

**RELEVANCE OF ANTICIPATION AND POSSIBLE STRATEGIES
IN THE SIMULTANEOUS INTERPRETATION
FROM ENGLISH INTO ITALIAN¹**

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1. Introduction

Anticipation has been only marginally treated in past studies on information and lexical processing or on simultaneous interpretation. The latter in particular, have tended to concentrate exclusively on the temporal aspect of anticipation².

In other words, anticipation in simultaneous interpretation has traditionally been taken to be the instance in which the interpreter is able to conclude the message (s)he is interpreting before the speaker has terminated (Lederer 1981).

The Paris School has drawn a distinction between semantic and linguistic anticipation, stating that the former is tied to comprehension of sense, the latter is a consequence of the frequent use of 'fixed' collocations and linguistic formulae which can be immediately recalled in full starting from their initial part (Lederer 1978, 1981; Seleskovitch 1978).

It is worth noting, however, that the occurrence of this type of 'temporal anticipation' results from a variety of factors including the languages involved (source language and target language).

If the transfer from source language (SL) to target language (TL) requires a high degree of morpho-syntactic restructuring it might be necessary to anticipate certain elements of the SL to comply with the syntactic rules of the TL (Riccardi & Snelling 1996).

A clear example of this is the well-known problem of the verb in final position in German which is frequently correctly anticipated during interpretation into Italian, French or English, i.e. languages marked by a SVO structure.

The temporal advantage of the interpreter over the speaker is also a

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- 1 The present article is an abstract from an experimental thesis in interpretation presented in March 1997 at the SSLM. A wider discussion of the themes touched upon here can therefore be found in Zanetti, R. "*Rilevanza dell'anticipazione e possibili strategie nell'interpretazione simultanea inglese-italiano*", supervised by Prof. Riccardi and Prof. Snelling.
 - 2 Psycholinguistic models of SI (Moser 1978, Chernov 1994) have concentrated more on the mechanisms of anticipation as described in 1.2 below.

consequence of the capability of the interpreter to synthesize his/her message while delivering it. Again, the rules of the target language are a determining factor.

The present study is aimed at demonstrating that temporal anticipation is a macroscopic aspect of a more general phenomenon, which, though amplified by the requirements and characteristics of simultaneous interpretation, occurs also in a monolingual context. This paper concentrates therefore on the mechanisms underlying anticipation and intends to demonstrate the existence of the phenomenon even though it might pass unnoticed when temporal measurements are taken.

1.1. The nature of anticipation considered in the study

Considering the fact that any instance of linguistic processing ultimately consists of a decoding phase followed by an encoding one (with a further passage in the case of interpretation represented by the linguistic transfer), the hypothesis tested here is that anticipation may stem from compression of the time required for decoding.

Decoding is based upon an all-out analysis of the incoming message comprising the acoustic-phonological, syntactic, semantic and pragmatic levels. The interactivity of the various levels of analysis has become common ground for almost all cognitive models of the last twenty years and so has the existence of a continuous flow between bottom-up (textual) and top-down (encyclopedic) information (Schwarz 1992)³. On the one hand, top-down information is activated by textual information at any level, on the other, it is responsible for a faster processing of the bottom-up information and contributes to direct it.

Compression strategies are commonly – though unconsciously – adopted by listeners who are prone to minimize the effort required for analysis by exploiting expectations – largely fed by top-down information – instead (Kintsch & van Dijk 1983).

In other words, listeners will generally analyse the message only to the extent that is necessary to activate expectations which then serve as 'frameworks' for comprehension. Marslen Wilson's cohort model supports such a hypothesis.

According to Marslen-Wilson (1989), words presented acoustically are recognized before being complete. The first syllables determine the cohort of potential candidates stored in the mental lexicon (top-down information storage)

3 The present study devotes particular attention to acoustic and lexical analysis as described in the 1975 Massaro's model (Massaro 1975) and in Marslen Wilson's cohort model (Marslen-Wilson 1989).

that can match the input. As further information is added, the number of candidates rapidly decreases until only one remains.

The cohort model contains the corollaries of early access and direction of access. Early access is explained by the fact that it is only the first syllables which are relevant in word recognition; direction of access follows as a consequence because decoding can only take place from left to right according to the natural development of acoustic information. To summarize, lexical processing is done rapidly on-line, partial bottom-up information of any kind is immediately integrated by top-down indications and word recognition can take place very early, before the end of a given lexical item (Marslen Wilson 1989).

The broad phenomenon of anticipation is more evident in simultaneous interpretation, firstly because of the parallel development of two texts which can be compared and contrasted by the analyst and secondly because of the time constraints imposed on the interpreter who is consequently forced to use any available energy-saving strategy to keep up with the task of comprehension and transfer (Gile 1985).

