# Multilingual Corpora for Cooperation Final Report 6 October 1995. <br> (subcontract to EU project LRE 61-101 <br> "International Co-operation for EAGLES") 

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## Chapter 1

## Introduction

### 1.1 Background

We report here on the corpus data acquired and prepared under the "MLCC "project (Multilingual Corpora for Cooperation). This project was elaborated within the framework of the LRE (Linguistic Research and Engineering) under the program for "International Cooperation for Eagles" (LRE 61-101). The goal of the MLCC project was to produce a multilingual corpus with two main components, a polylingual document collection of comparable material and a parallel corpus of translations. The data is destined to be published on CD-ROM and distributed at cost with minimal restrictions.

The MLCC corpus is intended to answer the needs of the European research community for comparable data in a wide range of languages. These resources will serve as a basis for new technology development and ultimately contribute to the realization of better commercial linguistic products. It has become clear that large amounts of data are necessary to assure the development of wide-coverage, robust and effective applications. The polylingual document collection, consisting of similar documents in six languages, provides an important addition to monolingual collections and will assure that researchers can carry out similar studies in their own language. This collection, with obvious connections to the TREC/Tipster materials used in the United States, will enable comparability in research on an international scale. The material can also provide the basis for European evaluation programs in Information Retrieval and NLP. The parallel data consisting of translated data in nine languages provides a wealth of material for translation studies as well as new technology development.

In this report we document the acquisition and preparation of the data delivered in fulfillment of the MLCC contract. We begin with a general overview of the data, followed by a detailed description of the two main components of the corpus.

### 1.2 Description of the corpus

The MLCC text corpus has two main components - one set to allow comparable studies to be carried out in different languages and one set as the basis for translation studies. We refer to
the first set as the Polylingual Document Collection, a collection of newspaper articles from financial newspapers in 6 languages (Dutch, English, French, German, Italian and Spanish). The Polylingual Document Collection consists of the following sub-corpora:

- Dutch - Het Financieel Dagblad - 1992-1993
- English - The Financial Times - 1993
- French - Le Monde - 1992-1993
- German - Handelsblatt-1986-1988
- Italian - Il Sole 24 Ore - 1992-1993
- Spanish - Expansion - 1994

The second set is a Multilingual Parallel Corpus, consisting of translated data in nine European languages. The languages are Danish, Dutch, English, French, German, Greek, Italian, Portugese, and Spanish. The parallel data, provided by the European Commission, comprises two sub-corpora from the Official Journal of the European Communities.

- Official Journal of the European Commission, C Series: Written Questions 1993
- Official Journal of the European Commission, Annex: Debates of the European Parliament 1992-1994

The choice of data was motivated by the multilingual needs of the European community with special attention to translation concerns. On the practical side, these texts were identified on the basis of the feasability of acquiring and preparing such data within the constraints of the project. This corpus will by no means satisfy the need for very large amounts of varied resources in many languages, though it does represent a modest first step.

### 1.3 Polylingual Document Collection

This part of the project was directed at collecting comparable financial journalism material from six EU languages (Dutch, English, French, German, Italian and Spanish) from a common time period.

Initially, we created a list of possible newspapers for each language. Having chosen the newspapers, we then made contact with the newspapers asking if they would be prepared to let us have electronic copies of past issues. The newspapers that we contacted were generally helpful and generously agreed to our requests. We would like to thank the editorial boards of the newspapers noted below for their generosity in donating data to this project and their help in providing information about the data and its markup. However, negotiation of licences and delivery of data were very time-consuming activities. Once we had received the corpus data, SGML -markup proceeded smoothly as documented in following chapters.

### 1.3.1 Dutch - Het Financieel Dagblad - 1992-1993

The corpus contains articles from the Dutch financial newspaper Het Financieel Dagblad editions of $2^{\text {nd }}$ January 1992 through to $24^{\text {th }}$ December 1993. It contains around 8,5 million words of text. See chapter 2 for more details.

### 1.3.2 English - The Financial Times - 1993

The corpus contains articles from the British financial newspaper The Financial Times editions from the year 1993. The corpus contains around 30 million words. See chapter 3 for more details.

### 1.3.3 French - Le Monde - 1992-1993

A corpus of articles from the French newspaper Le Monde, consisting of two years worth (1992-1993) of articles on financial subjects, approximately ten million words. Edinburgh have a licence with the newspaper allowing us to distribute this corpus for research purposes. See chapter 4 for more details.

### 1.3.4 German - Handelsblatt - 1986-1988

This subcorpus consists of articles from the German financial newspaper Handelsblatt from the period 02.01.1986 to 15.06 .1988 . It contains some 33 million words. Unfortunately, the time period of these articles was not from the same (1992-1993) period as the others. It may be possible to obtain more recent articles from Handelsblatt. See chapter 5 for more details.

### 1.3.5 Italian - Il Sole 24 Ore - 1992-1993

The corpus described here contains articles from the Italian financial newspaper Il Sole 24 Ore from the year 1992. This corpus contains some 1.88 million words. The data was obtained from the newspaper by PISA University, who have a licence allowing re-distribution of the corpus. The SGML -markup was done by Edinburgh. See chapter 6 for more details.

### 1.3.6 Spanish - Expansion - 1994

This subcorpus contains articles from the Spanish financial newspaper Expansion editions of 21-10-91 through 24-10-91 and 14-05-94 through 27-12-94. It contains some 10 million words. See chapter 7 for more details.

### 1.4 Multilingual Parallel Corpus

This part of the project was directed at collecting parallel texts in the 9 European Union official (as of 1993) languages and consists of corpora from the Office of Publications of the European Community. Initial meetings were held with members of the Office of Publications to identify potential collections of parallel data for inclusion in the MLCC corpus. The two series agreed on were the "Written Questions" (from the EU Office of Publications) and the "Parliamentary Debates" (from the Printing Offices of Parliament). The former collection was quickly supplied by the Office of Publications from in-house resources and delivered to MLCC in Spring 1994. The collection of the Parliamentary Debates, however, proved somewhat more difficult (and time-consuming) given that the only copy of some of the data was held in four different European printing offices. In what follows, the two parallel collections are presented separately.

### 1.4.1 Written Questions

The first parallel corpus included in the MLCC collection consists of records of questions and answers regarding European Community matters. The data is published regularly as one section of the C series of the Official Journal of the European Community in all official languages (previously nine and currently, as of 1995, eleven languages). This corpus contains written questions asked by members of the European Parliament and corresponding answers from the European Commission in 9 parallel versions (languages: Danish, Dutch, English, French, German, Greek, Italian, Portuguese and Spanish). The total size of the corpus is approximately 10.2 million words (ca. 1.1 million words per language).

The data was acquired by ISSCO from the Office of Publications of the European Community (OPOCE) and consists of material published in 1993. The texts were prepared by LTG. See chapter 8 for a detailed report on this corpus.

A subset of the corpus of "Written Questions", acquired and prepared in 1994, was made available to the MULTEXT project as a test case for software and resource development.

We are still negotiating with (OPOCE) to allow the release of this data to a wider audience.

### 1.4.2 Parliamentary Debates

The second parallel corpus defined for the MLCc collection is the records of Parliamentary sittings published as an annex to the Official Journal of the European Community - Debates of the European Parliament.

The Parliamentary Debates are a record of what was said by members of the meeting as well as written input provided to the meeting. The original data from which the translations are produced consists of a transcript of the sittings, each member speaking in the language of his choice. This version is circulated to all speakers for possible revision before it is sent out for translation. The final version, as collected and prepared for the MLCC corpus, consists of nine parallel versions of the material. The texts delivered comprise the Debates of Parliament from January 1992 to July 1994. This sub-corpus contains some 5 to 8 million words per
language. See chapter 9 for more details.

### 1.5 Status of the Deliverables

### 1.5.1 Licence agreements

Our intention is that the MLCC corpora will be made publicly available under the auspices of the new European Linguistic Resource Association (ELRA). Since the ELRA has only just been set up, we originally made temporary licence agreements with the data providers. The licences made with the The Financial Times newspaper are included as an example in appendix B. These agreements will need to be re-negotiated - to this end, contact with ELRA has been established.

### 1.5.2 Final Markup

A full list of the files in the MLCC corpus is given in Appendix C. The data has been checked for SGML conformance in according to the DTDs elaborated for the sub-corpora. The majority of the data is also TEI conformant as documented in Appendix A. The Parliamentary Debates sub-corpus is still in need of some work to achieve full TEI conformance. Prior to public distribution, a certain amount of automatic checking and hand correction would also be desirable. We estimate an additional 3 to 4 months work will be required to prepare the full corpus for CD-ROM publication.

## Chapter 2

## The Dutch Het Financieel Dagblad Corpus

### 2.1 Description of the corpus

Size The size of the Het Financieel Dagblad data is 60.6 megabytes and contains around 8.5 million words. The raw data are in the files orig/Ed9*.Lst.gz, orig/DUTCH.HFD.gz, and orig/ENGLISH.HFD.gz. The SGML marked-up versions are in the files data/Ed9*.Sgm.gz, data/DUTCH.HFD.Sgm.gz, and data/ENGLISH.HFD.Sgm.gz.

Time period The corpus contains articles from the Het Financieel Dagblad editions of $2^{\text {nd }}$ January 1992 through to $24^{\text {th }}$ December 1993.

### 2.2 Structure of the corpus

This corpus has been SGML coded using the newspaper. $d t d$. Each file of this corpus consists of a $<$ DIV0 $>$ containing a number of $<$ DIV1 $>$ s representing different articles from Het Financieel Dagblad.

Articles are of the following general structure:


Articles start off with the headline and publication date. This is followed by an (optional) INDEX followed by the actual article itself - including the headline again.

The INDEX consists of a number of LISTs, which appear at the start of the vast majority of articles. They are part of bibliographic information. Each list contains a list of ITEMs which depend on the list type. See below for more details.

An article contains the following SGML structure:

HEAD - Headline of the article.
OPENER - Contains a DATELINE element which gives the date of publication of the article (in the form YY-MM-DD).

INDEX - (optional) Contains several LIST elements. These lists have a TYPE attribute with value descriptor, trade, country, company or personname. See below for more details.

TEXT - Contains the text of the article, which is structured as follows:
HEAD - One or more heads. Heads have a TYPE attribute with value headline or subheading. The first occurrence of HEAD will be the headline and the rest will be subheadings.

BYLINE - (optional) This contains the name of the agency or journalist responsible for the article and/or the place where it was written, coded as $<$ NAME $>$ elements that have a TYPE attribute with value person or place respectively. BYLINEs occur either after the initial HEAD or at the end of the article.
$\mathbf{P}$ - A number of $\langle\mathrm{P}\rangle$ elements containing the main text of the article divided into paragraphs.
Figures - Some paragraphs may contain information about any photographs or graphs which appeared in the printed article, but have been omitted from this corpus.

ID attributes on the articles are the original identifiers given to the articles by the FD.
No sub-paragraph markup has been added, except that omitted figures have been coded as e.g

```
<FIGURE><HEAD>Op 9 oktober werd de eerste vestiging van Toys R
Us geopend in Arnhem. Filialen in Rotterdam, Muiden, Eindhoven
en Utrecht volgen.</HEAD>
<FIGDESC>omitted photo</FIGDESC> by: ANP</FIGURE>
```


### 2.2.1 Lists

These lists, which appear at the beginning of each article, are part of the bibliographic information attached to each article. They consist of a list of ITEMs which depend on the list type as follows:
descriptor - ITEMs are key phrases describing the contents of the article.
trade - ITEMs are names of industry/trade connected to the subject matter of the article. country - ITEMs are names of geographic areas connected to the subject matter of the article.
company - ITEMs are the names of companies/organisations which are referred to prominently in the article.
personname - ITEMs are the names of people referred to in the article.

For the lists of type descriptor, trade and country, each item is provided with an identifying number. These numbers have been put as a reference inside the $<$ ITEM $>$. An example follows here:

```
<LIST type=country>
<ITEM ref= 911.01 > Nederland </ITEM>
</LIST>
```


### 2.3 Structure of the original

The corpus is a concatenation of articles. The format of the Financieele Dagblad full text source data is shown below:

```
            Document 4 "M
*M
TI TOPMAN JOHN SCULLEY VERTREKT BIJ APPLE NA DRAMATISCHE WINSTVAL^M
PD 931019^M
DC 663 / 654.4 / 622 / 616 / 623 / 42 / 618 /^M
DE tussentijdse mededelingen / winst / ondernemingsbestuur. management /~M
    reorganisatie / ondernemingsplanning / werkloosheid / concurrentie /^M
    913.01 /^M
    VS /^M
    836.99 / / M
    computers /^M
    apple /^M
    j. sculley / m. markkula / m. spindler /^M
    TOPMAN JOHN SCULLEY VERTREKT BIJ APPLE NA DRAMATISCHE WINSTVAL Nadat`M
    hij in juni al op een zijspoor was gezet, is president John Sculley^M
    Mike Markkula is inmiddels benoemd als de nieuwe bestuursvoorzitter.^M
    .....
    Sculley kwam in 1983 bij Apple terecht, nadat hij eerder de hoogste^M
    ......
```

Each article starts with a document number. This has been put inside $<$ DIV1 $>$ as the value of attribute $n$. This is followed by:

TI - Headline
PD - Publication date
DC/DE - Descriptors and their corresponding codes

CC/CN - Countries and their corresponding codes
PC/PN - Trade and corresponding code
CO - Company
NP - Names of people
TX - Text
Each TX indicates the start of a new paragraph. The first occurrence of TX starts with capitalised text which is the headline of the article. The rest of capitalised text inside articles are usually subheadings.

### 2.3.1 Existing markup

The abovementioned markers are the only form of markup that the original data contained. These are sufficient to markup the basic structure of each document. With a few perlprogrammes, these markers have been converted into SGML markup. The major restructuring needed to be done on the TX-sections; Capitalised text needed to be put inside HEADs, Names of authors and places inside BYLINEs, references to photographs inside FIGUREs.

All files have been checked for their conformance to the DTD. Because of inconsistency in the use of capitalised text in the original data, quite a lot of hand correction of headlines and sub-headlines markup was necessary.

## Chapter 3

## The English The Financial Times Corpus

### 3.1 Introduction

The The Financial Times have provided the MLCC project with a large corpus of articles from their archives, which is described below.

Size The size of the The Financial Times data and contains around 30 million words. The raw data are in the files data/orig/tape*.gz. The SGML -marked-up versions are in the files data/data/tape*.sgm.gz.

Time period The corpus contains articles from the The Financial Times editions from the year 1993.

The marking up was done semi-automatically by means of PERL scripts and some final hand-editing. The PERL scripts are located in the directory data/prep/.

### 3.2 Structure of the corpus

Each file of this corpus consists of a $<\operatorname{div} 0>$ containing a number of $<\operatorname{div} 1>$ s representing different articles from the Financial Times. Each $\langle\operatorname{div} 1>$ consists of:

- a <div2>, which contains the articletext. The structure of these articles is HEAD, OPENER, BYLINE and Paragraphs, that can contain optional Figures.
- an <index>, which contains several LIST elements. These lists have a TYPE attribute with value company, country, industry, types, code or people. See below for more details.
- a <bibl>, as described below.

An article contains the following structure:

1. HEAD - The headline of the article.
2. OPENER - This contains the data of publication and the data of processing by the Financial Times, (encoded as <YYMMDD>FT and <YYMMDD> respectively.
3. BYLINE - This contains the name of the agency or journalist responsible for the article and the place where it was written (coded as a <NAME type=place> element).
4. Paragraphs - a number of $\langle\mathrm{P}\rangle$ elements containing the text of the article divided into paragraphs.
5. BIBL - A bibliographic entry for the article, containing <publisher>, <edition>, $<$ biblscope $>$ (giving the page of the newspaper where this article occurred) and <extent> (giving the approximate size of the article in words) elements.
6. Figures - There may be a final paragraph which contains information about any figures, photographs, graphs, etc which appeared in the printed article, but have been omitted from this corpus.

ID attributes on the articles are the original identifiers given to the articles by the FT.
No sub-paragraph markup has been added, except that omitted figures (in article-final paragraphs) have been coded as e.g.

```
<figure>
<head> Dr Armand Hammer, who led Occidental's diversification </head>
<figdesc>Photograph Omitted</figdesc>
</figure>
```


### 3.2.1 Structure of the index

Each index consists of a number of lists, that are part of the bibliographic information attached to each article. They consist of a list of ITEMs which depend on the list type as follows:
types - ITEMs are the type of news, covered by the contents of the article.
industry - ITEMs are types of industry connected to the subject matter of the article.
country - ITEMs are names of geographic areas connected to the subject matter of the article.
company - ITEMs are the names of companies/organisations which are referred to prominently in the article.
people - ITEMs are the names of people referred to in the article.
code - ITEMs are the identifying codes that refer to the items in the list of industry.

