishing Company.
- RAFROIDI, P. (1978) *Précis de stylistique anglaise*. Ophrys.
- ROUNDS, P. (1982) Hedging in Written Academic Discourse: Precision and Flexibility, Mimeo: The University of Michigan.
- SALAGER-MEYER, F. (1994) 'Hedges and Textual Communicative Function in Medical English Written Discourse', *English for Specific Purposes*, 13-2: 149-170.
- SELINKER, L. (1979) On the Use of Informants in Discourse Analysis and Language for Specialised Purposes, *Irall* 17: 189-215, Berlin, Mouton de Gruyter.

- SMART, G. (2003) 'A Central Bank's "Communications Strategy". The Interplay of Activity, Discourse Genres, and Technology in a Time of Organizational Change'. <http://wac.colostate.edu/books/selves_societies>
- SWALES, J. M. (1991) *Genre Analysis*, Cambridge: Cambridge University Press.