2. The experiment

The adoption of anticipation strategies during simultaneous interpretation has been assessed by means of an experiment carried out by 33 student-interpreters at the SSLM. 22 of them were asked to interpret into Italian an English text containing 15 anomalies, namely 15 lexical items (adjectives and nouns) whose central or final part had been purposely modified. 11 students were asked to shadow the same text and acted as a control group.

The experimental paradigm based on the introduction of disrupted sentences has been frequently used by past studies on shadowing to investigate the strategies involved in the processing of continuous speech (Marslen-Wilson 1973, 1975, 1985, Cohen 1980, Lackner 1980, Tonelli & Riccardi 1995).

Therefore, the design of the present test is not original 'per se'; rather it is original with reference to the object of investigation, that is simultaneous interpretation.

In both cases the assumption is that the reaction to the anomaly is revealing of the way the message is processed.

The conclusion reached by previous studies on shadowing is that the capability of students to correct errors (anomalies) on-line, is the direct consequence of the strong influence that their acoustic and semantic expectations bear on the processing of the message.

The shadowing of a continuous message compels the listener to listen (decode) and repeat immediately (encode) the message while the next chunk is being presented.

Strict time limits and the complexity of the task lead the shadower to reduce the time required for a thorough input analysis and to avail himself/herself of expectations instead:

the acoustic-phonetic cues are not matched with the corresponding phonemic image, but with the expected phonemic representation. Perceptual expectations at phonemic level are influenced by top-down analysis of the message which in turn has a bearing on the monitoring of incoming speech (Tonelli & Riccardi 1995: 72)

This would explain the reason why many of the errors contained in the text are not recognized as such.

Considering the fact that expectations have proven to be a helpful resource in the case of shadowing, the assumption was that they would be even more significant in simultaneous interpreting, where attention is divided not only between decoding and encoding but also between two different language systems, that of the source language, and that of the target language. Experimental results have confirmed this assumption.

2.1. Method and procedure

Subjects tested (29 female and 4 male) were students of interpretation in their final or extra years of course who had English as their first or second foreign language.

They were asked either to interpret into Italian or to shadow a speech in English originally delivered by the former secretary of UN Boutros Ghali. The text was abridged to last about 10 minutes (9 min. and 52 sec.), it was recorded on a tape at a speed of approximately 120 words per minute and submitted to students in various sessions. All deliveries were recorded and transcripts were made out of them.

The analysis of results is based upon that material and considers four processing options:

- 'R' stands for correction of the anomaly that was brought back to the unaltered version.
- 'NR' represents a repetition of the anomaly.
- 'O' is for omission of the anomalous material,
- 'IP' indicates paraphrasing-interpretation.

Paraphrasing was not checked for correctness, the IP criterion only required that something was said in the place of an anomaly.

All 15 anomalies of the text derive from the phonological modification of words originally present in it. Attention was paid to alter the central or final

syllables in order to verify Marslen Wilson's theory on early access. Anomalies were further grouped into three classes on the basis of their distance from or proximity to a correct antecedent that they recalled anaphorically:

- 'RD' anomalies were contained in lexical items that had appeared in their correct form more than three sentences before the one in question.
- 'RVs' were anomalies contained in items that had appeared less than three sentences before the one considered.
- 'N' anomalies were new, in the sense that they had no antecedent.

The distinction wanted to test the hypothesis that items with a near anaphorical antecedent are more readily processed than others (Clark and Sengul 1979). A higher number of corrections was expected in this case.

A form to be filled in by the subjects was distributed after the experiment. They had to indicate whether they had heard any kind of anomaly in the text and in case of affirmative answer they had to specify the type and number of detected anomalies.

2.2. General results

Chart Nr. 1 summarizes overall results. Smaller charts give the detailed results for shadowing (right) and SI (left). In general corrections are the most common option (O= 55%). The repetition of the anomaly is the less represented option (NR=11%) but this does not hold true for shadowing, where repetitions of anomalies contribute with a 30% share to the available processing options.