The following is an example of one article:

```
<div1 type=article id=idO0EGODBAH7FT>
<div2 type=articletext>
<head>
Unesco aims at resources shift </head>
<opener>
Publication <date>931027FT</date>
Processed by FT <date>940714</date>
</opener>
<byline>By REUTER
<name type=place>Paris</name></byline>
<p>
Unesco Director-General Federico Mayor yesterday announced plans to move
resources from staff to programmes, Reuter reports from Paris. About dollars
120m of the proposed dollars 455m budget would go to field units, raising
their share of operational funds from 38.2 to 45 per cent, he told the
organisation's general conference.
</p>
<p>
Basic education, Unesco's top priority, was to get nearly 39 per cent of the
budget (dollars 1m more than in the previous two-year period). Science would
get 22.5 per cent, with culture winning 17.2 per cent, communication 11.2
per cent and social science 10.3 per cent.
</p>
</div2>
<index>
<list type=country>
<item> FR France, EC </item>
</list>
<list type=industry>
<item> P9611 Administration of General Economic Programs </item>
</list>
<list type=types>
<item> NEWS General News </item>
</list>
<list type=code>
<item> P9611 </item>
</list>
</index>
<bibl>
<publisher>The Financial Times</publisher>
<edition>International</edition>
<biblScope>Page 8</biblScope>
<extent>128</extent>
</bibl>
</div1>
```


### 3.3 Structure of the original

The corpus is a concatenation of articles. The format of Financial times full text source data is shown below:

```
. .AN. -OOBAOBKAGFFT
. .HL.-
910115FT 910115 Occidental writes off Dollars 2bn in post-Hammer shake-up
(398)
..BL.-
    By MARTIN DICKSON
..DL.-
    NEW YORK
..TX.-
JUST FIVE weeks after the death of Dr Armand Hammer, Occidental Petroleum's
......
dividend. The moves will mean a Dollars 2bn fourth-quarter write-off.
..TX.-
The announcement by Mr Ray Irani, the energy group's new chairman, sharply
......
Occidental into one of the US's top 20 corporations by revenue.
..DS.-
The Financial Times
..XP.-
London Page 19 Photograph Dr Armand Hammer, who led Occidental's
diversification (Omitted).
```

Each acticle is built up from a series of sections. Each section contains a marker of the form . . XX.-(where markers are per the following list), indicating the start of a particular type of data section. A line of at least 64 asterisks $\left({ }^{* * *}\right)$ indicates the end of each article.
..AN.- Accession Number
The twelve character string is unique to this document within the FT PROFILE database.
..HL.- Headline; breaks down into:

- yymmddFT indicates the date of the publication of the document and its 'source', The Financial Times.
- yymmdd is a date first processed by FT PROFILE, and is not significant to the data content.
- Text.. represents the headline proper. The last 'word' in the headline is a number inside parentheses, indicating the approximate number of words within the document.
..BL.- Byline (optional)
Provides the author.
..DL.- Dateline (optional)
Provides a place.
..TX.- Text (recurring)
Each ..TX.- indicates the start of a new paragraph.
..DS.- Data Supplier
Contains the name of the Supplier or Source
..XP.- eXtended Page; contains the following information:
- Edition Name
- Page number
- Omitted data - When this appears it is of the form
xxxx text..... (Omitted).
$-\operatorname{xxxx}$ is one word indicating the nature of the omission (Photograph, Graph, Map, etc.)
- text is any caption which appeared in the paper against the item omitted. This text is optional.
- (Omitted) indicates the 'end' of the omission, whether or not any text was included.


### 3.3.1 Existing markup

The above mentioned markers at the beginning of each section are the only form of markup that the original data contained. These are sufficient to mark-up the basic structure of each document. With a simple perl-programme, these markers have been converted to TEIconformant markup. The only 'major' restructuring needs to be done on the . . HL. --section; the two dates will be put in a separate date-marker, and the wordcount in a separate extentmarker.

### 3.3.2 Markup Process

The raw data that came of the tapes had one problem; they looked like this:



In order to fix this the files have been run through two perl scripts: transform1.perl and transform2.perl. The result of these transformations, which are the original data are stored in the directory data/original/new/.

The actual SGML markup was done by running all thes files through perlscripts convert1.perl, convert2.perl, convert3.perl and convert4.perl. The TEI-headers have been added automatically by running the files through a little program called add-headers, which also counts the size of the files.

All files have been checked for their conformance to the DTD. The DTD is the general newspaper.dtd.

## Chapter 4

## The French Le Monde Corpus

Corpus of articles from the French newspaper Le Monde, consisting of two years (1992-1993) of extracts from the Le Monde, being articles with category codes ECO, MDE and INI, approximately ten million words.

### 4.1 The SGML Corpus

The MLCC Le Monde corpus consists of the files

- data/fr01A1292.NN.sgm where $\mathbf{N N}=01$... 30
- data/fr01A1293.NN.sgm where NN $=01 \ldots 32$
consisting, respectively of articles from 1992 and 1993, in date order.
The structure of each file is described by the newspaper.dtd DTD file, and have been checked as conformant to this DTD.

The global structure of each file is (indentation of SGML -markup is there to show structure, it is not present in the corpus files):

```
<tei.2>
    <teiheader> ... </teiheader>
    <text id="ID" lang=fr>
        <body>
            <div0 type=storylist>
                <div1 type=article n=N id=ARTICLE_ID> ... </div1> *
            </div0>
        </body>
    </text>
</tei>
```

The structure of each article "<div1 type=article" is roughly as follows, full details can be found in DTD/newspaper.dtd :

```
<div1 type=article n=N id=ARTICLE_ID>
    <opener>
        <date>DATE</date>
                DOC= ...
                FAB= ...
                NUM= ...
                REF= ...
                SEC= ...
                TAI= ...
    </opener>
    <index>
        <list type=TYPE><item>...</item>*</list>*
    </index>
    <div2 type=articletext n=1>
        <div3 type=introduction>
            <p>...</p>*
        </div3>
        <opener><p>...</p>*</opener>
        <byline>...</byline>
        <head type=superheading>...</head>
        <head type=headline>...</head>
        <p> ... </p>*
    </div2>
</div1>
```

The corpus consists of 16977 articles.

### 4.2 Original Data Format

The original files as received from Le Monde were two large files:

- 01 A1292 Lines: 555073 Words: 4,220,400 Chars: 28244086
- 01 A1293 Lines: 577811 Words: 4,685,735 Chars: 31413192

The character code used in these files is ISO-LATIN-1.
In order to make more manageably sized files, these two large files were split at lines of the form

```
<#FIELD NAME = ACC>.*</#FIELD>
```

into the files

```
orig/fr01A12{92,93}.NN
where NN = 01 ... }30\mathrm{ for 92
    = 01 ... }32\mathrm{ for 93
```

The directory orig contains the original texts as delivered from Le Monde. They are marked up in a form of nonstandard SGML, with each element being coded as

```
<#FIELD NAME = name>field_value</#FIELD>
```

where name and field_value are variables.

### 4.3 First stage conversion to SGML

The PERL script prep/prep.perl was used first to convert the original markup into valid SGML (described by the DTD prep/lemonde.dtd).

The original markup was divided into a number of different classes:
(1) The body of the articles were marked with the following markup.

FIELD NAME Nature of markup

| TIJ | Headline |
| :---: | :---: |
|  | Converted into <head type=headline> |
| TIC | Another kind of headline text? |
|  | Converted into <head type=superheading> |
| TIO | A subheadline after headline |
|  | Converted into <head type=subheading> |
| SIG | Signature - a persons name (or list of names) (upper case: Surname Forename) |
|  | Converted into < byline> |
| CHA | A small paragraph of text (occurs immediately after $<\mathrm{ACC}>$ ?) |
|  | Converted into < div3 type=introduction> |
| ORI | PLACE from our correspondent |
|  | Converted into <opener> |
| NTE | Some text (A footnote?) |
|  | Converted into <note> |
| TEX | The text of the article. |
|  | Converted into <div2 type=articletext $\mathrm{n}=\mathrm{N}>$ |

(2) Articles have identification information in the following markup.

FIELD NAME Nature of markup

| ACC | number <br> Signals the start of an article. <br> Converted into <div1 type=article $\mathrm{n}=\mathrm{N}$ id=idnumber> <br> date $(\mathrm{yymmad})$ |
| :--- | :--- |
| DAT |  |

Converted into < date> element inside <opener>
DOC One of the following: (BCL|BHL|DAR|DRX|FLA|JGB|JPD|LEY|LLY|MHB|MHC|MYR|RIP)
PUM always = QUO
REF reference_number(n-nnn-nn)
SEC section, one of: (ECO|MDE|INI)
TAI number
FAB number
NUM article_number(date-reference)

The DOC, FAB, NUM, REF, SEC, and TAI fields were converted into text inside the <opener> element.
(3) Bibliographic or keyword information in the following (mostly optional) markup:

FIELD NAME Nature of markup

| FR2 | A list |
| :--- | :--- |
| PE2 | A list |
| ET2 | A list |
| DOS | A list of codes from (ECO\|GEN|EXT|EX|EC) |
| AUO | A list of person names |
| CAT | A list of article category types, when not normal text |
|  | article. Possible values are: |
|  | BIOGRAPHIE, BULLETIN, CARTE, CHRONOLOGIE, CORRESPONDANCE |
|  | DESSIN, DOSSIER, ENTRETIEN, GRAPHIQUE, INTEGRAL, MARCHES |
|  | MINISTRES, NECROLOGIE, OPINION, ORGANIGRAMME, PHOTO |
|  | PORTRAIT, PUBLICITE, RECAPITULATIF, RECTIF, SERIE |
|  | SIX CROCHETS, SUPPLEMENT, TABLEAU |
|  | A comment (very rare) |
| COM | Comma sep list of org names? |
| ET1 | nl sep list of ? |
| FR1 | One of the following: |
| GO2 | (BALLET\|EXPOSITION|FILM|LIVRE,RAPPORT| |
|  | LIVRE\|PUBLICATION|RADIO|RAPPORT|TELEVISION,FEUILLETON| |
|  | TELEVISION,FILM\|TELEVISION) |
| LIE | Usually a (list of) article_number(s) Cross references? |
| PE1 | A nl separated list of person names (occurring in article) |
| SU1 | A code(\||) |
| IMA | Very rare. Ignored. |
| NBI | Very rare. Always has value "1". Ignored |
| GO1 | Very rare. |
| SIP | Very rare. Ignored |
| SOT | Very rare. Ignored |
| SU2 | Very rare. |

The fields in this section were converted into <list> elements inside an <index> element, one per aticle. Thus the original:

```
<#FIELD NAME = ACC>224745</#FIELD>
<#FIELD NAME = DAT>920101</#FIELD>
<#FIELD NAME = DOC>BHL</#FIELD>
<#FIELD NAME = DOS>EXT,ECO</#FIELD>
<#FIELD NAME = ET2>FRANCE,ESPAGNE,CAISSE D'EPARGNE</#FIELD>
<#FIELD NAME = FAB>12311070</#FIELD>
<#FIELD NAME = NUM>920101-2-014-33</#FIELD>
<#FIELD NAME = PE2>LYONNAISE DUMEZ,CAIXA</#FIELD>
<#FIELD NAME = PUM>QUO</#FIELD>
<#FIELD NAME = REF>2-014-33</#FIELD>
<#FIELD NAME = SEC>ECO</#FIELD>
<#FIELD NAME = TAI>31</#FIELD>
<#FIELD NAME = TIJ>Lyonnaise-Dumez resserre ses liens avec la Caixa</#FIELD>
<#FIELD NAME = TEX>NO PHYSICAL FILE</#FIELD>
```

was converted into:

```
<div1 type=article n=1 id=id224745>
<opener>
<date>920101</date>
DOC=BHL
FAB=12311070
NUM=920101-2-014-33
REF=2-014-33
SEC=ECO
TAI=31
</opener>
<index>
<list type=DOS><item>EXT</item><item>ECO</item></list>
<list type=ET2>
<item>FRANCE</item>
<item>ESPAGNE</item>
<item>CAISSE D'EPARGNE</item>
</list>
<list type=PE2>
<item>LYONNAISE DUMEZ</item>
<item>CAIXA</item>
</list>
</index>
<div2 type=articletext n=1>
<head type=headline>Lyonnaise-Dumez resserre ses liens avec la Caixa</head>
```

(a) Fields of the form
<\#FIELD NAME = TEX>NO PHYSICAL FILE</\#FIELD>
were ignored.
(b) In the original paragraphs inside <TEX> were marked with a line final "<" character. These have been converted into standard SGML style paragraphs.

### 4.4 Second stage conversion of markup to valid SGML

After prep/prep.perl had been run, prep/prep2.perl was run to reorder the SGML structure marked up. Elements which had been noted as being of index or bibliographic type were reordered into global <IDENT $>$ and $<$ BIBL $>$ elements, one per article. The resulting corpus documents were conformant to the prep/lemonde.dtd DTD file.

Then prep/prep3.perl was run to convert the SGML markup to be conformant to the dtd/newspaper.dtd DTD.
prep/prep4.perl contains some last minute modifications.

### 4.5 Hand correction of corpus

After the corpus had been checked to be SGML conformant to the dtd/newspaper.dtd, the corpus was hand checked and some errors in the headlines were corrected, since some spaces had been omitted between words, e.g.
$<\#$ FIELD NAME $=$ TIJ $>$ La préparation du 44 congrèsLa CGT va sensiblement renouveler ses instances dirigeantes</\#FIELD>
has been corrected to
$<$ head type=headline $>$ La préparation du 44 congrès. La CGT va sensiblement renouveler ses instances dirigeantes</head>

We have tried to catch as many of these as possible, but cannot guarantee complete coverage.

## Chapter 5

## The German Handelsblatt Corpus

The MLCC Financial Newspaper Corpus German part, consisting of articles from Handelsblatt from the period 02.01.1986 to 15.06.1988.

### 5.1 Original data

We received a tape from Handelsblatt, which we had a 'little' difficulty reading. However after a number of attempts, we discovered that the tape contained a number of files as follows:

| File | Size $(\mathrm{Mb})$ | Desc |
| :--- | :--- | :--- |
| 1.data | 1177 | Index and data (data starts at character position |
|  |  |  |
| 2.data | 2 | Adverts |
| 3.data | 2 | Adverts |
| 4.data | 5 | Adverts |
| 5.data | 3 | Adverts |
| 6.data | 1 | Adverts |
| 7.data | 0 | List of American States |
| 8.data | 493 | Data |

We decided to extract approximately 30 Mb of text from the start of the text data in the file 1.data and use that as the MLCC subcorpus. The extracted text was split into articles at lines containing the string "HB Nr." and stored as the files orig/hb.NNN where NNN runs from 001 to 210 .

The extracted data appears to consist of the editorial content of Handelsblatt between 02.01.1986-15.06.1988. Edinburgh still has the complete data and it would be possible to extract more or a different range of articles if desired.

### 5.2 Conversion to SGML

The original files contained a large amount of non-textual control characters. These have largely been removed. The preparation process was done by a number of PERL scripts which are in the prep directory.

Prep.perl divides text into articles and structures them with SGML markup. It removes non-printing characters and attempts to classify them as paragraph breaks or as pieces of extraneous text, coded as <err> ... </err> elements.

Prep2.perl restructures the SGML index elements and tidies up the SGML markup provided by perp.perl.

Prep3.perl converts null bytes (octal 000) into newlines.
Finally the add-headers program was used to add TEI headers to the data files.

### 5.3 Notes on SGML structure

$\left(^{*}\right)$ Bylines have not been marked up in SGML. They should be. E.g.
vwd NEW YORK. Die Preise fuer Kupfer und Aluminium, die infolge
should be marked up as
<byline> vwd NEW YORK. </byline> Die Preise fuer Kupfer und Aluminium, die infolge
${ }^{*}$ ) The corpus does not use iso-latin-1 characters for non-standard ASCII characters, i.e. umlauted vowels and the 'scharfes s'. Instead they are coded as respectively ae, oe, ue and ss. When they appear capitalised, then both letters of the digraph are capitalised. We have not converted these into iso-latin- 1 characters $\ddot{a}, \ddot{0}$, $̈$ i and $\wp$, since to do so, would require more on-line lexical information than we had readily available.
$\left.{ }^{*}\right)<$ err $>$ elements.
As mentioned above, in the process of extracting the textual data from the original melange of text and other data (probably indexing and formatting information), in a few cases, short pieces of text were found which were difficult to classify. These have been marked up inside <err> .. </err> elements.

These appear to fall into a number of different classes, as follows:
(1) Short bits of gibberish, presumably originally part of control information. For example
(7,3) Mill. DM, darunter 2,5 (1,6) Mill. DM Grenzzonensonderabschreibungen. $<\mathrm{err}>$ S\$ $\backslash$ _\$\%! $\mathrm{G} 7</ \mathrm{err}>$
$</$ p>
$<p>$
Der Jahresgewinn der Mutter fiel vor Koerperschaftsteuern und der

These can be removed without damage to the integrity of the text.
(2) Short pieces of disembodied text. These appear to be often a piece of text which is missing from somewhere else in the text (also marked with an <err> element). Perhaps originally some text which overflowed from another article. For example
... nachzukommen.
$<$ err $>$ orp rutschte $1 /</$ err $>$
$</$ p>
$<p>$
sug 47 /, Exxon / auf 50, Phillips / auf 10 und Mobil / auf $28 /$. Zu den ...

These can sometimes be linked up with another <err> element which is missing some text. This requires human intervention and an understanding of the text.
(3) Marking missing text at the end of a paragraph

For example:
... sich in der vorigen Woche in New York auf, wo sie den Glaeubigerbanken die $<$ err>neue durch den OElpreissturz geschaffene Lage darlegten. Citi</err>
$</$ p>

<p>
Neben dem Dow Jones schlossen auch die uebrigen Boersenindices im Plus ab. Der ...

The previous example probably continues this one, i.e. the above text should probably be:
... sich in der vorigen Woche in New York auf, wo sie den Glaeubigerbanken die neue durch den OElpreissturz geschaffene Lage darlegten. Citicorp rutschte 1 / <missingtext>
\(</\) p \(>\)
\(<p>\)
Neben dem Dow Jones schlossen auch die uebrigen Boersenindices im Plus ab. Der ...