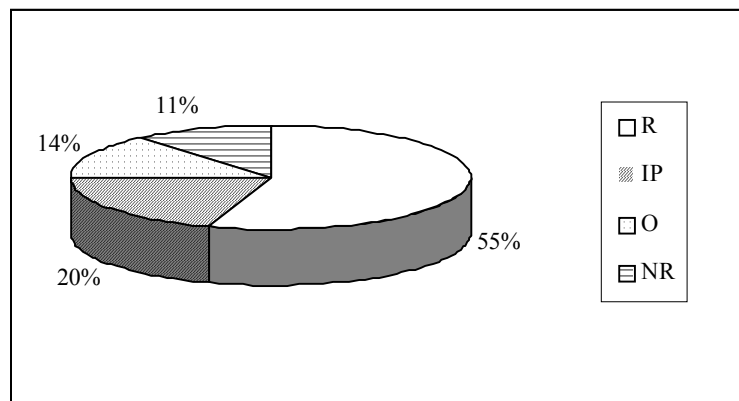


Chart nr. 1. Int +Sha. Total share of R, NR, O, IP for SI and shadowing

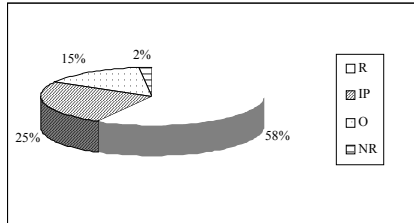


Chart nr.1 Int. R, NR, O, IP results in SI

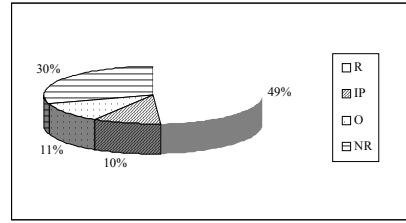
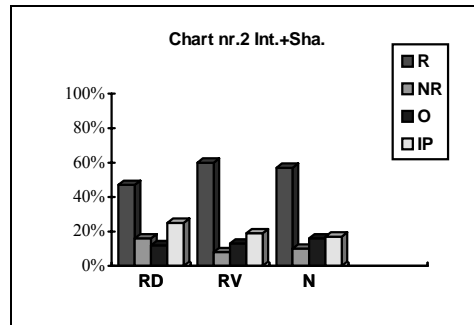


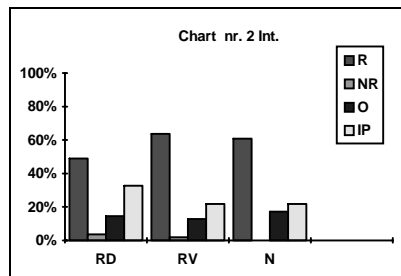
Chart nr. 1 Sha. R, NR, O, IP results in shadowing

2.3. Results according to RD, RV, N groups

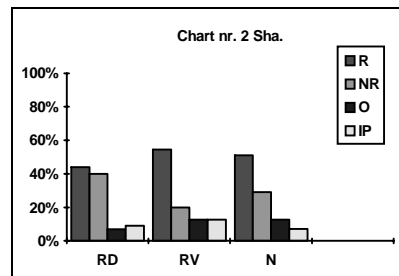
As expected, corrections are higher in the presence of a closer antecedent (RV). In general 60% of RV have been corrected as against 47% of RD and 57% of N. Results are confirmed also in the separate smaller charts for SI and shadowing. It is worth noting, however, that in shadowing repetitions of the anomaly (NR) are significantly higher than in SI for all three groups.



R, NR, O, IP results for each class of anomaly in SI and shadowing



R, NR, O, IP results for each class of anomaly in SI



R, NR, O, IP results for each class of anomaly in shadowing

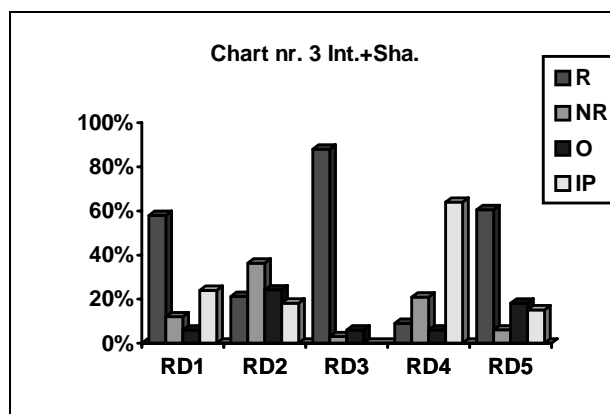
2.3.1 RD anomalies

Charts 3-5 and the corresponding tables present the results obtained for each anomaly. Each group (RD, RV, N) contained different kinds of anomalies. In some cases anomalies have given rise to existing lexical items, with varying likelihood of appearance in the given context, in others they have resulted in nonsense.