Due to lack of time to hand check and correct all these cases, they have been left as is. In the first seven files, they have been edited and some have been edited into <break> milestone markers.

Thus the corpus contains <err> and <break> elements. <err> means a piece of text which belongs to one of the categories above. <break> is a milestone tag (empty element) which marks a place where some text is missing, usually at the end of an paragraph.

\section*{Chapter 6}

\section*{The Italian Il Sole 24 Ore Corpus}

\subsection*{6.1 Description of the corpus}

The Il Sole 24 Ore newspaper have provided the MLCC project with a corpus of articles from their archives. The following is a short report on the nature of this data.

The corpus described here contains articles from Il Sole 24 Ore from the year 1992. The corpus consists of 26 files. The size of the Il Sole 24 Ore data is approximately 13.3 megabytes and contains 1.88 million words. The raw data (as received from the Pisa) are in the files orig/sole*.txt.gz. The SGML marked-up version are in the files data/sole*.tei.gz.

The Il Sole 24 Ore corpus has been converted to TEI P3 conformant SGML markup. This markup was done semi-automatically by means of a PERL script and post-editing. The PERL script is in the file prep/conv.perl.

The DTD used by this corpus is a strict subset of the TEI P3 DTD, the subset used is defined in the file lib/italian.dtd as an complete DTD.

\subsection*{6.2 Structure of the corpus}

Each corpus consists of a number of \(<\) DIV1 \(>\) s which represent newspaper articles. An article consists of the following SGML structure:

OPENER - The initial OPENER element contains a DATELINE element which gives the data of publication of the article (in the form DD-MM-YY).

HEAD - one or more headlines of the article. Headlines are classified into one of the types rubrica or titolazione. See below for more details.

BYLINE - (optional) gives the name of the author of the article.
OPENER - (optional) This OPENER before the body of the article contains the place in which the article was written.

Paragraphs - Zero or more P elements containing the main text of the article.

Lists - Zero or more LIST elements. These lists have a TYPE attribute with value area, descrittori, didascalia, evento, persone, societaoenti, tabelle, or vedianche. See below for more details.

TRAILER - Contains a copyright notice on behalf of "Il Sole 24 Ore".

\subsection*{6.2.1 Headlines}

Each article has two HEAD elements:
type=rubrica - Gives a broad classification of the topic of the article. It is not clear to us where this text appeared in the newspaper, whether it appeared in the article or at the top of the page.
type=titolazione - The headline of the article.

\subsection*{6.2.2 Lists}

These lists, which appear at the end of each article, are part of the bibliographic information attached to each article. They consist of a list of ITEMs which depend on the list type as follows:
area - ITEMs are names of geographic areas connected to the subject matter of the article.
descrittori - ITEMs are key phrases describing the contents of the article.
didascalia - ITEMS are descriptions of photographs or other graphics which appeared in the printed form of the article, but which have been removed from this electronic version. Inside each ITEM is a FIGURE element with attributes \(\mathrm{n}=\) GRAFICO \(-<n n>\), FOTO\(<n n>\), IMMAGINE- \(<n n>\) or DISEGNO \(-<n n>\), containing a HEAD element giving the caption of the figure.
evento - ITEMs are the names of important events referred to in the articles. This list type is not always specified for an article.
persone - ITEMs are the names of prominent people referred to in the article.
societaoenti - ITEMs are the names of organisations which are referred to prominently in the article.
tabelle - ITEMs are tables which were included in the article. Attributes on the ITEMs are \(n=\) TABELLA \(-<n n>\) and rend=tabular. Tables are not marked up and white space is significant inside these.
vedianche - ITEMs are a list of references to other articles connected to this one.

\subsection*{6.2.3 Sub-paragraph structure}

Paragraphs may contain CORR elements where the MLCC has corrected the text supplied. These elements are of the form
\[
<\text { corr resp }=\text { mlcc sic=" original text">corrected text }</ \text { corr }>
\]

Thus the content of the document has been corrected, while the original text has been preserved as the value of an attribute. The major kinds of corrections made was the changing of accented vowels to use ISO-LATIN-1 accented characters rather than apostrophes, (e.g. Socie'te' \(\rightarrow\) Société).

Throughout we have made a silent correction of word final grave accents (apostrophes following a word final vowel) to the corresponding accented character.

A character histogram shows that the only characters appearing in the corpus that are not 7 -bit ascii are the following:
\begin{tabular}{llll} 
Octal code & char & Octal code & char \\
300 & À & 310 & \(\grave{\text { E }}\) \\
314 & Ì & 322 & Ò \\
331 & Ù & 340 & à \\
350 & è & 351 & é \\
354 & ì & 362 & ò \\
363 & ó & 371 & ù
\end{tabular}

Text may contain the SGML character entities: \&lab; "<" left angle bracket \&rab; ">" right angle bracket

\subsection*{6.3 Markup}

The original text, as received from Pisa, can be inspected in the orig directory. These files were converted to the SGML version by means of the PERL script mentioned above. The output of this script were then hand checked for conformance to the DTD and that we had not made any obvious mistakes in the markup. Finally, with the aid of a native Italian speaker, we marked accented vowels and made a few corrections (marked by CORR elements).

Paragraph boundaries were added, largely automatically, on the basis of the layout of the original texts. In some cases, paragraphs begin with some words in capitals, these should probably be marked up as sub headlines or as additional DATELINE elements inside the body of an article.

\section*{Chapter 7}

\section*{The Spanish Expansion Corpus}

\subsection*{7.1 Description of the corpus}

Size: The size of the Expansion data is 72 megabytes and contains around 10 million words. The raw data are in the files orig/expan1**.gz. The SGML marked-up versions are in the files data/expan1**.sgm.gz.

Time period: The corpus contains articles from the Expansion editions of 21-10-91 through 24-10-91 and 14-05-94 through 27-12-94.

The structure of each file is described by the dtd/newspaper.dtd DTD file, and have been checked as conformant to this DTD.

\subsection*{7.2 Structure of the SGML corpus}

Each file of this corpus consists of a \(<\) DIV \(0>\) containing a number of \(<\) DIV1 \(>\) s representing different articles from Expansion.

The structure of each article "<div1 type=article" is roughly as follows, full details can be found in DTD/newspaper.dtd :
```
<div1 type=article n=ARTICLE_ID>
    <opener><dateline>DATE</dateline></opener>
    <div2 type=articletext>
        <head type=section>...</head>?
        <head type=superheading>...</head>?
        <head type=headline>...</head>
        <byline><name type=person/place>...</name></byline>?
        <div3 type=introduction>
            <p>...</p>*
        </div3>
        <p>...</p>*
        <head type=subheading>...</head>*
```
```
        <div3 type=apoyo>?
            <head type=subheading>...</head>*
            <p>...</p>*
        </div3>
        <div3 type=li>?
            <head type=subheading>...</head>*
            <p>...</p>*
        </div3>
        </div2>
    <bibl>
        <edition>EDITION_NUMBER</edition>
        <biblscope>PAGE_NUMBER</biblscope>
    </bibl>
    </div2>
</div1>
```

\subsection*{7.3 Original Data Format}

The original data as received from Expansion was one big file: expan1.txt Lines: 1934248 Words: 9,864,348 Chars: 71364608

This file was split at lines of the form
*** BRS DOCUMENT BOUNDARY ***
into the files orig/expan1XX where \(\mathrm{XX}=\mathrm{aa} . . . \mathrm{bg}\)
The directory orig contains the original texts as delivered from Expansion. Some characters do not conform to ISO-LATIN-1. These characters were replaced by ISO-LATIN-1 conformant characters and can be found in the program replace.perl.

\subsection*{7.4 Conversion to SGML}

The PERL scripts prep/prepA.perl, prep/prepB.perl, prep/prepC.perl, prep/clean.perl and prep/clean2.perl were used to convert the original markup into valid SGML (described by the DTD DTD/newspaper.dtd).

What follows is the original structure and the way this was marked up:
..Document-Number
number \(\quad\) Converted into <div1 type=article \(\mathrm{n}=\) number \(>\)
<NUME>
NNNN
Edition number
Converted into <edition> inside <bibl>
\(<\) DESD \(>\)
\begin{tabular}{|c|c|}
\hline \multirow[t]{2}{*}{ddmmyyyy} & Date \\
\hline & Converted into <dateline> element inside <opener> \\
\hline \multicolumn{2}{|l|}{\(<\mathrm{HAST}>\)} \\
\hline & Always empty -> ignored \\
\hline & Converted into < div2 type=articletext> \\
\hline \multicolumn{2}{|l|}{\(<\) NPAG>} \\
\hline \multirow[t]{2}{*}{N} & Pagenumber \\
\hline & Converted into < biblscope> inside < bibl> \\
\hline \(<\mathrm{PASE}>\) & Always empty -> ignored \\
\hline \multirow[t]{2}{*}{<CINT>} & Section of the paper in which article appeared \\
\hline & Converted into < head type=section> \\
\hline \multirow[t]{2}{*}{<ANTE>} & Superheading \\
\hline & Converted into < head type=superheading> \\
\hline \multirow[t]{2}{*}{<TITU \(>\)} & Headline \\
\hline & Converted into <head type=headline> \\
\hline \multicolumn{2}{|l|}{<ENTR \(>\)} \\
\hline \multirow[t]{2}{*}{text} & a small paragraph of text \\
\hline & Converted into < div3 type=introduction> \\
\hline \multicolumn{2}{|l|}{< TEXT>} \\
\hline text & the article text \\
\hline \multirow[t]{2}{*}{<APOY>} & Some kind of supporting article \\
\hline & Converted into <div3 type=apoyo> \\
\hline \multirow[t]{2}{*}{<LI>} & Some text (quotes, figurecaptions, footnotes ????) \\
\hline & Converted into <div3 type=li> \\
\hline \(<\) REFI \(>\) & Always empty \(\rightarrow\) ignored \\
\hline \(<\) ANOT> & Always empty \(->\) ignored \\
\hline
\end{tabular}

Paragraph boundaries were not explicitly marked in the original but could be detected by the sentence-end punctuation followed by whitespaces. If it was the case that there was an end of a paragraph and the next paragraph was one (short) line long, the single line was a subheadline and converted into <head type=subheading>.

In most articles names and places of correspondents or news agencies appeared at the start of \(<\) ENTR \(>\) or \(<\) TEXT \(>\). Names are usually capitalised. They are converted into <name \(>\), \(<\) name type=person \(>\) or <name type=place> inside \(<\) byline \(>\).

\subsection*{7.5 Hand correction of corpus}

The corpus was checked to be SGML conformant to the DTD/newspaper.dtd, and some errors were corrected by hand. Some corrections had to be made to the <byline> elements and there were some missing \(\langle\mathrm{p}\rangle\) and \(</ \mathrm{p}\rangle\) elements.

\section*{Chapter 8}

\section*{Journal of the European Commission Written Questions Corpus}

\subsection*{8.1 The corpus}

The text corpus provided to MULTEXT as deliverable 4.2 .1 version \(B\) consists of extracts from the Journal of the European Commission, Written Questions (1993), henceforth JOCWQ. This corpus contains written questions asked by members of the European Parliament and corresponding answers from the European Commission in 9 parallel versions (languages: Danish, Dutch, English, French, German, Greek, Italian, Portuguese and Spanish). The total size of the corpus is approximately 10.2 million words ( \(\sim 1.1\) million words per language). This data has been acquired and marked-up as part of the Multilingual Parallel Corpus of the Multilingual Corpora for Cooperation (MLCC) project.

The data was acquired by ISSCO from the Office of Publications of the European Community (OPOCE) and consists of Parliamentary Questions published in 1993.

The deliverable consists of:
1. This document.
2. A TEI conformant and nSGML conformant version of the corpus marked-up to level 1. Some level 2 (sub-paragraph) markup in included where this was easily derived from existing markup.
3. Since some of the transformations applied are non-reversible, the original corpus supplied by EPOCE is included as well, in order to allow errors to be checked.
4. The source of the programs used to automatically markup the corpus files.
5. The source of the TEI P3 DTD.
6. A restricted DTD which describes this corpus. This DTD (which is much smaller than the complete TEI DTD) may be be useful for programs which require the structure of the corpus.

The structure of the corpus is simple. There is a single directory containing 360 ( \(=40 \times 9\) ) files. These correspond to 40 issues of the Written Questions, each in 9 language versions. They are named:
\[
\exp . j o c<\text { NNN }>.93 .<\text { LA }>.01 . t e i
\]
where NNN is three digits referring to the issue of the Written Questions and LA is a two letter language code, ( da=Danish, de=German, en=English, es=Spanish, fr=French, \(\mathrm{gr}=\) Greek, it=Italian, \(\mathrm{nl}=\) Dutch, \(\mathrm{pt}=\) Portuguese).

\subsection*{8.2 The markup}

\subsection*{8.2.1 Definition of Level 1 markup}

The JOCWQ corpus has been marked-up with gross structural markup (level 1 markup as defined in the MULTEXT Corpus Encoding Standard (CES) [4]). This kind of markup includes a TEI conformant header, and universal text elements down to the level of the paragraph, e.g. textual divisions (volume,chapter,etc), paragraphs, titles and headings, footnotes, tables. Some CES level 2 markup has been included where this was easily extracted from the original markup, e.g. quoted sections, rendition information and some abbreviations, names and dates.

\subsection*{8.2.2 nSGML Definition}

Normalised SGML (nSGML) is a format for SGML marked-up corpora which imposes further restrictions on SGML documents. These restrictions are imposed to (a) improve the readability of corpora and (b) to ease text processing by the MULTEXT tools. A file is in nSGML format if it satisfies the following conditions:
1. Document is a valid SGML document according to some supplied DTD.
2. Document is coded using one of the ISO-LATIN character sets, with embedded character entities where necessary.
3. Reference concrete syntax - processing 8-bit clean in data and attribute values.
4. No capacity/length restrictions.
5. No short refs or tag minimisation.
6. No SUBDOCs.
7. No marked sections.
8. All end-tags present (except for empty elements).
9. All entity references terminated with ";"
10. No SGML elements are broken across multiple lines.

The JOCWQ corpus is in nSGML format as defined above. It also satisfies the invariant that with the exception of \#PCDATA inside \(<\) HEAD \(>\) elements, every line starts with SGML markup. There are no newline characters inside normal \(<\mathrm{P}\rangle\) elements, ie those which do not contain \(<\) FIGURE \(>\) s.

\subsection*{8.2.3 The DTD Used}

The corpus is conformant to the TEI P3 DTD. In fact, it is conformant to a slightly modified version of the TEI P3 DTD. The only change which we have made is to change the definition of special paragraphs to allowed mixed content, i.e. we redefine
\[
<!\text { ENTITY \% specialPara ' }(((\% \text { m.chunk }),(\% \text { component.seq })) \mid(\% \text { paraContent }))^{\prime}>
\]
as
\[
<!\text { ENTITY \% specialPara }{ }^{\prime}(\# P C D A T A|\% m . p h r a s e| \% m . i n t e r \mid \% m . c h u n k)^{*}>
\]

This is necessary to allow quoted paragraphs to be coded as
\[
\begin{aligned}
& <q> \\
& <p>\text { Paragraph } 1</ p> \\
& <p>\text { Paragraph } 2</ p> \\
& </ q>
\end{aligned}
\]
rather than as
\[
\begin{aligned}
& <q><p> \\
& \text { Paragraph1 } \\
& </ \mathrm{p}><\text { p }> \\
& \text { Paragraph2 } \\
& </ \mathrm{p}></ \mathrm{q}>
\end{aligned}
\]

In addition to using the standard "TEI.prose" DTD, we also use the "TEI.figures" DTD to allow the markup of tables and figures. Finally, we use a small number of character entities, defined below.

\subsection*{8.2.4 Character set used in JOCWQ corpus}

The JOCWQ corpus uses the ISO-LATIN-1 character set with the following exceptions; the Greek files are coded in the ISO-LATIN-7 character set, and the following SGML character entities are used for non ISO-LATIN-1 characters and may occur anywhere in the text of the corpus.
- \&dmql; - Double quote mark left
- \&dmqr; - Double quote mark right
- \&dlqm; - Double low quotation mark
- \&mdash; - em dash
- \&ndash; - en dash
- \&oelig; - oe ligature (œ)
- \&permil; - Permil sign, (per thousand (per million?) 0/00) only occurs once in corpus and was present in original markup.
- \&prime; - ?, only occurs once in corpus and was present in original markup.
- \&\#142; - Formex G2 character set introduction
- \&\#143; - Formex G3 character set introduction

The last two character entities occur only where there was an error in the usage of these escape characters, usually within a \(<\) SIC \(>\) element.

\subsection*{8.2.5 Description of the corpus structure}

Each file in the JOCWQ corpus corresponds to one issue of the Journal of the European Commission Written Questions for 1993 in one language. This is represented by a <DIV0> which has a <HEAD \(>\) element of type DOCUMENT.BIBLIOGRAPHY and a number of \(<\) DIV1 \(>\) s. The \(<\) HEAD \(>\) contains various fields and identifiers associated with this document (supplied in original).

Each < DIV1> corresponds to one Written question and an answer to it. Sometimes the final \(<\) DIV1 \(>\) in a document contains corrections to earlier questions. Each <DIV1> has a \(<\) HEAD \(>\) of type RECORD.BIBLIOGRAPHY containing further EPOCE information about this question and a number of \(\langle\) DIV2 \(\rangle\) elements.