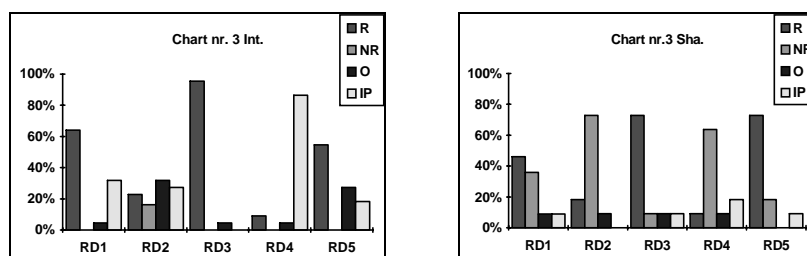
The processing of nonsense (e.g. RD3) is revealing of phonological expectations. 'Globalization', for instance, has been commonly restored to 'Globalization' passing almost unnoticed even in shadowing. It is worth pointing out that the recognition of 'phonological' nonsense is more easily detected in the shadowing task, rather than in the SI into Italian, since the passage from one linguistic system into another does not allow the form of words to be preserved. The interpreter therefore does not carry out a formal analysis for its own sake, because (s)he can't re-employ that material. The shadower, on the other hand, is called upon to reproduce the exact form of the input and will therefore be more attentive to the form. A poor detection of a phonological anomaly in shadowing leads to the conclusion that also shadowers act according to expectations.

Table 3. RD Anomalies

Code	Original	Anomaly
RD1	Fiftieth	Fifth
RD2	Transitional	Transnational
RD3	Globalization	Globaliration
RD4	Democratization	Democratifashion
RD5	United Nations	United Stations



R, NR, O, IP results for anomalies of the RD group in SI and e shadowing.



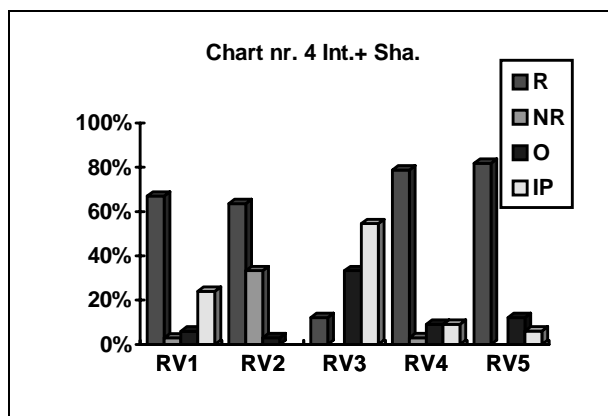
R, NR, O, IP results for RD anomalies in SI R, NR, O, IP results for RD anomalies in shadowing

2.3.2 RV Anomalies

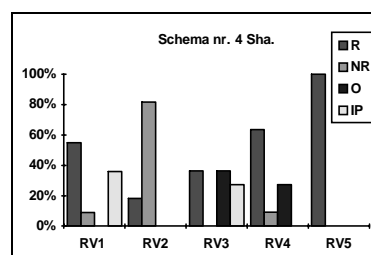
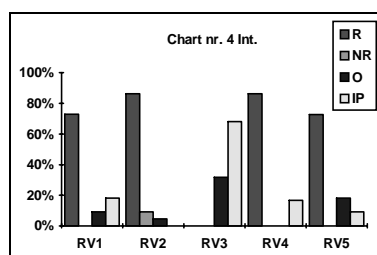
In general, RV anomalies have reported the highest number of corrections. None of them was a nonsense word, though most of them were highly improbable given the context. RV 2 (*democracy-demography*) is highly revealing of the role played by semantic expectations in SI. Both words exist and both can occur in the text. Shadowers recognize the formal correctness of '*demography*' and, fulfilling their task, repeat the word as it stands (NR=81,81% in Shadowing). Conversely, interpreters, who cannot transfer the formal structure of the speech, tend to concentrate more on the semantic aspect of the message and develop expectations based on it. According to such expectations, given the semantic context and the lexical input 'demo-' the conclusion should be '-cracy'. Indeed interpreters' corrections (R) amount to 81,81%. To corroborate the theory of a different processing in SI and shadowing, it should be noted that this is the same percentage reported in shadowing for NR.

Table 4. RV Anomalies

Code	Original	Anomaly
RV1	Charter	Chapter
RV2	Democracy	Demography
RV3	State Structures	Stoat Structures
RV4	Human rights	Human nights
RV5	Conference	Confidence



R, NR, O, IP results for RV anomalies in SI and shadowing



R, NR, O, IP results for RV anomalies in SI R, NR, O, IP results for RV anomalies in shadowing

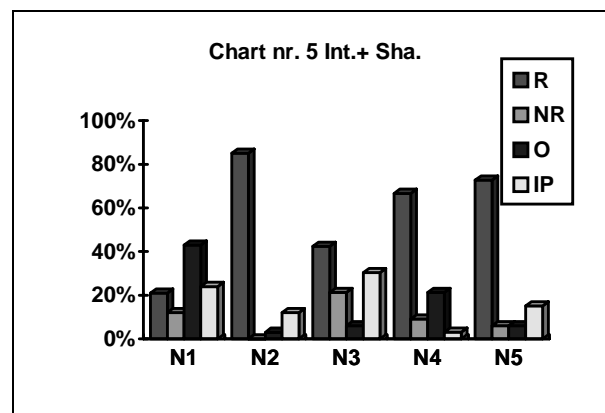
2.3.3 N Anomalies

N anomalies have been corrected more than RDs. Also in this case none of them was a lexical nonsense, despite the fact that some were semantic nonsense.

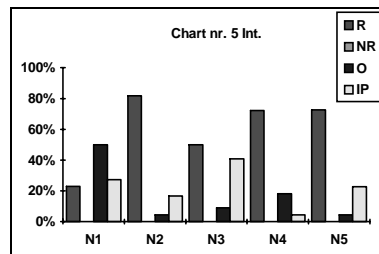
The correction of N2, which has never been repeated either in SI or shadowing, might represent the revealing of a linguistic-syntactic expectation. It was included in the well-known collocation '*to widen the gap between the rich and the poor*'. Given the frequency of the collocation no interpreter or shadower would wait its end to reproduce it correctly. The anomaly therefore cannot be detected because the expected form has already been activated and the term has been anticipated.

Table 5. N anomalies

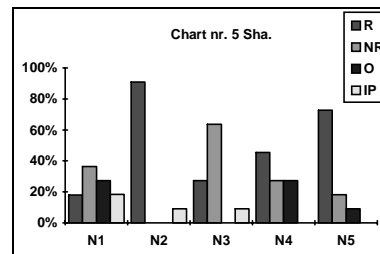
Code	Original	Anomaly
N1	Information	Infuriation
N2	Poor	Port
N3	Strife	Strike
N4	Power	Powder
N5	Principles	Princes



R, NR, O, IP results for N anomalies in SI and shadowing



R, NR, O, IP results for N anomalies in SI



R, NR, O, IP results for N anomalies in shadowing

2.4 Questionnaire results

Results from the final questionnaire that subjects had to fill in, reveal that when anomalies were heard (more in shadowing than in SI because of the already explained characteristics of the task), their number was considerably lower than

15. On average subjects reported 3 to 5 anomalies, which proves the fact that in the presence of a complex task the analysis cannot be too accurate. Adequacy of analysis is guaranteed by the contribution of expectations. The most recalled anomaly is RV2 to further demonstrate the existence of semantic expectations; when they are not met, the anomaly is promptly recalled.

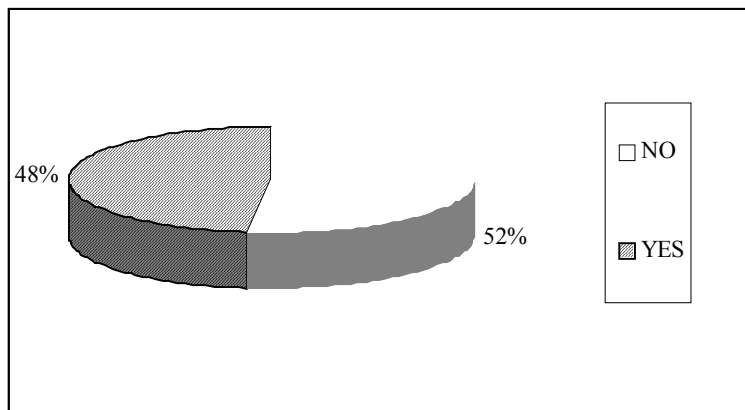


Chart nr. 6. Int.+Sha. Yes/No answers to the question: 'Have you heard any anomaly in the text?' for SI and shadowing.

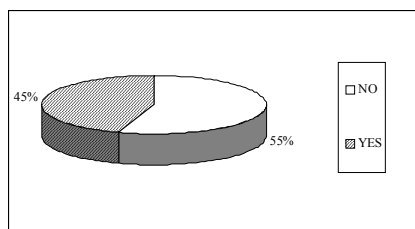


Chart nr. 6. Int. Yes/No answers to the question: 'Have you heard any anomaly in the text?' for SI

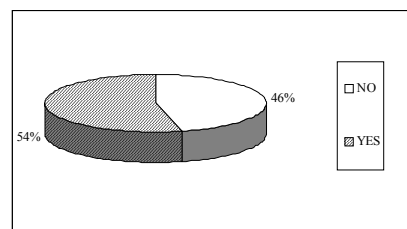


Chart nr. 6 Sha. Yes/No answers to the question: 'Have you heard any anomaly in the text?' for shadowing