Each \(<\) DIV2 \(>\) element is either a Written question and its answer (type=wqa) or a correction to an earlier question (type \(=y\) ). It contains a \(<\) HEAD TYPE \(=O R>\) which is a textual title for the question, containing an identifier for the question, the name of the person who asked it, and its date. The \(<\) DIV2 \(>\) then contains a number of \(<\) DIV \(3>\) s.

A \(<\) DIV \(3>\) contains a number of \(<\) DIV4 \(>\) s of type "Q" (question) or type "R" (reply) which contain the actual text.

Inside a \(<\) DIV \(4>\) there can be paragraphs \(<\mathrm{P}\rangle\), or quoted paragraphs \(<\mathrm{Q}\rangle\). The next section describes the possible markup inside paragraphs.

SGML identifiers have been attached to the following elements: (i) The document has an identifier on the \(<\) TEXT \(>\) element. These are of the form FXA \(93<\) docno \(><\) langid \(>\) C where \(<\) docno \(>\) is the three digit document identifier and <langid> is the two letter language
identifier (uppercase). (ii) Each record in the document has an identifier on the associated \(<\) DIV1 \(>\). These are of the form FXAC93 \(<\) docno \(><\) langid \(>\) C. \(<n n n n>.<m m>.00\). \(<n n n n>\) and \(<m m>\) are digit strings.
See Table 3 for a formal definition of the structure of the corpus, given in the form of a DTD.

\subsection*{8.2.6 SGML elements inside paragraphs}

The following SGML elements may occur inside paragraphs and titles:
- <abbr> - abbreviations such as No., Mrs. etc.
- <num>-sequence numbers for footnotes and footnote references.
- <hi>-used to mark superscript and subscript characters in text.
- <ref>-A reference to a footnote,
for example, \(<\) REF \(\mathrm{n}=\) "note 2 " \(>(<\) NUM \(>2</\) NUM \(>)</\) REF \(>\) occurs in running text as a reference to the footnote "note2".
- <note>-A footnote.
- <date> - A date. Not all dates are marked-up, only those marked-up in the original.
- <sic>-An error noticed by EPOCE, usually a problem with character set switching, not corrected.
- <corr> - An error noticed and corrected by MLCC, usually a problem with character set switching.
- <name> - The name of a person.
- <rs>-An identifier of a question or answer occurring in text.
- \(\langle\mathrm{q}\rangle-\mathrm{A}\) section of quoted text.
- <list> - A list of items, normally used for headings for tables.
- <table> - A 2-dimensional table organised into rows and cells.
- <figure> - a more complex type of table.

\subsection*{8.2.7 An example question/answer from the corpus}

The following is an example of one complete record from the corpus. Newlines have been inserted to improve readability inside \(<\mathrm{HEAD}\rangle\) and \(<\mathrm{P}\rangle\) elements.
```
<DIV1 TYPE=RECORD ID="FXAC93016ENC.0001.01.00">
<HEAD TYPE=RECORD.BIBLIOGRAPHY>
[RECORD.REF id="FXAC93016ENC/0001/01/00-1" secid="FXAC93016ENC"
```
```
type="vert" BIBLEV="s" SEGIND="0" SEGREL="W2" ]
[RECORD.COMPL compl="C"]
[RECORD.LA lang="EN"]
[RECORD.MAT vjur="L65" corrid="ORIG" section=" C1" ]
[RECORD.ID scheme=" WQ" year="91" num="1463"]
[RECORD.ID scheme="JO3" year=" 93" num=" 01" journal="16"]
[RECORD.BODY role="020" an="PE" ]
[RECORD.PART page="1" ordpage="1" ]
[RECORD.CLASS class="991E14630000000000" scheme="CLX" ]
</HEAD>
<DIV2 TYPE="WQA">
<HEAD TYPE="OR">
WRITTEN QUESTION <ABBR REND="TAIL-SUPER">No</ABBR>
<RS TYPE="WQ">1463/91</RS> by <NAME TYPE=PERSON>
<ABBR REND="TAIL-SUPER">Mrs</ABBR> Brigitte Ernst de la Graete (V)</NAME>
to the Commission of the European Communities
```
<DATE>(16 July 1991)</DATE>
</HEAD>
<HEAD TYPE="INFO">(93/C 16/01)</HEAD>
<DIV3 TYPE=BODY>
<DIV4 TYPE="Q">
<HEAD>
Subject: Energy cooperation: assessment
</HEAD>
\(<\mathrm{P}\rangle\) Assessment of the Lomé programmes of action in the ACP countries has brought to light various
technical and political problems in respect of energy projects (particularly hydro-electric power stations).
It has been shown that certain projects are not feasible because of a lack of funding in the ACP countries
concerned, inaccurate economic, environmental and social impact studies or insufficient qualified personnel
to supervise and plan the implementation of projects. \(</ \mathrm{P}>\)
\(<\mathrm{P}>\) Who carried out the assessment and who provided the funding? \(</ \mathrm{P}>\)
\(<\mathrm{P}>\) Can detailed results be forwarded to Parliament? </P>
\(<\mathrm{P}>\) What conclusions does the Commission draw from this for future purposes? \(</ \mathrm{P}>\)
</DIV4>
<DIV4 TYPE="R">
<HEAD>
Answer given by <NAME TYPE=PERSON><ABBR REND="TAIL-SUPER">Mr</ABBR>
Marín</NAME> on behalf of the Commission
<DATE>(8 September 1992)</DATE>
</HEAD>
\(<\mathrm{P}>\) The assessment of energy projects in ACP countries to which the Honourable Member refers was carried
out by Sussex Research Associates Ltd of Britain, in tandem with Lahmeyer International of Germany. The
assessment was funded under the Article entitled \(<\) Q>'evaluation of the results of Community aid and
practical follow-up measures'</Q> within the Chapter of the 1986 budget on <Q>'specific measures for
cooperation with developing countries' \(</ \mathrm{Q}\rangle .</ \mathrm{P}\rangle\)
\(<\mathrm{P}>\) The Commission will forward directly to the Honourable Member and to Parliament's Secretariat a
copy of the May 1988 summary report on this evaluation of energy projects in ACP countries.</P>
\(<\mathrm{P}>\) All assessments seek to make it possible to use the lessons of past experience to improve action in
the future. In this particular case, thanks to the recommendations of the study (which were turned into \(<\mathrm{Q}>\) 'basic principles' \(</ \mathrm{Q}>\) by the meeting of the ACP-EEC Council of Ministers of 6 and 7 May 1991), the departments of the Commission with responsibility for this field now possess guidelines which promise to improve activities in energy-related matters. \(</ \mathrm{P}>\)
</DIV4>
</DIV3>
</DIV2>
</DIV1>

\subsection*{8.2.8 Shortcomings}

The main shortcoming with the existing markup is that numbered lists of paragraphs are not marked as such. Also dates and names have not been marked-up inside paragraphs.

\subsection*{8.3 How the corpus was marked up}

The corpus came to us marked up in a form of SGML defined in the FORMEX specification [1]. This markup has been converted to TEI conformant SGML [3] as described below. The corpus preparation consisted of the following steps:
1. Automatic Character set conversion.
2. Automatic conversion of FORMEX markup into TEI markup.
3. Hand-editing of TEI markup to ensure conformance with TEI DTD.
4. Automatic writing of TEI headers for the files.

\subsection*{8.3.1 Character set conversion}

This section describes how the corpus was transcribed into the ISO-LATIN-1 character set. The Greek texts were already coded in ISO-LATIN-7, so no character set conversion was required for them. In the following, \NNN means the character with numeric value NNN (octal). The corpus used one of two characters as escape characters to indicate that the following character came from a non-standard character set. These two characters are \(\backslash 216\) (Formex G2 character set) and \(\backslash 217\) (Formex G3 character set).

Table 1 shows how characters in these two additional character sets were translated into ISO-LATIN-1 characters or SGML entities.

Notes
1. Occasionally in the corpus there were \(<\) (BLK0)SIC \(>\ldots</(\) BLK0)SIC \(>\) elements which included invalid escaped character sequences. These have been replaced by \(<\) SIC \(>\ldots</\) SIC \(>\) and inside such elements, all invalid occurrances of \(\backslash 216\) or \(\backslash 217\),
i.e. those which did not match one of the sequences given in table 1, have been replaced by SGML character references e.g. \&\#142; or \& \#143; .

\section*{2. Accents}

There are some occurrances of \(\backslash 216\) or \(\backslash 217\) which were not in \(<\) (BLK0)SIC \(>\ldots\) \(</(\) BLK 0\()\) SIC \(>\) elements but which did not match any of the patterns in table 1. If they matched one of the other FORMEX characters (defined in [2]) and made sense in context, they were replaced by SGML entities. If they looked like errors, e.g. the accent being placed after instead of before a vowel, then they were replaced by
\(<\) CORR RESP \(=\) MLCC SIC \(=\) "Original Text" \(>\) Replacement Text \(</\) CORR \(>\).
where where "Original Text" was the word which contains the error and "Replacement Text" is what we considered the correct replacement word to be. These changes were made in the hand-correction phase of corpus preparation.
3. Line breaks marked with Ctrl-M Ctrl-J have been replaced by Ctrl-J throughout.
4. Blank lines and line-final whitespace have been removed.
5. Spaces

The four different varieties (widths) of spaces (i.e. em space, en space, thin space and \(4 / \mathrm{em}\) space) have all been replaced by space characters. This is a non-reversible operation, but it was considered that the improvement in readability outweighed the loss in information for the purposes of the MULTEXT project.

\subsection*{8.3.2 Conversion of FORMEX SGML into TEI SGML}

As indicated before, the corpus came to us marked-up using a number of FORMEX defined SGML DTDs. These have been converted to use the TEI DTD.

Firstly, all SGML processing instructions have been completely removed. This is a nonreversible operation, but it was considered that the improvement in readability outweighed the loss in information for the purposes of the MULTEXT project. With the possible exception of some tables, it appears that little linguistic information has been lost.

Secondly, the FORMEX defined elements have been converted, (mainly one-to-one), to TEI defined elements. The mapping used is defined in Table 2.

A PERL program was developed to do this conversion automatically. This data was first character converted and an SGML DTD was written which described the corpus (the FORMEX DTD's were not made available to us). The data was then converted to a TEI conformant form on the basis of this DTD.

Notes:
1. \(<(\) BLK0 \()\) NOTES \(>\) appears not to code any significant information as it only ever contains a sequence of \(<\) NOTE \(>\) elements. Thus removal is justified.
2. \(<(\mathrm{BLK} 0) \mathrm{TO}>\) and \(<(\mathrm{BLK} 0) \mathrm{FOR}>\) are only ever used to markup the word "Commission" (and its translates) and hence it was thought that it did not carry significant
information as the context tells us if the text is TO or FROM the commission. Thus removal is justified.
3. Treatment of bibliographic structure

Each file contains a bibliographic entry for the file and each question/answer also had a bibliographic header. This information has been converted to text (in a stereotypical form) inside a \(<\) HEAD TYPE=DOCUMENT.BIBLIOGRAPHY \(>\) or
\(<\) HEAD TYPE=RECORD.BIBLIOGRAPHY \(>\) element inside the relevant \(<\) DIV \(>\), rather than into SGML markup. This was done as it did not seem clear how to code this information in TEI. It is still in a form which would allow further processing by later programs.
4. Conversion of SGML identifiers

SGML identifiers in the original contained '/' characters. As these do not match the SGML declaration we use, all '/' characters inside IDs have been converted to '.' i.e.
ID="FXAC93006ENC/0001/01/00" \(\Longrightarrow\) ID="FXAC93006ENC.0001.01.00"
5. Reformatting and adding paragraph markup

Each line of text in the original (where it was not structural markup) corresponded to a paragraph of text. Thus each such line has been marked in a \(\langle\) p \(\rangle \ldots</\) p \(\rangle\) element. The line breaks have been left as in the original so each \(\langle\mathrm{p}\rangle\) element is on a single line.

\subsection*{8.3.3 Hand-editing of TEI markup}

After the corpus had been automatically converted, each file was checked for TEI conformance and errors found were corrected by hand. Due to the clean nature of the original texts, relatively few errors were found. Common errors found were:
- Incorrectly placed \(<\mathrm{Q}\rangle\), as for example English genitive apostrophes (John's) being taken as quotation marks.
- \(\langle\mathrm{P}\rangle\) interfering with \(\langle\mathrm{Q}\rangle\), the major problem with the automatic TEI markup concerned the quotation markup. \(\langle\mathrm{Q}\rangle\) elements can occur both inside and outside paragraph and this is what caused problems: sometimes \(\langle\mathrm{Q}\rangle\) elements appeared before \(<\mathrm{P}\rangle\) elements and \(</ \mathrm{Q}\rangle\) elements before \(</ \mathrm{P}\rangle\) elements. Consequently, the editing consisted for the greater part of putting the \(\langle\mathrm{Q}\rangle\) and \(</ \mathrm{Q}\rangle\) elements in the right places. When one or more entire paragraphs were quoted, the \(<\mathrm{Q}>\) elements were put outside the \(<\mathrm{P}\rangle\) elements; otherwise the \(<\mathrm{Q}\rangle\) elements were put inside \(<\mathrm{P}\rangle\) elements at the appropriate place.
- The other type of error that occurred a few times was the need to change \(<\) BLKO.EXPL \(\mathrm{ID}=>\) into \(<\) NOTE \(\mathrm{N}=>\) since the program was not clever enough to catch all of these.
- Errors in the Formex G2 and G3 character sets, as noted in section 4.1 note 2 above.
- Rendition attribute on \(\langle\mathrm{HI}\rangle\), in the original markup, a number of different values were given for the Rendition attribute on \(<\mathrm{HI}\rangle\) elements. These appeared to be different names for the same thing. Thus, values of "SUP" or "SUF" have been changed to "SUPER" and values of "EXP", "VAL", "INDEX", or "SUB" have been changed to "SUB".
- Change \(<\) p REND \(=\) tabular \(N=\) "table " \(>\) with a \(<\) HEAD \(>\) into \(<p><\) FIGURE REND=tabular N \(=\) "table1" \(><\) FIGDESC \(>\) and put \(<\) FIGDESC \(>\) after the \(</\) HEAD \(>\).
- Put in missing < HEAD TYPE="info" \(>\) before text lines of the form \((93 / \ldots .\).\() .\)
- In all the joc195 files, the list of paragraphs in the last record, together with the \(<\) HEAD \(>\) were put inside \(\mathrm{a}<\) LIST \(>\) and each pair of paragraphs was put inside an \(<\) ITEM \(>\).

\subsection*{8.3.4 Automatic writing of TEI headers}

TEI headers were generated by program and filled in with a small amount of document specific data (identifiers, language used, file sizes). These headers are fairly straightforward.

\subsection*{8.3.5 Removal of token internal markup}

Originally there were various kinds of token-internal markup occurring in the corpus, e.g.
\[
\mathrm{S}<\mathrm{HI} \text { REND="SUPER" }>\mathrm{r} .</ \mathrm{HI}>
\]
as an abbreviation for 'Signor'. These caused problems for segmenter programs, so it was decided to change all token-internal markup to a form which respects token boundaries. For example, the above example of token-internal markup has been replaced by \(<\mathrm{ABBR}>\) elements with new REND attribute values as follows:

TAIL-SUPER: All but the first character of the token is in superscript characters. e.g.
\[
\begin{aligned}
& \text { S }<\text { HI REND="SUPER" }>\mathrm{r} .</ \mathrm{HI}>\text { abbrev. for Signor } \\
& \rightarrow \\
& <\text { ABBR REND=TAIL-SUPER }>\text { Sr. }</ \text { ABBR }>
\end{aligned}
\]

TAIL-SUPER: Token consists of either digits or roman numerals followed by a superscript suffix. e.g.
```
XIV<HI REND="SUPER">ème</HI>
->
<ABBR REND="TAIL-SUPER">XIVème</ABBR>
```

TAIL-SUPER: Representation of exponential numbers. e.g. there were a small number of cases of
\[
10<\text { HI REND }=\text { "SUPER" }>9</ \mathrm{HI}>\text { meaning } 1,000,000,000
\]

We were not sure how best to represent this last case, presently they are coded as: \(10<\) ABBR REND="TAIL-SUPER" \(>\mathrm{e} 9</\) ABBR \(>\)

TAIL-SUB: The last character of the token is subscript. e.g.
\[
\begin{aligned}
& \mathrm{CO}<\text { HI REND }=\text { "SUB" }>2</ \mathrm{HI}>\text { Chemical compound } \\
& \rightarrow \\
& <\text { ABBR REND }=\text { TAIL-SUB }>\mathrm{CO} 2</ \mathrm{ABBR}>
\end{aligned}
\]

\section*{Bibliography}
[1] "Formex - Formalised exchange of electronic publications", edited by C. Guittet, Office for official publications of the European communities, 'New technologies - project management' department, Luxembourg, 1985.
[2] "Formex V.2/rev - Character sets specifications", OPOCE, August 1993.
[3] "Guidelines for electronic text encoding and exchange (TEI P3)", edited by C.M.Sperberg-McQueen and Lou Burnard, ACL, Chicago/Oxford, 1994.
[4] "Specification for the corpus encoding style", MULTEXT Deliverable 1.5.1, Nancy Ide and Jean Véronis, September, 1994.