Table 6. Most detected anomalies and number of detections

Code	Total	SI	Shadowing
RV2	7	5	2
RD5	6	1	5
RD1	5	3	2
RV5	2		2
N4	1		1

3. Conclusions

The final aim of this study was to demonstrate the contribution given by expectations to the comprehension of a message. The temporal anticipation which has been sometimes measured in SI (Lederer 1981) is only the macroscopic aspect of a deeper phenomenon which is ultimately generated by a compression in the time required for decoding. The possibility of compression is offered by the continuous information flow between bottom-up (textual) and top-down information from long-term memory (extensively described by the majority of cognitive models of the past twenty years). The flow is continuous and simultaneous at all level of analysis from the acoustic-phonological (Massaro 1975, Marslen-Wilson 1989) to the syntactic (Flores d'Arcais 1991) and the semantic-pragmatic (Kintsch and van Dijk 1983).

Anticipation is made possible by such dynamics and the principle of 'linguistic economy' lead the language user to adopt it strategically. All the more so when the task is complex and demanding (Gile 1985). This conclusion was drawn by previous studies on anticipation in SI (Moser 1978, Lederer 1981, Chernov 1994) and is confirmed by the experimental investigation of the present study. The experimental design was aimed at discovering anticipation strategies even though they might not be evident superficially because of the languages involved, English and Italian, both marked by an SVO structure. Past studies on shadowing that had employed the same experimental design (Marslen-Wilson 1973, 1975, 1985, Cohen 1980, Tonelli & Riccardi 1995) justified the on-line correction of anomalies by maintaining that the complexity of the task led subjects to avail themselves of expectations. The present experiment confirms such findings and proves that the statement is even more valid for SI. By comparing the results of SI with those of shadowing, a further element emerges. Expectations involved in SI are not only acoustic but also syntactic and semantic. By contrast, in shadowing, where the form of the message has to be preserved, processing is predominantly focussed on the acoustic-phonological aspect. This is the reason why in shadowing fewer corrections occur when the word is formally correct but semantically unacceptable.

To conclude, the experiment has revealed the existence of anticipation strategies which are constantly present during SI performance, even though the morphosyntactic structures of SL and TL may render them poorly evident.

In general, anticipation strategies are adopted unconsciously, though they are a powerful weapon for the interpreter. The problem remains as to the way they can be perceived, improved and exploited best. An obvious, though unavoidable, suggestion is that of becoming more aware of the processes of analysis involved in decoding and learning to recognize relevant information, at all levels, in order to trigger the highest possible number of 'anticipatory reactions'.

4.1 Annex 1. Original text.

Global Prospects for the United Nations

The speech was delivered by the Secretary General of the United Nations Organization, Boutros Boutros Ghali at the World Economic Forum in Davos, Switzerland, on 26 January 1995⁴.

As the United Nations celebrates the fiftieth anniversary of its founding, I wish to reflect out loud on the global prospect for the Organization which I am currently responsible for managing and which the drafters of the San Francisco Charter expressly conceived as a "center for harmonizing the actions of Nations".

I should like to try and rise above day-to-day details of the international situation and to outline what I consider to be the main challenge facing the international community of tomorrow. In a way, I should like to try and suggest the role that the United Nations can play in an international society that is becoming increasingly globalized, but, at the same time, seems to have lost many of its traditional bearings and value systems.

To do this, I think it is important, and this anniversary, the **fiftieth** of the United Nations, offers us an opportunity to do so, to go back to the actual letter of the Charter and to rethink the opening words of its preamble: "We the people of the United Nations".

There is an underlying message in this collective exhortation which is often forgotten and yet which seems to me to reflect considerable foresight.

The drafters of the Charter at the end of the Second World War had a profound intuition that the international community would be more than just a collection of sovereign States and would have to administer a new kind of global solidarity.

From the very first sentence of its preamble, the United Nations Charter suggests, implicitly but strongly, not only the advent of a global, transnational society, but also the need for a collective, democratic project.

Fifty years after its drafting, the time has come for us to ask ourselves what has become of the **charter's** promises.

First of all, we have clearly entered the era of a global society.

In the economic sphere, through the combined effects of technological progress, rationalization of management methods and optimization of productivity, major corporations are becoming increasingly globalized and are often forming networks among each other.

⁴ The unabridged version of the text was published in the political review *Aussenpolitik 11/95*, Interpress Verlag GmbH.