\section*{Table 1: Character conversions}

Original
character
sequence
Character set FORMEX G2
\begin{tabular}{|c|c|c|c|}
\hline 1216) & \(\Longrightarrow\) & ، & Single quote mark left \\
\hline \(\backslash 2169\) & \(\Longrightarrow\) & , & Single quote mark right \\
\hline \(\backslash 2160\) & \(\Longrightarrow\) & \(\backslash 260\) & Degree sign \\
\hline \(\backslash 2161\) & \(\Longrightarrow\) & \(\backslash 261\) & \(\pm\) Plus/minus sign \\
\hline \(\backslash 2163\) & \(\Longrightarrow\) & \(\backslash 263\) & \({ }^{3}\) superscript 3 \\
\hline \(\backslash 2164\) & \(\Longrightarrow\) & \(\backslash 327\) & \(\times\) multiplication sign \\
\hline \(\backslash 2167\) & \(\Longrightarrow\) & \(\backslash 267\) & Middle dot \\
\hline \216\# & \(\Longrightarrow\) & \(\backslash 243\) & \(£\) Pound sign \\
\hline \(\backslash 2168\) & \(\Longrightarrow\) & \$ & Dollar sign \\
\hline \216* & \(\Longrightarrow\) & \&dqmi; & Double quote mark left \\
\hline \216: & \(\Longrightarrow\) & \&dqmr; & Double quote mark right \\
\hline \(\backslash 216\) ' & \(\Rightarrow\) & \(\backslash 247\) & § Section sign \\
\hline
\end{tabular}

GRAVE ACCENTS
\begin{tabular}{|c|c|c|c|}
\hline \216Aa & \(\Longrightarrow\) & \(\backslash 340\) & à \\
\hline \(\backslash 216 \mathrm{Ae}\) & \(\Longrightarrow\) & \(\backslash 350\) & è \\
\hline \(\backslash 216 \mathrm{Ai}\) & \(\Longrightarrow\) & \(\backslash 354\) & ì \\
\hline \(\backslash 216 \mathrm{Ao}\) & \(\Longrightarrow\) & \(\backslash 362\) & ò \\
\hline \(\backslash 216 \mathrm{Au}\) & \(\Longrightarrow\) & \(\backslash 371\) & ù \\
\hline \216AA & \(\Longrightarrow\) & \(\backslash 300\) & A \\
\hline \(\backslash 216 \mathrm{AE}\) & \(\Longrightarrow\) & \(\backslash 310\) & E \\
\hline \(\backslash 216 \mathrm{AI}\) & \(\Longrightarrow\) & \(\backslash 314\) & I \\
\hline \(\backslash 216 \mathrm{AO}\) & \(\Longrightarrow\) & \(\backslash 322\) & Ò \\
\hline \(\backslash 216 \mathrm{AU}\) & \(\Longrightarrow\) & \(\backslash 331\) & U \\
\hline
\end{tabular}

ACUTE ACCENTS
\begin{tabular}{|c|c|c|c|}
\hline \(\backslash 216 \mathrm{Ba}\) & \(\Longrightarrow\) & \(\backslash 341\) & á \\
\hline \(\backslash 216 \mathrm{Be}\) & \(\Longrightarrow\) & \(\backslash 351\) & é \\
\hline \(\backslash 216 \mathrm{Bi}\) & \(\Longrightarrow\) & \(\backslash 355\) & í \\
\hline \216Bo & \(\Longrightarrow\) & \(\backslash 363\) & ó \\
\hline \(\backslash 216 \mathrm{Bu}\) & \(\Longrightarrow\) & \(\backslash 372\) & ú \\
\hline \216By & \(\Longrightarrow\) & \(\backslash 375\) & ý \\
\hline \216BA & \(\Longrightarrow\) & \(\backslash 301\) & Á \\
\hline \216BE & \(\Longrightarrow\) & \} 3 1 1 & E \\
\hline \216BI & \(\Longrightarrow\) & \(\backslash 315\) & 1 \\
\hline \216BO & \(\Longrightarrow\) & \(\backslash 323\) & Ó \\
\hline \(\backslash 216 \mathrm{BU}\) & \(\Longrightarrow\) & \(\backslash 332\) & U \\
\hline \216BY & \(\Longrightarrow\) & \(\backslash 335\) & Y \\
\hline
\end{tabular}

\section*{CIRCUMFLEX ACCENTS}
\begin{tabular}{llll}
1216 Ca & \(\Longrightarrow\) & \(\backslash 342\) & \(\hat{\mathrm{a}}\) \\
1216 Ce & \(\Longrightarrow\) & \(\backslash 352\) & \(\hat{\mathrm{e}}\) \\
1216 Ci & \(\Longrightarrow\) & \(\backslash 356\) & \(\hat{\mathrm{I}}\) \\
1216 Co & \(\Longrightarrow\) & \(\backslash 364\) & \(\hat{o}\) \\
1216 Cu & \(\Longrightarrow\) & \(\backslash 373\) & \(\hat{\mathrm{u}}\) \\
1216 CA & \(\Longrightarrow\) & 1302 & \(\hat{\mathrm{~A}}\) \\
1216 CE & \(\Longrightarrow\) & 1312 & \(\hat{\mathrm{E}}\) \\
1216 CI & \(\Longrightarrow\) & \(\backslash 316\) & \(\hat{\mathrm{I}}\) \\
1216 CO & \(\Longrightarrow\) & 1324 & \(\hat{\mathrm{O}}\) \\
1216 CU & \(\Longrightarrow\) & 1333 & \(\hat{\mathrm{U}}\)
\end{tabular}

\section*{TILDE ACCENTS}
\begin{tabular}{llll}
1216 Da & \(\Longrightarrow\) & \(\backslash 343\) & \(\tilde{\mathrm{a}}\) \\
1216 Do & \(\Longrightarrow\) & \(\backslash 365\) & \(\tilde{o}\) \\
1216 Dn & \(\Longrightarrow\) & \(\backslash 361\) & \(\tilde{\tilde{n}}\) \\
1216 DA & \(\Longrightarrow\) & \(\backslash 303\) & \(\tilde{\mathrm{~A}}\) \\
1216 DO & \(\Longrightarrow\) & \(\backslash 325\) & \(\tilde{\mathrm{O}}\) \\
1216 DN & \(\Longrightarrow\) & \(\backslash 321\) & \(\tilde{\mathrm{~N}}\)
\end{tabular}

UMLAUTS and DIERESIS
\begin{tabular}{llll}
\(\backslash 216 \mathrm{Ha}\) & \(\Longrightarrow\) & \(\backslash 344\) & \(\ddot{a}\) \\
\(\backslash 216 \mathrm{He}\) & \(\Longrightarrow\) & \(\backslash 353\) & \(\ddot{\mathrm{e}}\) \\
\(\backslash 216 \mathrm{Hi}\) & \(\Longrightarrow\) & \(\backslash 357\) & \(\ddot{\mathrm{O}}\) \\
\(\backslash 216 \mathrm{Ho}\) & \(\Longrightarrow\) & \(\backslash 366\) & \(\ddot{0}\) \\
1216 Hu & \(\Longrightarrow\) & \(\backslash 374\) & \(\ddot{\mathrm{i}}\) \\
\(\backslash 216 \mathrm{HA}\) & \(\Longrightarrow\) & \(\backslash 304\) & \(\ddot{̈}\) \\
\(\backslash 216 \mathrm{HE}\) & \(\Longrightarrow\) & \(\backslash 313\) & \(\ddot{\mathrm{E}}\) \\
\(\backslash 216 \mathrm{HI}\) & \(\Longrightarrow\) & \(\backslash 317\) & \(\ddot{\mathrm{I}}\) \\
\(\backslash 216 \mathrm{HO}\) & \(\Longrightarrow\) & \(\backslash 326\) & \(\ddot{O}\) \\
\(\backslash 216 \mathrm{HU}\) & \(\Longrightarrow\) & \(\backslash 334\) & \(\ddot{\mathrm{U}}\)
\end{tabular}

Circle above (Danish only)
\begin{tabular}{llll} 
2216Ja & \(\Longrightarrow\) & \(\backslash 345\) & \(\AA\) \\
2216JA & \(\Longrightarrow\) & 1305 & \(\AA\) \\
OTHERS & & &
\end{tabular}
\begin{tabular}{llll}
\(\backslash 216 \mathrm{Kc}\) & \(\Longrightarrow\) & \(\backslash 347\) & ç \\
\(\backslash 216\{\) & \(\Longrightarrow\) & \(\backslash 337\) & B \\
\(\backslash 216 \mathrm{z}\) & \(\Longrightarrow\) & \&oelig; & œ \\
\(\backslash 216 \mathrm{a}\) & \(\Longrightarrow\) & \(\backslash 306\) & Æ \\
\(\backslash 216 \mathrm{q}\) & \(\Longrightarrow\) & \(\backslash 346\) & \(æ\) \\
\(\backslash 216+\) & \(\Longrightarrow\) & \(\backslash 253\) & Angle quote mark left \\
\(\backslash 216 ;\) & \(\Longrightarrow\) & \(\backslash 273\) & Angle quote mark right
\end{tabular}
\begin{tabular}{llll}
\(\backslash 216 \mathrm{y}\) & \(\Longrightarrow\) & \(\backslash 370\) & \(\emptyset\) \\
\(\backslash 216 \mathrm{i}\) & \(\Longrightarrow\) & \(\backslash 330\) & \(\emptyset\) \\
\(\backslash 216 \mathrm{Q}\) & \(\Longrightarrow\) & \(\backslash 271\) & Superscript 1 \\
\(\backslash 216 ?\) & \(\Longrightarrow\) & \(\backslash 277\) & \(\vdots\) \\
\(\backslash 216!\) & \(\Longrightarrow\) & \(\backslash 241\) & \(i\) \\
\(\backslash 216 \mathrm{k}\) & \(\Longrightarrow\) & \(\backslash 272\) & up-o \\
\(\backslash 216 \mathrm{c}\) & \(\Longrightarrow\) & \(\backslash 252\) & up-a
\end{tabular}

Character set FORMEX G3
\begin{tabular}{ll}
\(\backslash 217+\) & \(\Longrightarrow\) \\
\(\backslash 217)\) & \(\Longrightarrow\) \\
\(\backslash 217^{*}\) & \(\Longrightarrow\) \\
\(\backslash 217^{*}\) & \(\Longrightarrow\) \\
\(\backslash 217 \$\) & \(\Longrightarrow\) \\
\(\backslash 217^{\prime \prime}\) & \(\Longrightarrow\) \\
\(\backslash 217!\) & \(\Longrightarrow\)
\end{tabular}
\begin{tabular}{ll} 
- & Hyphen \\
\&mdash; & em dash \\
\&ndash; & en dash \\
\&dlqm; & Double low quotation mark \\
& 4/em space (following 4 replaced \\
& en space by spaces) \\
& em space \\
& thin space
\end{tabular}

\section*{Table 2: Conversion of SGML element structure}


FORMEX
\(<(\) BLK0 \() \mathrm{ABREV}>\quad \Longrightarrow\)
< (BLK0)SEQN>
\(<(\) BLK0)INDIC TYPE \(=>\) \(<(\) BLK0 \() \mathrm{EXPL}\) IDREF \(=>\) \(<(\) BLK0 \()\) EXPL ID \(=>\)
\(<(\) BLK0) NOTES \(>\)
\(<(\mathrm{BLK} 0) \mathrm{TI}>\)
\(<(\mathrm{BLK} 0) \mathrm{DATE} \mathrm{STD}=\mathrm{NO}>\)
\(<(\) BLK0 \() \mathrm{SIC}>\)
\(<(\mathrm{BLK} 0) \mathrm{QT}>\)
\(<(\) BLK0)PERSON \(>\) \(<\) (SUP)SUP>
\(<(\) RECORD \()\) RECORD \(>\)
< (BLK0) BLK0>
\(<\) (BLK0)BLK1>
\(<(\) BLK0) BLK2>
\(<(\) BLK 0\()\) ID \(>\)
\(<(\mathrm{BLK} 0) \mathrm{TO}>\)
\(<(\) BLK0)TBL \(\mathrm{ID}=>\)
\(<(\) BLK0) CORPUS \(>\)
\(<(\mathrm{BLK} 0) \mathrm{COL}\) ID \(=>\)
\(<(\) BLK0) BLKCOL>
\(<(\) BLK0) COL1>
\(<(\) BLK0) COL2>
\(<(\) BLK0) NOTCOL>
\(<(\) BLK0) BLKROW \(>\)
\(<(\) BLK 0 ) ROW1>

TEI
Markup
<ABBR>
\(\Longrightarrow \quad<\mathrm{NUM}>\)
\(\Longrightarrow \quad<\mathrm{HI}\) REND \(=>\)
\(\Longrightarrow \quad<\) REF \(\mathrm{N}=>\)
\(\Longrightarrow \quad<\) NOTE \(\mathrm{N}=>\)
\(\Longrightarrow \quad\) nothing
\(\Longrightarrow \quad<\mathrm{HEAD}>\)
\(\Longrightarrow \quad<\mathrm{DATE}>\)
\(\Longrightarrow \quad<\mathrm{SIC}>\)
\(\Longrightarrow \quad<\mathrm{Q}>\)
\(\Longrightarrow \quad<\) NAME TYPE=PERSON \(>\)
\(\Longrightarrow \quad<\) DIV0 TYPE=DOCUMENT \(><\) HEAD \(>\)
\(\Longrightarrow \quad<\) DIV \(1><\) HEAD \(>\)
\(\Longrightarrow \quad<\) DIV2>
\(\Longrightarrow \quad<\) DIV 3 TYPE=BODY \(>\)
\(\Longrightarrow \quad<\) DIV \(4>\)
\(\Longrightarrow \quad<\mathrm{RS}>\)
\(\Longrightarrow \quad\) nothing
\(\Longrightarrow \quad\) nothing
\(\Longrightarrow \quad<\mathrm{P}><\) FIGURE REND=TABULAR \(\mathrm{N}=>\)
\(\Longrightarrow \quad<\) TABLE \(>\)
\(\Longrightarrow \quad<\) ROW \(>\)
\(\Longrightarrow \quad<\) CELL \(\mathrm{N}=>\)
\(\Longrightarrow \quad<L I S T\) TYPE=TABLE.COLUMN.HEADINGS \(>\)
\(\Longrightarrow \quad<\) ITEM \(>\)
\(\Longrightarrow \quad<\) ITEM \(>\) inside \(<\) LIST \(>\)
\(\Longrightarrow \quad<\mathrm{HEAD}\) TYPE=COLUMN.NOTE \(>\)
\(\Longrightarrow \quad<\) LIST TYPE=TABLE.ROW.HEADINGS \(>\)
\(\Longrightarrow \quad<\) ITEM \(>\)

\section*{Chapter 9}

\section*{European Parliament Debates Corpus}

\subsection*{9.1 The Corpus}

This second parallel corpus defined for the MLCC collection is the records of Parliamentary sittings published as an Annex to the Official Journal of the European Community under the title Debates of the European Parliament. In what follows we will first briefly describe the origin and nature of the data before discussing the physical preparation of the material.

The Parliamentary Debates are a record of what was said by members during the meeting. The texts also contain copies of written input provided to the meeting and other material such as headlines reflecting the structure of the meetings and explanatory comments on the sessions. The original data, from which the translations are ultimately produced, consists of a transcript of the sittings, each member speaking in the language of his choice. This manuscript (known as the "rainbow version") is circulated to all speakers for possible revision before it is sent out for translation. The final version is thus an edited and translated version of the debates, augmented with written documents submitted to the meeting. The data collection, as acquired and prepared for the MLCC corpus, consists of nine parallel versions of the material. The languages are English, Danish, Dutch, French, German, Greek, Italian, Portuguese and Spanish. The texts delivered comprise the Debates of the European Parliament from January 1992 to July 1994.

The language used in this corpus can be characterized as a written version of "formal spoken" language. The transcripts have been cleaned up (for e.g. grammaticality and style) and revised (for e.g. clarity or political motivations). The topics are varied, including discussions of international events and European Union policies as well as day-to-day problems such as traffic conditions in Luxembourg. The debates contain technical discussions as well as personal opinions, and the style ranges from factual and informative to argumentative. The vocabulary is rich and extensive, with an abundance of technical terms, acronyms and proper names as well as common and popular expressions. In a discussion of pollution and traffic problems, for example, the car driver's behavior is characterized with the expression "zoom, zoom, zoom". Though the interactions are generally quite formal and distant, typical of the communication style in such meetings, there are also examples of very personal interactions, e.g. "That is right, I saw you myself". As such, the language used in this collection represents an excellent base for a variety of NLP technology development and evaluation activities.
\begin{tabular}{|l||c|c|c|c|}
\hline & \begin{tabular}{c} 
IBM-tapes \\
(MOPAS)
\end{tabular} & \begin{tabular}{c} 
IBM-tapes \\
(ASCII)
\end{tabular} & \begin{tabular}{c} 
Bernoulli \\
(MOPAS)
\end{tabular} & \begin{tabular}{c} 
Diskettes \\
(ASCII)
\end{tabular} \\
\hline \hline Danish & 10 MB & & 10 MB & 10 MB \\
Dutch & 20 MB & & 10 MB & \\
English & 15 MB & & 10 MB & \\
French & & 25 MB & 5 MB & \\
German & & & 1 MB & 40 MB \\
Greek & & & 1 MB & 40 MB \\
Italian & & 30 MB & 1 MB & \\
Portuguese & 5 MB & 20 MB & 10 MB & \\
Spanish & 20 MB & & 10 MB & \\
\hline
\end{tabular}

Table 9.1: Overview on the data from the European Parliament.

This corpus represents a collection of multilingual parallel data larger than any currently available to the research community in terms of size and number of languages. Given that it is produced on a regular basis and is not encumbered with major privacy and copyright problems, additional material could easily be added for translation studies in e.g. source and target variation per language pair. \({ }^{1}\) Such a growing collection can also serve general language studies in important areas such as language coverage and vocabulary growth.

\subsection*{9.2 Data acquisition}

Unlike the Written Questions series described in chapter 8, the acquisition and subsequent preparation of the Debates required considerably more time and effort than originally foreseen in the MLCC proposal. The physical acquisition alone proceeded in phases over the entire year of 1994. With considerable help from Mr. Brogard, Director of the European Parliament Printing Services, we were able to locate and obtain a full set of the Debates. The majority of the data was available from in-house backups, albeit on different media. The missing subsets were located and eventually obtained from four different printing companies in Europe. The varied sources of the material meant that the data sets were delivered on different storage media and used different formatting conventions. The mark-up ranged from quite simple ASCII to a highly complex typesetting language called MOPAS. The final set of data consisted of 15 tapes, 2 Bernouilli diskpacks and 100 diskettes; an overview is given in Table 1 in terms of languages amounts and formats.

For exploratory data conversion work, a first sample tape of data was provided in April 1994. The purpose of this sample tape was first to assure that the data could physically be accessed on the media in which it was provided ( \(1 / 2\) inch reel tape). Once the data itself had been extracted, initial data conversion tests could begin. The data delivered on the Bernoulli disk packs also required the acquisition and installation of a Bernouilli tape reader in order to access the data. The full set of data \((300 \mathrm{Mb})\) was delivered in phases throughout the year

\footnotetext{
\({ }^{1}\) There are eleven sittings each year which represent \(250-300\) pages per sitting/per language. One page contains approximately 1000 words. The collection of additional data in this series should also be considerably easier since, as of July 1995, the data preparation process for Parliament texts has been modernized.
}

1994, the last delivery of a Bernouilli disk pack and diskettes containing the outstanding data from the independent printers was obtained from the Parliamentary Printing services in December 1994.

\subsection*{9.3 Data Preparation}

Before describing the details of this work, we give an overview of the basic steps followed in preparing the data:
1. The data was read and transferred to a Sun Sparc station for processing
2. Background documentation on the MOPAS commands was collected
3. Reference material, i.e. sample printed versions of the texts, were obtained
4. Programs were written (in test and verify cycles) to parse the MOPAS syntax and establish correspondences with the SGML tags to be introduced.
5. Extensive checking mechanisms were developed to verify the results and capture potential problems.
6. A semi-automatic preprocessing phase was introduced to prepare each file for automatic processing.
7. MOPAS commands were replaced with SGML tags by the program.
8. The MOPAS character set was replaced by the standard ISO-Latin-1 character set; Greek characters represent a special case in need of further treatment.
9. Headers were automatically inserted by program.

It is worth noting that the delivery of new data sets required additional loops in each of the steps outlined above. We now turn to a somewhat more detailed description of each of these steps from reading the data to decoding and transforming the codes to SGML tags.

\subsection*{9.3.1 Reading the Data}

As described above, the data for the Parliamentary Debates corpus was delivered in phases throughout the year 1994 on three different media. Each set required a different set of resources and programs to read the data and assure that no data was lost or corrupted during this process.

The data from the three storage media were extracted as follows:
- IBM tapes: The data supplied on \(1 / 2\) reel tapes were read blockwise via a tape reader on a DEC machine available at the University of Geneva Computing services. The data was then transferred to a Sun Sparc station at ISSCO by FTP. The block headers and some other undecoded part of the file headers (probably encoding time of creations, revision number, etc.) were removed prior to processing of the data.
- Bernouilli disk packs: In order to read the Bernouilli disk packs, the Parliamentary Printing offices lent ISSCO a Bernouilli reader and a copy of the necessary software to communicate with a PC. The software was installed and the data was then copied to the PC and finally to a Sun Sparc station. \({ }^{2}\) A Bernouilli disk pack can contain up to 90 Mb of data and is used for PC back-up purposes.
- floppy disks: The data delivered on the floppy disks (100 diskettes) were copied onto a PC and also transferred via a local network to a Sun Sparc station.

It is worth noting that acquiring data on such diverse media requires a well equipped center and access to experienced technical personnel. To this end, contact was established with a technician at the Parliamentary Printing services as well as a local Swiss company, Delta Information Systems SA. This company was able to provide us with extracts from the "Autologic SA MOPAS manual" describing "Files on magnetic tapes" and the section on "Mopas internal codes".

The structure of the data on the varied storage media did not necessarily correspond to the logical file structure produced in the final data set. Sittings were divided across numerous files, organized differently for each data set. Reading and transferring all of this data (300 Mb ) thus required a careful manipulation of hundreds of files in order to retain all of the information potentially useful for further processing.

\subsection*{9.3.2 Data Conversion}

The majority of the data supplied was coded in the MOPAS format, a powerful procedural type setting language. The conversion of these highly complex formatting codes to descriptive SGML turned out to be a very complex task requiring additional time and resources not foreseen in the initial project proposal. The first step in this task was to acquire documentation on this formatting language and to compare the electronic data with the printed version.

The Parliamentary Printing offices and the Swiss company, Delta Information systems, who work with this formatting language were helpful in providing background information. However, a full and precise description of the macros used for the Debates were no longer available. One reason for this is that the coding schema evolved over time, thus new options were adopted in more recent sittings.

Decoding the typesetting commands in view of inserting SGML tags is more than a simple decryption task. The typesetting commands are of a procedural nature such that no one-toone correspondence can be established between code and desired tag. Exploratory programs were written to parse the syntax of the MOPAS commands in an attempt to establish correspondences between the codes and the SGML tags to be introduced. This decoding work proceeded in test and verify cycles. Each new data set (and in fact each new sitting) brought in new variants on the coding. Since not all of the codes could be reliably interpreted, extensive checking mechanisms were written to capture problematic cases.

\footnotetext{
\({ }^{2}\) Since this storage medium is not commonly known to the public we had to rely on in-house expertise and some trial and error exercises to extract the data.
}

After lengthy trial decoding cycles, a good portion of the codes could be analyzed and interpreted in view of transforming them to SGML tags. However, not all of the special sequences of codes could be reliably recognized and thus no simple replacement scheme was possible. Changes from one set of data to another introduced minor modifications and the original data also contained errors. In order to overcome these problems within the time allotted for this project, we decided to introduce a pre-processing phase as preparation to the automatic conversion program.

In practice, the data preparation thus proceeded in a step-wise fashion. The MOPAS files which contained binary control codes representing the mark-up sequences were converted to an ASCII notation. These control codes were then converted to SGML tags and the output was verified by additional checking programs. In case of errors in the SGML output the conversion program was modified for a new test and verify cycle. This work proceeded in iterations up to a point where it became apparent that the return on program refinement could only bring marginal improvements (given the time and resource constraints of the project). At this point, the intermediate files were edited to avoid the errors otherwise produced by the automatic conversion routines.

The following types of errors, due to variations and errors in the original files, were relatively frequent:
- sequences of footnotes were not separated
- the end of a table was not detected
- the beginning of a debate or annex was not detected properly because the words "sitting" or "annex" were misspelled
- for each speaker, the political party and the language used were usually given in brackets. Sometimes an opening or closing bracket was missing.

This edited intermediate version of the files is provided with the deliverables. The majority of the processing (i.e. the automatic conversion of control codes to SGML tags) is realized as a set of automata written in the form of a C-program. The source code comprises 2,500 lines of code and is provided with the data.

As mentioned above, a subset of the data was supplied in a very simple ASCII without formatting. Though it is quite straightforward to automatically convert this to an SGML conformant document, the mark-up is of little value. A simple program could, for example, replace double carriage returns with open and closing paragraph tags. However, the rich information (as derived from the typesetting codes which provide interesting linguistic information e.g. marking headlines and identifying speakers and languages) cannot be reliably reconstructed without quite intensive and intelligent processing. For the ASCII data containing some markup, a set of programs to convert these codes into SGML have been developed in this project and can probably be applied to the rest of this protion of the ASCII corpus without much additional effort. The rather large set of German data wich contains essentially no markup has not been processed.

An overview of all of the data that has been converted is given in Table 9.2 in terms of languages, word counts and formats.
\begin{tabular}{|l||c|c|c|c|c|}
\hline & \begin{tabular}{c} 
IBM-tapes \\
(MOPAS 1)
\end{tabular} & \begin{tabular}{c} 
IBM-tapes \\
(ASCII 1)
\end{tabular} & \begin{tabular}{c} 
Bernoulli \\
(MOPAS 2)
\end{tabular} & \begin{tabular}{c} 
Bernoulli 2 \\
(MOPAS 2)
\end{tabular} & \begin{tabular}{c} 
Diskettes \\
(ASCII 2)
\end{tabular} \\
\hline \hline Danish & 1.7 & & 1.7 & 1.7 & \(* 1.7\) \\
Dutch & 3.4 & & 1.7 & 0.8 & \\
English & 2.5 & 0.8 & 1.7 & 2.5 & \\
French & & 2.0 & 0.8 & 1.7 & \\
German & & & 0.2 & 0.8 & \(* 7.0\) \\
Greek & & & 0.2 & 1.7 & \(* 7.0\) \\
Italian & & \(* 5.0\) & 0.2 & 1.7 & \\
Portuguese & 0.8 & \(* 3.4\) & 1.7 & 1.7 & \\
Spanish & 1.7 & & 1.7 & 1.7 & \\
\hline
\end{tabular}

Table 9.2: Overview on the data from the European Parliament (figures are in million words). Data marked with "*" require additional work.

\subsection*{9.3.3 Some practical considerations}

Data preparation of such a sizable collection from the low-level format to a logically structured document is of necessity a step-wise activity including numerous test and verify cycles. This implies that all of the data should be available for sampling and that numerous copies will be stored for intermediate consistency checking. Though physical storage space is no longer an obstacle, it is worth noting that the manipulation of such a large amount of data contained in the numerous files does require investment in an adequate working environment. This includes not only adequate processing power and disk space but also a proper network environment. In the preparation of this data our environment consisted of access to a \(1 / 2\) inch tape reader with a network connection, a Bernouilli disk pack reader, a PC and a SUN Sparc station with adequate disk space ( 2 Gb ).

A few additional practical considerations are worth noting in the documentation of this work. We offer these comments as input to future data preparation projects. The issues listed here identify issues that any data preparation project must address but for which there are no simple answers.
- idealized project planning vs. the practical reality
- time investment in development of automatic conversion routines in view of targeted level of detail and accuracy
- reversibility of conversion steps
- automatic reproduction of information (in perhaps different forms)
- choice of semi-automic, fully automatic and human editing

At the outset of the MLCC project an estimate was made of time necessary for the work foreseen. Practical obstacles such as the delivery of data in phases and in different formats as well as the complexity of the formatting language only became apparent in the course of
the project and required some readjustment of plans. All of the data is currently in a form useful for NLP activities though some additional work would be desirable as documented in section 9.7.

Investment in data conversion work is a trade-off between time and accuracy. Older typesetting languages are procedural languages and were not intended for automatic conversion to logical structures. There is thus often a break-off point where further development of fully automatic conversion routines is no longer viable or desirable. E.g. for this corpus, the development of a program for fully automatic conversion of the MOPAS codes would probably take longer than hand-editing to correct for mistakes not caught by the program. As discussed above, we opted for semi-automatic conversion, with a hand-editing phase, in view of the time constraints and the estimated feasibility of fully automatic conversion.

In principle, it is desirable to aim for full reversibility, however, in practice this is rarely possible. As documented in the discussion of the preparation of the parallel data (cf. also 8), some non-reversible step were deemed necessary). These are documented and intermediate copies of the data are also provided to record the non-automatic steps. And in any case, as past activities have demonstrated, no corpus is fully error free and thus will always require some hand-editing depending on the required or desired level of precision.

\subsection*{9.4 Data structure and markup}

We provide here a summary description of the document structure and coding conventions. The corpus has been marked-up with gross structural markup including an SGML header and universal text elements down to the level of the paragraph, e.g. textual divisions, paragraphs, titles, headings, footnotes and tables. Some markup inside paragraphs has been included where this was easily extracted from the original markup, e.g. information about speakers.

\subsection*{9.4.1 Global Document Structure}

The following gives an overview of the document structure:
```
<tei.2>
    <teiheader> ...
    </teiheader>
<text>
            <body>
<debates>
        <cover>
            <title>
            </title>
            <p> ...
            </p>
        </cover>
        <sitting> ...
            <contents>
```
```
            <p> ...
                    </p>
            </contents>
            <p> ...
            </p>
            <annex> ...
                    <p> ...
                    </p>
                    </annex>
            </sitting>
        </debates>
        </body>
    </text>
    </tei.2>
```

Tags that can occur anywhere
```
<headline> </headline>
<footnote> </footnote>
<speaker> </speaker>
<pageref> </pageref> page references in table of contents
<logo> </logo>
<table> </table>
```
page references in table of contents
logo of the EC office for publications

Each document corresponds to one issue of the Official Journal of the European Communities - Debates of the European Parliament. The contents of the four cover pages are enclosed by <cover> tags. The main document consists of a number of sittings. Each sitting starts with a table of contents. Some sittings include one or more annexes.

\subsection*{9.4.2 nSGML Definition}

The data is coded in normalised SGML (nSGML), a format for SGML marked-up corpora which imposes further restrictions on SGML documents. These restrictions are imposed to (a) improve the readability of corpora and (b) to ease text processing by other programs. The files in nSGML format satisfy the following conditions:
1. Document is a valid SGML document according to the supplied DTD.
2. Document is coded using one of the ISO-LATIN character sets, with embedded character entities where necessary.
3. Reference concrete syntax - processing 8-bit clean in data and attribute values.
4. No capacity/length restrictions.
5. No short refs or tag minimization.
6. No SUBDOCs.
7. No marked sections.
8. All end-tags present (except for empty elements).
9. All entity references terminated with ";"
10. No SGML elements are broken across multiple lines.

All of the files with the exception of the Greek data and the files delivered in ASCII are conformant with this definition.

\subsection*{9.4.3 The DTD Used}

The document type definition used in preparation and checking of the data is given in appendix A.3. This DTD accounts for all markup specific to this corpus (that was recoverable from the MOPAS codes).

The header elements were automatically generated by program and filled in with a small amount of document specific data. The programs developed for this task as well as the processing was done by LTG. Work on completing this to bring it up to TEI conformance, e.g. renaming "sittings" to "divisions" with type attributes should be quite straightforward.

\subsection*{9.4.4 The Character Set}

The Parliamentary Debates corpus uses the ISO-LATIN-1 character set (exception: Greek files will be coded in the ISO-LATIN-7 character set). The following SGML character entities are used for non ISO-LATIN-1 characters and may occur anywhere in the text of the corpus.
```
Entities
&footref; reference marker for footnote
&dqml; double quote mark left
&dqmr; double quote mark right
&linesep; line separator within tables
&colsep; column separator within tables
&amp; ampersand (&)
&lab; left angle bracket (<)
&hyphen; hyphen used for word separation at end of line
&vaigu; v with accent ' over the character
&parsep; triangle of stars occasionally used for paragraph separation
```

The full list of character conversion codes is supplied as an Appendix to this chapter.

\subsection*{9.5 Sample from the corpus}

The following is an extract from an English version of one of the debates files (deb94011721.en.b):
```
<headline>1. Approval of the Minutes</headline>
<p>
<speaker>President. -</speaker> The Minutes of yesterday's sitting have been
distributed.
</p>
<p>
Are there any comments?
</p>
<p>
<speaker>Oostlander <party>(PPE)</party>. - <language>(NL)</language></speaker>
Madam President, I have a problem with the translation of a resolution, as
recorded in the Minutes, namely the resolution about Bosnia Hercegovina.
I mention in particular paragraph 1(h) of that resolution. I presented the
resolution in my best English, so that English is the original language.
The strange thing is that in paragraph 1(h) my English expression elimination
comes out as dismantling. Consequently as a result of that change in the
terminology of the text handed in, an equivalent of 'dismantling' has been
entered in all other translations. The strange thing is that the translation
into Dutch again contains the correct expression, 'elimination'. This is an
extraordinarily strange state of affairs, so that as a Dutchman I could not
know yesterday on the basis of my own Dutch text that the original English
text had been changed to a different English text. I should be glad if you
would have that investigated because we, as Members of Parliament, must
naturally be able to rely completely on the integrity of the translation
service. I hope to have an answer from you in due course.
</p>
<p>
<speaker>President. -</speaker> We shall check with the original text as you
have described it. Unless there is a more delicate problem, which I do not see,
if it is simply a translation problem, we shall go back to the original text.
</p>
<p>
<speaker>Oostlander <party>(PPE)</party>. - <language>(NL)</language></speaker>
Madam President, it was not a problem of translation as such, but of altering
an original text into another text by the changing of a word in the original
language.
</p>
<p>
<speaker>President. -</speaker> I understood what you said. So I ask my
fellow-Members to tell me whether they are against the idea of going back to
the text as you originally wrote it, before it was presented to the sitting.
There do not seem to be any objections.
</p>
```

As apparent in this example, the language is riched and varied. Interesting additional markup is included such as the coding of the party and language in the speaker fields. However, other additional codes present in the original, as can be seen from the official printed version, were not possible to recover. And unfortunately, in some cases, information has possibly been lost. \({ }^{3}\) This situation, though not ideal, reflects similar problems encountered by all commercial products that must accommodate a range of idiosyncratic markup schema currently in use. Given the current lack of standards and only partial convertibility between systems, these texts can also provide test data for robustness issues.