In the financial sphere, with deregulation, the end of exchange controls, financial innovation and advances in telecommunications, the financial world has become effectively globalized.

In the **information** sphere, news and data can instantaneously be transmitted worldwide.

These massive changes are making States and international public opinion aware that some major problems of our common future are essentially transnational in scope.

Whether it is a question of protecting the environment, controlling population growth, combating AIDS or cracking down on transnational crime, it is clear that all these issues must now be dealt with globally and can only, to a very limited extent, be tackled at the level of individual nation States.

But we are also aware that the phenomenon of globalization is fraught with risks. Among other things, it can destroy traditional bonds of solidarity and marginalize countries and even entire regions, further widening the gap between the rich and the **poor**.

War, exclusion, hatred and ethnic or religious **strife** always feed on such a climate, and irrational, fanatical beliefs are always at hand to offer mistaken solutions to people in distress.

This gives us a compelling obligation to reflect on a new approach to collective living in order to offer States and Nations, and men and women the world over, valid grounds for hope.

It is from this standpoint that the idea of democracy, I would always say global democracy, assumes its full significance.

I think it is important not only to promote the democratic idea, but also to think globally. We must realize that in order for democracy to have real meaning, it must be possible for it to be exercised everywhere that power is concentrated – at national level, of course, but also at the international, and, henceforth, the **transnational** levels.

For **democracy** is not just a form of government of or among States. It must be the method by which all power, of whatever kind, is wielded in today's international society. In other words, I firmly believe that the **globalization** of the economy must be accompanied by the progressive globalization of democracy.

In saying this, I am well aware that I am both presenting a paradox and defining a risk.

The paradox, of course, lies in the somewhat contradictory courses, taken by the expansion of democracy and the evolution of power at the international level. At a time when States are gradually achieving democracy, the reality of global power is largely eluding them, because globalization involves the emergence of new powers that transcend **state structures**. There is, therefore, a

tremendous risk that States will become, at one and the same time, increasingly democratic and increasingly unable to control the basic decisions on which their future and that of the planet ultimately depend. This global mission of democratization can, therefore, be accomplished only by acting at all levels at which power is wielded in international society.

For some years now, the United Nations has been waging, pragmatically and empirically, a diplomatic effort on behalf of democracy within States.

Most peace-keeping operations now envisage both the restoration of democracy and the protection of human rights.

I think it is important to emphasize that democratic States are both the best guarantors of peace and the best defenders of **human rights** and each day that passes confirms that authoritarian regimes are potential warmongers and, conversely, the culture of democracy is fundamentally a culture of peace. But this desire for **democratization** risks being deprived of part of its meaning if, at the same time, **power** in the world-wide scale is not wielded by States, and if the new repositories of power are not themselves also governed by democratic **principles**.

For it is clear that, in a society which is becoming global, the room for manoeuvre left to national decision-makers is lessened.

This change of perspective faces the **United Nations** with a new imperative: that of incorporating the democratic idea into the globalization of international life by engendering new forms of solidarity.

But solidarity is not enacted by decree. Solidarity is also the desire to base the future on a new social covenant and can thus be the product only of a collective commitment.

The United Nations is even now engaging in vast collective analysis in the economic and social sphere, by organizing a whole series of international conferences devoted to major transnational problems that are shaping the future, indeed the destiny of mankind.

It is in this spirit that the 1992 Conference on Environment and Development held in Rio must be understood. As part of the same approach, the United Nations took the initiative of convening in Cairo last September a **Conference** intended to reflect on population problems and on the demographic future of the planet. And in Naples in November, the Member States of the United Nations drew up a Global Action Plan against Organized Transnational Crime.

4.2 Annex 2 Experimental text⁵

As the United Nations celebrates the fiftieth anniversary of its founding, I wish to reflect out loud on the global prospect for the Organization which I am currently responsible for managing and which the drafters of the San Francisco Charter expressly conceived as a "centre for harmonizing the actions of Nations".

I should like to try and rise above day-to-day details of the international situation and to outline what I consider to be the main challenge facing the international community of tomorrow. In a way, I should like to try and suggest the role that the United Nations can play in an international society that is becoming increasingly globalized, but, at the same time, seems to have lost many of its traditional bearings and value systems.

To do this, I think it is important, and this anniversary, the **fifth** ^(RD1) of the United Nations, offers us an opportunity to do so, to go back to the actual letter of the Charter and to rethink the opening words of its preamble: "We the people of the United Nations".

There is an underlying message in this collective exhortation which is often forgotten and yet which seems to me to reflect considerable foresight.