\subsection*{9.6 Data deliverables}

In summary we provide an overview of all of the Parliamentary Debates data that is supplied for the MLCC project. The data is classified according to language and format, the amount is given in millions of words. The starred data has not been transformed nor checked for SGML compliance. Note that initial work on converting the markup codes in the Greek data has been undertaken to assure that the program could also handle the MOPAS codes in these files.

As can be seen from the table, the total size of the corpus is approximately 60 million words ( ~ 5-7 million words per language).

The deliverable of the Parliamentary Debates corpus consists of:
1. The documentation of the acquisition and preparation work as described in this chapter.
2. A full set of the data supplied on tape (cf. annex for a full listing of the files).
3. The data listed in Table 2 (modulo the subset marked with "**) has been SGML marked up to level 1. Some level 2 (sub-paragraph) markup was included where this was easily derived from existing formatting.
4. A copy of the original corpus (as supplied by the Parliamentary Printing Offices of the European Communities) included as well as an intermediate version of the files preprocessed for automatic conversion.
5. The source code of the programs used to automatically markup the corpus files.
6. The Document Type Definition (still in need of minor modifications in order to ensure TEI-conformance)

The directory structure of the corpus corresponds to the processing phases of the data. The file organization reflects the logical organization of the sittings according to when they were held. The files are named as follows.

\footnotetext{
\({ }^{3}\) In the passage cited above, the careful reader will have noticed that the first use of the words elimination and dismantling as citations are not quoted in the text, though they probably did appear with special typographical markup in the printed version. We did not have access to all of the written material, nor the resources, to verify such potential mistakes.
}
\[
\mathrm{deb}<\mathrm{JJ}><\mathrm{MM}><\mathrm{D} 1>-<\mathrm{D} 2>.<\mathrm{LA}>.<\mathrm{TYPE}>
\]
where \(<\mathrm{JJ}><\mathrm{MM}>\) are year and month when the debate took place, \(<\mathrm{D} 1>\) is first day and \(<\) D2 \(>\) the last day of the debate. LA is a two letter language code (da=Danish, de=German, en \(=\) English, es \(=\) Spanish, \(\mathrm{fr}=\) French, \(\mathrm{gr}=\) Greek, \(\mathrm{it}=\) Italian, \(\mathrm{nl}=\) Dutch, \(\mathrm{pt}=\) Portuguese ), and \(<\) TYPE \(>\) gives information of the type of the original markup (m=MOPAS from IBM-tapes, \(b=\) MOPAS from Bernoulli tapes, \(a=\) ASCII from IBM-tapes).

An example of the files corresponding to one session for each of the languages from data initially delivered in MOPAS format on the Bernouilli tapes is as follows:
```

deb940418-22.da.b.gz Session April 18-22, 1994, Danish
deb940418-22.de.b.gz Session April 18-22, 1994, German
deb940418-22.el.b.gz Session April 18-22, 1994, Greek
deb940418-22.en.b.gz Session April 18-22, 1994, English
deb940418-22.es.b.gz Session April 18-22, 1994, Spanish
deb940418-22.fr.b.gz Session April 18-22, 1994, French
deb940418-22.it.b.gz Session April 18-22, 1994, Italian
deb940418-22.nl.b.gz Session April 18-22, 1994, Dutch
deb940418-22.pt.b.gz Session April 18-22, 1994, Portuguese

```

This organization and file naming convention serves two purposes. The date and language codes correspond to the information given for the printed versions. \({ }^{4}\) It should be noted that in some cases the sessions, consisting of numerous sittings, may be distributed over more than one file. The addition of a markup code in the last field (minus the " gz " to indicate the file has been compressed) was adopted in view of possible future additional processing. Where consistent errors are found in the codes, they will most likely be specific to one set of data according to the markup source. \({ }^{5}\)

\subsection*{9.7 Further Work}

As discussed above, the work invested to prepare this corpus required a substantial amount of work not initially foreseen in the project proposal. The corpus as delivered in its current form would satisfy the needs of a large community of researchers in need of more data in their language. However, some additional processing is still necessary for a subset of the corpus and would be desirable for the entire corpus. The work still required to improve the markup of the corpus to a state where it can be considered in a final form is as follows:
- SGML Markup of the rest of the data.

The sub-directories diskettes, newtapes and some of tapesascii (i.e. tapes 2-6 of the orig/tapesascii directory) have not been cleaned up nor SGML marked up.

\footnotetext{
\({ }^{4}\) The written versions are available from official EU publication offices throughout Europe.
\({ }^{5}\) In view of future standards on naming conventions, we note that such corpus specific extensions should always be possible.
}

The diskettes data is reasonably clean text. The German part does not have much in the way of formatting which may make it harder to reliably add e.g. paragraph markup. The Greek has been transliterated into Latin characters and should be converted to the ISO-LATIN-7 encoding standard.

The newtapes and the tapesascii are heavily formatted, but appear to use the same formatting codes as used in tapel of tapesascii. Programs to convert this into SGML have been developed in this project and hopefully can be applied to the rest of this corpus without much additional effort.
- Upgrading of SGML markup to TEI conformant SGML.

For the whole Debates corpus we would like to improve the SGML markup, mainly to bring it into line with the markup used in the other sub-corpora of the MLCC.
- Conversion of the markup into TEI style
e.g. \(<\) sitting \(>\) to \(<\operatorname{div} 1\) type=sitting>, etc.
- Improving the level of markup.
e.g. better markup of headings, lists, citations, etc.
- Greek data

The Greek parts of the corpus (i.e. the subcorpora in the bernou and diskettes directories) need to be checked thoroughly by a native speaker for correctness. The Greek data in bernou uses two character codes (Latin and Greek). Currently these files are coded in ISO-LATIN-1 with a number of ad-hoc conventions for code switching and representing non- ISO-LATIN-1 characters. Work is still needed to standardize these codes.
- Hand-editing

All of the data could benefit from some additional hand-editing. Spot checks have been carried out to evaluate the current state but no systematic correction has been undertaken. Errors such as potentially incorrectly broken paragraphs (e.g. paragraphs ending without any punctuation) could be automatically detected and then verified or corrected by hand-editing.

Assuming a well-equipped center with experience in such data preparation work, we estimate four person/months over an elapse time of two months. Verification and hand-editing of the data would require personnel with knowledge of the nine languages.

\section*{Appendix: MOPAS to ISO character conversion}

Original
character
sequence
GRAVE ACCENTS
\begin{tabular}{|c|c|c|c|}
\hline \(a \backslash 3\) & \(\Longrightarrow\) & \(\backslash 224\) & à \\
\hline e\3 & \(\Longrightarrow\) & \(\backslash 232\) & è \\
\hline i\3 & \(\Longrightarrow\) & \(\backslash 236\) & ì \\
\hline - \3 & \(\Longrightarrow\) & \(\backslash 342\) & ò \\
\hline \(\mathrm{u} \backslash 3\) & \(\Longrightarrow\) & \(\backslash 249\) & ù \\
\hline A\3 & \(\Longrightarrow\) & \(\backslash 192\) & À \\
\hline E\3 & \(\Longrightarrow\) & \(\backslash 200\) & E \\
\hline I \} 3 & \(\Longrightarrow\) & \(\backslash 204\) & I \\
\hline O\3 & \(\Longrightarrow\) & \(\backslash 210\) & Ò \\
\hline \(\mathrm{U} \backslash 3\) & \(\Longrightarrow\) & \(\backslash 217\) & Ù \\
\hline
\end{tabular}

ACUTE ACCENTS
\begin{tabular}{llll}
\(\mathrm{a} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 225\) & á \\
\(\mathrm{e} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 233\) & é \\
\(\mathrm{i} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 237\) & í \\
\(\mathrm{O} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 243\) & ó \\
\(\mathrm{u} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 250\) & ú \\
\(\mathrm{A} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 193\) & Á \\
\(\mathrm{E} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 201\) & É \\
\(\mathrm{I} \backslash 2\) & \(\Longrightarrow\) & \(\backslash 205\) & Í \\
\(\mathrm{O} \backslash 2\) & & \(\backslash 211\) & Ó \\
\(\mathrm{U} \backslash 2\) & & 1218 & Ú
\end{tabular}

CIRCUMFLEX ACCENTS
\begin{tabular}{|c|c|c|c|}
\hline a \9 & \(\Rightarrow\) & \(\backslash 226\) & â \\
\hline e\9 & \(\Longrightarrow\) & \(\backslash 234\) & è \\
\hline i\9 & \(\Longrightarrow\) & \(\backslash 238\) & ̂̂ \\
\hline - \9 & \(\Longrightarrow\) & \(\backslash 244\) & ô \\
\hline u \9 & \(\Longrightarrow\) & \(\backslash 251\) & ̂̂ \\
\hline A\9 & \(\Longrightarrow\) & \(\backslash 194\) & A \\
\hline E\9 & \(\Longrightarrow\) & \(\backslash 202\) & E \\
\hline I\9 & \(\Longrightarrow\) & \(\backslash 206\) & İ \\
\hline \(\mathrm{O} \backslash 9\) & \(\Longrightarrow\) & \(\backslash 212\) & O \\
\hline U\9 & \(\Longrightarrow\) & \(\backslash 219\) & U \\
\hline
\end{tabular}

TILDE ACCENTS
\begin{tabular}{llll}
\(a \backslash 11\) & \(\Longrightarrow\) & \(\backslash 227\) & \(\tilde{a}\) \\
\(o \backslash 11\) & \(\Longrightarrow\) & \(\backslash 245\) & \(\tilde{o}\)
\end{tabular}
\begin{tabular}{llll}
\(\mathrm{n} \backslash 11\) & \(\Longrightarrow\) & \(\backslash 241\) & \(\tilde{\mathrm{n}}\) \\
\(\mathrm{A} \backslash 11\) & \(\Longrightarrow\) & \(\backslash 195\) & \(\tilde{A}\) \\
\(\mathrm{O} \backslash 11\) & \(\Longrightarrow\) & \(\backslash 213\) & \(\tilde{\mathrm{O}}\) \\
\(\mathrm{N} \backslash 11\) & \(\Longrightarrow\) & \(\backslash 209\) & \(\tilde{\mathrm{~N}}\)
\end{tabular}

UMLAUTS and DIERESIS
\begin{tabular}{|c|c|c|c|}
\hline \(\backslash 163\) & \(\Longrightarrow\) & \(\backslash 228\) & à \\
\hline \(\backslash 171\) & \(\Longrightarrow\) & \(\backslash 235\) & ë \\
\hline \(\backslash 128 \backslash 7\) & \(\Longrightarrow\) & \(\backslash 239\) & ï \\
\hline \(\backslash 181\) & \(\Longrightarrow\) & \(\backslash 246\) & \(\ddot{\square}\) \\
\hline \(\backslash 187\) & \(\Longrightarrow\) & \(\backslash 252\) & ii \\
\hline \(\backslash 162\) & \(\Longrightarrow\) & \(\backslash 196\) & \(\ddot{\text { Ä }}\) \\
\hline \(\backslash 170\) & \(\Longrightarrow\) & \(\backslash 203\) & \(\ddot{\text { Ë }}\) \\
\hline \(\backslash 180\) & \(\Longrightarrow\) & \(\backslash 214\) & Ö \\
\hline \(\backslash 186\) & \(\Longrightarrow\) & \(\backslash 220\) & U \\
\hline
\end{tabular}

Circle above
\begin{tabular}{llll}
\(\ 155\) & \(\Longrightarrow\) & \(\backslash 229\) & \(\AA\) \\
\\
154 & \(\Longrightarrow\) & \(\backslash 197\) & \(\AA\)
\end{tabular}

OTHERS
\begin{tabular}{|c|c|c|c|}
\hline \(\backslash 159\) & \(\Rightarrow\) & \(\backslash 231\) & ç \\
\hline \(\backslash 158\) & \(\Longrightarrow\) & \(\backslash 231\) & C \\
\hline \(\backslash 135\) & \(\Longrightarrow\) & \(\backslash 223\) & B \\
\hline \(\backslash 153\) & \(\Longrightarrow\) & \&oelig; & œ \\
\hline \(\backslash 150\) & \(\Longrightarrow\) & \(\backslash 198\) & Æ \\
\hline \(\backslash 151\) & \(\Longrightarrow\) & \(\backslash 230\) & æ \\
\hline \(\backslash 146\) & \(\Longrightarrow\) & \(\backslash 171\) & Angle quote mark left \\
\hline \(\backslash 147\) & \(\Longrightarrow\) & \(\backslash 187\) & Angle quote mark right \\
\hline \(\backslash 157\) & \(\Longrightarrow\) & \(\backslash 248\) & ø \\
\hline \(\backslash 156\) & \(\Longrightarrow\) & \(\backslash 216\) & \(\emptyset\) \\
\hline \(\backslash 138\) & \(\Longrightarrow\) & \(\backslash 191\) & i \\
\hline \(\backslash 139\) & \(\Longrightarrow\) & \(\backslash 161\) & i \\
\hline \(\backslash 199\) & \(\Longrightarrow\) & - & Hyphen \\
\hline \(\backslash 131\) & \(\Longrightarrow\) & \&mdash; & em dash \\
\hline \(\backslash 145\) & \(\Longrightarrow\) & \&ndash; & en dash \\
\hline \(\backslash 127\) & \(\Longrightarrow\) & & M-space \\
\hline \(\backslash 126\) & \(\Longrightarrow\) & & N -space \\
\hline \(\backslash 94\) & \(\Longrightarrow\) & & thin space \\
\hline \(\backslash 130\) & \(\Longrightarrow\) & \(\backslash 176\) & Degree sign \\
\hline \(\backslash 148\) & \(\Longrightarrow\) & \(\backslash 177\) & Plus/minus sign \\
\hline \(\backslash 144\) & \(=\) & \(\backslash 183\) & Middle dot \\
\hline \(\backslash 137\) & \(\Longrightarrow\) & \(\backslash 163\) & Pound sign \\
\hline \(\backslash 189\) & \(\Longrightarrow\) & \&dqml; & Double quote mark left \\
\hline \(\backslash 190\) & \(\Longrightarrow\) & \& dqmr; & Double quote mark right \\
\hline
\end{tabular}

\section*{Appendix A}

\section*{SGML DTDs}

This appendix contains the full source of the SGML -DTDs used by these corpora.

\section*{A. 1 TEI}

The TEI DTD that we use is the P3 TEI DTD modified as follows. We redefine the contents of special paragraphs (e.g. \(\langle\mathrm{q}\rangle\) ) to allow \(\langle\mathrm{p}\rangle\) and \#PCDATA inside them, i.e. we declare the entity specialPara to be:
```

<!ENTITY % specialPara '(\#PCDATA | %m.phrase | %m.inter |
%m.chunk)*'

```
instead of by:
```

<!ENTITY % specialPara '(((%m.chunk), (%component.seq)) |
```
    (\%paraContent))'