The drafters of the Charter at the end of the Second World War had a profound intuition that the international community would be more than just a collection of sovereign States and would have to administer a new kind of global solidarity.

From the very first sentence of its preamble, the United Nations Charter suggests, implicitly but strongly, not only the advent of a global, transnational society, but also the need for a collective, democratic project.

Fifty years after its drafting, the time has come for us to ask ourselves what has become of the **Chapter's** ^(RV1) promises.

First of all, we have clearly entered the era of a global society.

In the economic sphere, through the combined effects of technological progress, rationalization of management methods and optimization of productivity, major corporations are becoming increasingly globalized and are often forming networks among each other.

In the financial sphere, with deregulation, the end of exchange controls, financial innovation and advances in telecommunications, the financial world has become effectively globalized.

5 Anomalies are contained in the terms written in bold characters. The anomaly code appears in brackets above. Underlined items are the nearest correct antecedent of the anomalous word. Distance was used as a yardstick to group together RDs and RVs (see 2.1).

In the **infuriation**^(N1) sphere, news and data can instantaneously be transmitted worldwide.

These massive changes are making States and international public opinion aware that some major problems of our common future are essentially transnational in scope.

Whether it is a question of protecting the environment, controlling population growth, combating AIDS or cracking down on transnational crime, it is clear that all these issues must now be dealt with globally and can only, to a very limited extent, be tackled at the level of individual nation States.

But we are also aware that the phenomenon of globalization is fraught with risks. Among other things, it can destroy traditional bonds of solidarity and marginalize countries and even entire regions, further widening the gap between the rich and the **poor**^(N2).

War, exclusion, hatred and ethnic or religious **strike**^(N3) always feed on such a climate, and irrational, fanatical beliefs are always at hand to offer mistaken solutions to people in distress.

This gives us a compelling obligation to reflect on a new approach to collective living in order to offer States and nations, and men and women the world over, valid grounds for hope.

It is from this standpoint that the idea of democracy, I would always say global democracy, assumes its full significance.

I think it is important not only to promote the democratic idea, but also to think globally. We must realize that in order for democracy to have real meaning, it must be possible for it to be exercised everywhere that power is concentrated – at national level, of course, but also at the international, and, henceforth, the **transitional**^(RD2) levels.

For **demography**^(RV2) is not just a form of government of or among States. It must be the method by which all power, of whatever kind, is wielded in today's international society. In other words, I firmly believe that the **globalization**^(RD3) of the economy must be accompanied by the progressive globalization of democracy.

In saying this, I am well aware that I am both presenting a paradox and defining a risk.

The paradox, of course, lies in the somewhat contradictory courses, taken by the expansion of democracy and the evolution of power at the international level. At a time when States are gradually achieving democracy, the reality of global power is largely eluding them, because globalization involves the emergence of new powers that transcend **stoa structures**^(RV3). There is, therefore, a tremendous risk that States will become, at one and the same time, increasingly democratic and increasingly unable to control the basic decisions on which their future and that of the planet ultimately depend. This global

mission of democratization can, therefore, be accomplished only by acting at all levels at which power is wielded in international society.

For some years now, the United Nations has been waging, pragmatically and empirically, a diplomatic effort on behalf of democracy within States.

Most peace-keeping operations now envisage both the restoration of democracy and the protection of human rights.

I think it is important to emphasize that democratic States are both the best guarantors of peace and the best defenders of **human rights**^(RV4) and each day that passes confirms that authoritarian regimes are potential warmongers and, conversely, the culture of democracy is fundamentally a culture of peace. But this desire for **democratifashion**^(RD4) risks being deprived of part of its meaning if, at the same time, **powder**^(N4) in the world-wide scale is not wielded by States, and if the new repositories of power are not themselves also governed by democratic **princes**^(N5).

For it is clear that, in a society which is becoming global, the room for manoeuvre left to national decision-makers is lessened.

This change of perspective faces the **United Nations**^(RD5) with a new imperative: that of incorporating the democratic idea into the globalization of international life by engendering new forms of solidarity.

But solidarity is not enacted by decree. Solidarity is also the desire to base the future on a new social covenant and can thus be the product only of a collective commitment.

The United Nations is even now engaging in vast collective analysis in the economic and social sphere, by organizing a whole series of international conferences devoted to major transnational problems that are shaping the future, indeed the destiny of mankind.

It is in this spirit that the 1992 Conference on Environment and Development held in Rio must be understood. As part of the same approach, the United Nations took the initiative of convening in Cairo last September a **Confidence**^(RV5) intended to reflect on population problems and on the demographic future of the planet. And in Naples in November, member states of the United Nations drew up a Global Action Plan against Organized Transnational Crime.

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