\section*{A. 2 Newspaper}

This DTD is used for the newspaper corpora (with the exception of the Italian). It is largely a subset of the TEI P3 with the exception of the \(<\) INDEX \(>\) element, which we use to keep non-printed information about the articles. As suggested by Nancy Ide, it would be preferable to use the TEI <KEYWORDS \(>\) element for this purpose.
```
<!ENTITY % txtchunks "(#PCDATA | corr | list | figure )*" >
<!-- The Corpus Header -->
<!-- TEI HEADER and PACKAGING -->
<!ELEMENT TEI.2 - - (teiheader, text) > 
<!ELEMENT TEIHEADER - - (filedesc, encodingdesc, profiledesc, revisiondesc) >
<!ELEMENT FILEDESC - - (titlestmt, editionstmt, extent,
        publicationstmt, sourcedesc)>
<!-- TITLESTMT - Title of file and associated information -->
<!ELEMENT TITLESTMT - - (title)>
<!ELEMENT TITLE - - (#PCDATA)>
<!ELEMENT EDITIONSTMT - - (edition)>
<!ELEMENT EDITION - - (#PCDATA)>
<!ELEMENT EXTENT - - (#PCDATA)>
<!ELEMENT PUBLICATIONSTMT - - (p*)>
<!ELEMENT SOURCEDESC - - (p*)>
<!-- ENCODINGDESC - description of markup used in this file -->
<!ELEMENT ENCODINGDESC - - (projectdesc, editorialdecl)>
<!ELEMENT PROJECTDESC - - (p*)>
<!ELEMENT EDITORIALDECL - - (p*)>
<!-- PROFILEDESC - what languages are used in this document -->
<!ELEMENT PROFILEDESC - - (langusage)>
<!ELEMENT LANGUSAGE - - (language)>
<!ELEMENT LANGUAGE - - (#PCDATA)>
<!ATTLIST LANGUAGE ID ID #REQUIRED>
<!-- REVISIONDESC - history of changes made to this file -->
<!ELEMENT REVISIONDESC - - (change+)>
<!ELEMENT CHANGE - - (date, respstmt+, item) >
<!ELEMENT RESPSTMT - - (name,resp) >
<!ELEMENT RESP - - (#PCDATA)>
```

```
<!-- TEXT -->
<!ELEMENT DIV2 - - (head|plbylinelopener|trailer|div3|note)* >
<!ATTLIST DIV2
\begin{tabular}{lll} 
N & CDATA & \#IMPLIED \\
TYPE & (articletext) & articletext >
\end{tabular}
```

```
<!ELEMENT DIV3 - - (head|plbyline)* >
<!ATTLIST DIV3
    N CDATA #IMPLIED
    TYPE (introduction|apoyolli) introduction >
<!ELEMENT NOTE - - (p)* >
<!ATTLIST NOTE
N CDATA \#IMPLIED
    TYPE (introduction) introduction >
<!-- Paragraphs -->
<!ELEMENT P - - (%txtchunks) >
<!ATTLIST P
                                    REND (TABULAR|NORMAL) NORMAL
                            N CDATA #TMPLIED >
<!-- Type=NORMAL Used to encode a normal paragraph of running text -->
<!-- Type=TABULAR Used to encode a certain kind of simple table -->
<!-- CORR Character errors noted and corrected by MLCC -->
<!ELEMENT CORR - - (#PCDATA) >
<!ATTLIST CORR
        RESP (MLCC) MLCC
        SIC CDATA #REQUIRED -- original text-->
<!-- BYLINE author -->
<!ELEMENT BYLINE - - (#PCDATA|name)* >
<!-- DATELINE -->
<!ELEMENT DATELINE - - (#PCDATA) >
<!-- DATE a date -->
<!ELEMENT DATE - - (#PCDATA) >
<!-- ITEM An item in a list -->
<!ELEMENT ITEM - - ((#PCDATA | list | p | figure | corr )*) >
<!ATTLIST ITEM
ID ID \#IMPLIED
        N CDATA #IMPLIED
        REF CDATA #IMPLIED
        REND (tabular|normal) normal>
<!-- FIGURE a table with more complex internal structure -->
<!-- FIGURE omitted photographs or tables -->
<!ELEMENT FIGURE - - (#PCDATA|head|figdesclp)* >
<!ATTLIST FIGURE
\begin{tabular}{lll} 
REND & (TABULAR) & TABULAR \\
N & CDATA & \#IMPLIED >
\end{tabular}
<!-- NAME The name of a person -->
```

```
<!ELEMENT NAME - - (#PCDATA | corr )* >
<!ATTLIST NAME
    type (person|place) person >
<!-- FIGDESC the body of a FIGURE -->
<!ELEMENT FIGDESC - - (#PCDATA) >
<!-- TRAILER -->
<!ELEMENT trailer - - (#PCDATA) >
<!-- BIBL -->
<!ELEMENT BIBL - - (PUBLISHER|EDITION|BIBLSCOPE|EXTENT)* >
<!ELEMENT PUBLISHER - - (#PCDATA) >
<!ELEMENT BIBLSCOPE - - (#PCDATA) >
<!-- Character entities -->
<!ENTITY amp "&" -- ampersand -->
<!ENTITY lab "&amp;lab;" -- left angle bracket -->
<!ENTITY rab "&amp;rab;" -- right angle bracket -->
<!ENTITY dia "&amp;dia;" -- diamond -->
<!-- end of file -->
```


## A. 3 Debates

```
<!-- SGML-Header for the Debates of the -->
<!-- European Parliament in MOPAS-format -->
<!ELEMENT debates - - (cover*,sitting+)
            +(headline|footnote|footref|
                                    pagerefllogoltable|speaker|
                                    party|language)>
<!ELEMENT cover - - (title?,p*)>
<!ELEMENT sitting - - (id?,contents?,p+,annex*)>
<!ELEMENT id - - (#PCDATA)>
<!ELEMENT contents - - (p+)>
<!ELEMENT annex - - (p+)>
<!ELEMENT (pltitle|headline|footnotel
        footreflspeaker|partyl
        language|pageref|logo|table) - - (#PCDATA)>
<!ENTITY footref "*">
<!ENTITY dqmr ",,">
<!ENTITY dqml ","">
<!ENTITY linesep "linesep">
<!ENTITY colsep "colsep">
<!ENTITY amp "&">
<!ENTITY parsep "***********">
<!ENTITY hyphen "-">
<!ENTITY vaigu "v'">
<!ENTITY lab "<">
<!ENTITY oelig "oe">
```


## A. 4 Formex6 DTD for JOCWQ corpus

The following DTD is a subset of the TEI P3 which describes the JOCWQ corpus. It may be of interest as a more precise definition of the JOCWQ markup. In order to use this DTD on the JOCWQ corpus, it is necessary to use the supplied command 'newtei' which uses a non-standard sgmls catalog file to redefine the TEI P3 DTD to this formex6 DTD.

```
<!-- Model DTD for the FORMEX encoded JOC corpus Version 6 -->
<!-- DTD for MLCC JOC WQ corpus -->
<!-- this is a subset of the TEI P3 DTD -->
<!-- includes a definition of the TEI header subset that we use -->
<!ENTITY % tichunks "(#PCDATA | abbr | q | sic | ref | rs | name |
    hi | date | corr)*" >
<!ENTITY % txtchunks "(#PCDATA | abbr | q | sic | ref | note |
    hi | corr | list | table | figure )*" >
<!-- TEI HEADER and PACKAGING -->
<!ELEMENT TEI.2 - - (teiheader, text) >
<!ELEMENT TEXT - - (body) >
<!ATTLIST TEXT ID ID #REQUIRED
                                LANG IDREF #REQUIRED>
<!ELEMENT BODY - - (divO) >
<!ELEMENT TEIHEADER - - (filedesc, encodingdesc, profiledesc, revisiondesc) >
<!ELEMENT FILEDESC - - (titlestmt, editionstmt, extent,
    publicationstmt, sourcedesc)>
<!-- TITLESTMT - Title of file and associated information -->
<!ELEMENT TITLESTMT - - (title)>
<!ELEMENT TITLE - - (#PCDATA)>
<!ELEMENT EDITIONSTMT - - (edition)>
<!ELEMENT EDITION - - (#PCDATA)>
<!ELEMENT EXTENT - - (#PCDATA)>
<!ELEMENT PUBLICATIONSTMT - - (p*)>
<!ELEMENT SOURCEDESC - - (p*)>
<!-- ENCODINGDESC - description of markup used in this file -->
<!ELEMENT ENCODINGDESC - - (projectdesc, editorialdecl)>
<!ELEMENT PROJECTDESC - - (p*)>
<!ELEMENT EDITORIALDECL - - (p*)>
```

```
<!-- PROFILEDESC - what languages are used in this document -->
```

<!-- PROFILEDESC - what languages are used in this document -->
<!ELEMENT PROFILEDESC - - (langusage)>
<!ELEMENT PROFILEDESC - - (langusage)>
<!ELEMENT LANGUSAGE - - (language)>
<!ELEMENT LANGUSAGE - - (language)>
<!ELEMENT LANGUAGE - - (#PCDATA)>
<!ELEMENT LANGUAGE - - (#PCDATA)>
<!ATTLIST LANGUAGE ID ID #REQUIRED>

```
<!ATTLIST LANGUAGE ID ID #REQUIRED>
```

```
<!-- REVISIONDESC - history of changes made to this file -->
<!ELEMENT REVISIONDESC - - (change+)>
<!ELEMENT CHANGE - - (date, respstmt+, item) >
<!ELEMENT RESPSTMT - - (name,resp) >
<!ELEMENT RESP - - (#PCDATA)>
<!-- THE DATA -->
<!-- DIVO a document -->
<!ELEMENT DIVO - - (head, div1*) >
<!ATTLIST DIVO
    TYPE (document) document >
<!-- DIV1 a record in the document -->
<!ELEMENT DIV1 - - (head, div2*) >
<!ATTLIST DIV1
    TYPE (record) record
    ID ID #TMPLIED >
<!-- DIV2 a Written Question -->
<!ELEMENT DIV2 - - (head+, div3*) >
<!ATTLIST DIV2
    TYPE (wqa | y) wqa >
<!-- WQA is a Written Question Answer -->
<!-- Y is a correction -->
<!-- DIV3 -->
<!ELEMENT DIV3 - - (head?, (div4+ | (p | q | list)*)) >
<!ATTLIST DIV3
        TYPE (body) body >
<!-- Second alternative is for type=Y only -->
<!-- DIV4 -->
<!ELEMENT DIV4 - - (#PCDATA, head, (P | q | #PCDATA )*) >
<!-- NB The #PCDATA element before the <HEAD> only ever contains a newline-->
<!ATTLIST DIV4
                            TYPE (q|r) q >
<!-- Type=q is a written question -->
<!-- Type=r is a reply to a written question -->
<!-- HEAD -->
<!ELEMENT HEAD - - (%tichunks;) -- title of div-->
<!ATTLIST HEAD
```

TYPE (OR | RECORD.BIBLIOGRAPHY | DOCUMENT.BIBLIOGRAPHY |
INFO | COLUMN.NOTE ) OR >

| <!-- Type=0R | Normal heads of <DIV4>s |
| :---: | :---: |
| <!-- Type=RECORD.BIBLIOGRAPHY | Bibliographic information attached to |
| $<!$ | a DIV1 describing a written question |
| <!-- Type=DOCUMENT.BIBLIOGRAPHY | Bibliographic information attached to |
| <!-- | a DIVO describing a document |
| <!-- Type=INFO | Attached to a DIV2, gives an identifier |
| <!-- | to a Written Question/Answer |
| <!-- Type=COLUMN. NOTE | The head in a list of column headings |
| <!-- | in a table |

<!-- P -->
<!ELEMENT P - - (\%txtchunks; ) >

<!ATTLIST P
REND (TABULARINORMAL) NORMAL
N CDATA \#TMPLIED >
```
<!-- Type=NORMAL Used to encode a normal paragraph of running text -->
```

<!-- Type=TABULAR Used to encode a certain kind of simple table -->
<!-- ABBR an abbreviation -->
<!ELEMENT ABBR - - (\#PCDATA | hi)* >

<!ATTLIST ABBR

REND (TAIL-SUPER|TAIL-SUB|NORMAL) NORMAL >
```
<!-- DATE a date -->
<!ELEMENT DATE - - (#PCDATA | abbr | sic )* >
<!-- REF footnote references -->
<!ELEMENT REF - - (#PCDATA | num | abbr)* >
<!ATTLIST REF
```

            N CDATA \#REQUIRED >
    <!-- NOTE footnotes -->
<!ELEMENT NOTE - - (\#PCDATA | num | abbr | q | sic)* >

<!ATTLIST NOTE

N CDATA \#REQUIRED >
<!-- RS An identifier for questions, only in titles -->
<!ELEMENT RS - - (\#PCDATA) >

<!ATTLIST RS
    TYPE (WQ) WQ >
<!-- HI Appears to show character rendition usually type=sup -->
<!-- for superscript characters ? -->
<!ELEMENT HI - - (\#PCDATA) >

<!ATTLIST HI
    REND (superlsub) \#REQUIRED >
```
<!-- Rend=SUPER Superscript -->
<!-- Rend=SUB Subscript -->
<!-- NAME The name of a person -->
<!ELEMENT NAME - - (#PCDATA | abbr | corr | ref | sic)* >
<!ATTLIST NAME
    type (person) person >
<!-- Q quoted material -->
<!-- occurs either (a) inside a paragraph or (b) at paragraph -->
<!-- level containing a number of paragraphs -->
<!ELEMENT Q - - (#PCDATA | p | abbr | ref | sic )* >
<!-- NUM Sequence Number for Footnotes -->
<!ELEMENT NUM - - (#PCDATA) >
<!-- SIC Errors marked by EPOCE usually in character codes -->
<!ELEMENT SIC - - (#PCDATA) >
<!-- CORR Character errors noted and corrected by MLCC -->
<!ELEMENT CORR - - (#PCDATA) >
<!ATTLIST CORR
    RESP (MLCC) MLCC
    SIC CDATA #REQUIRED -- original text-->
<!-- LIST A list of things -->
<!ELEMENT LIST - - (head?, item*) >
<!ATTLIST LIST
    TYPE (NORMAL|TABLE.COLUMN.HEADINGS|
                        TABLE.ROW.HEADINGS) NORMAL >
<!-- ITEM An item in a list -->
<!ELEMENT ITEM - - ((#PCDATA | list | p | q | ref )*) >
<!-- TABLE Tabular data -->
<!ELEMENT TABLE - - (row+) >
<!-- ROW a row of a table -->
<!ELEMENT ROW - - (cell+) >
<!-- CELL a cell of a table -->
<!ELEMENT CELL - - ((#PCDATA | ref )*) >
<!ATTLIST CELL
    N CDATA #IMPLIED >
<!-- FIGURE a table with more complex internal structure -->
<!ELEMENT FIGURE - - (head, figdesc) >
<!ATTLIST FIGURE
```

```
            REND (TABULAR) TABULAR
            N CDATA #REQUIRED >
<!-- FIGDESC the body of a FIGURE -->
<!ELEMENT FIGDESC - - (%txtchunks) >
<!-- Character entities -->
<!ENTITY amp "&">
<!ENTITY oelig "&amp;oelig;" -- oe as in (French) &oelig;vre -->
<!ENTITY mdash "&amp;mdash;" >
<!ENTITY ndash "&amp;ndash;" >
<!ENTITY dlqm "&amp;dlqm;" -- Double low quotation mark -->
<!ENTITY dqml "&amp;dqml;" -- Double quotation mark left -->
<!ENTITY dqmr "&amp;dqmr;" -- Double quotation mark right -->
<!ENTITY permil "&amp;permil;" -- permil sign (per 1000) 0/00 -->
<!ENTITY prime "&amp;prime;" -- ? occurs once in original markup -->
<!-- end of file -->
```


## Appendix B

## Licence Agreement forms

The following are the licence agreements which MLCC made with a number of newspapers. They are included here to act as an example of the kind of licence agreement which could be arranged between ELRA and the corpus data providers.

# B. 1 Example Agreement between Data Provider and the University of Edinburgh 

## Licence Agreement Form

Letter of Licence for Copyrighted Material

This letter describes the terms of an agreement between F.T. Business Enterprises Limited, whose signature appears below, and The University of Edinburgh, acting through the Human Communication Research Centre (HCRC), in which F.T. Business Enterprises Limited gives, free of charge, non-exclusive use of a machine-readable version of the copyrighted material described below to The University of Edinburgh, for the purposes of analysis. In particular, HCRC will analyse the materials with a view to investigating their suitability for inclusion in the text corpus being developed by the MLCC project.

The HCRC is a department of The University of Edinburgh which inter alia undertakes research into the automatic analysis of natural language texts. It is a partner in the Multilingual Corpora for Cooperation (mlcc) and Multilingual Text Tools and Corpora (multext) projects of the European Union.

The MLCC is an activity which collects machine readable text for the purpose of scientific and humanistic research, and distributes it at cost and without royalties.

The MULTEXT project is an activity which seeks to contribute to the development of generally usable software tools to manipulate and analyse text corpora and to create multilingual corpora with structural and linguistic markup.
Accordingly,

1. F.T. Business Enterprises Limited agrees to give The University of Edinburgh a machine-readable copy of the copyrighted material described below under (10) and licence to analyse it subject to the constraints specified below under (3) - (9).
2. F.T. Business Enterprises Limited hereby warrants that it has full right and authority to grant these presents and that the said copyrighted material is not subject to any third party right or interest.
3. The University of Edinburgh shall be licenced to use the material for the multext and MLCC projects subject to the provisions of this Agreement.
4. The University of Edinburgh shall be entitled to distribute copies of the material to the other partners in the MULTEXT project, subject to such partner entering into an agreement similar to this one, confining their use to analysis for research purposes and barring further redistribution.
5. This agreement shall come into effect on the 1 st November 1994 and shall terminate on the 31st July 1995 unless either party is in breach of the terms of this agreement. In the case of a material breach of this agreement either party may terminate forthwith upon written notice.
6. Both parties exclude all liability of whatsoever nature for direct, consequential or indirect loss, economic loss or loss of profit of whatsoever kind suffered by the other.
7. Upon termination of this agreement, unless another licence is in effect, The University of Edinburgh and multext partners shall delete all copies of this material.
8. Nothing in this agreement shall be deemed to vest in The University of Edinburgh any legal or beneficial rights in ownership of the material or in any other data supplied by F.T. Business Enterprises Limited which at all times shall remain the property of F.T. Business Enterprises Limited.
9. Neither party may assign, sub-contract or delegate the rights or obligations under this agreement without the prior written consent of the other, such consent not to be unreasonably withheld in case of an assignment of the full rights and obligations under this agreement by either party to a subsidiary or associated company.
10. The materials consist of the following machine-readable texts: The full text of the editorial content of the Financial Times 1st January 1993-31st December 1993.
(Signed)

> Date
F.T. Business Enterprises

Limited
(Signed)
Date $\qquad$
For The University of Edinburgh
List of multext partners:

- ISSCO, Geneva
- Digital Equipment B.V.
- Fundacion Bosch Grimpera, Universitat Central de Barcelona
- Arbeitsbereich Linguistik, Westfaelische Wilhelms-Universitaet Muenster
- Istituto di Linguistica Computazionale Consiglio Nazionale delle Richerche, University of Pisa
- Sonovision Itep Technologies, France
- SNI/SIETEC Systemtechnik, Muenchen
- Centro de Desarollo Software, Siemens-Nixdorf Sistemas de Informacion, Barcelona
- Department de Filologia, Universitat Autonoma de Barcelona
- Stichting Taaltechnologie, Utrecht Technology
- Rank Xerox Research Centre, France


## B. 2 Example Agreement between the University of Edinburgh and Data Users

Licence Agreement Form<br>Licence agreement between Edinburgh and multext partners for the mlcc Financial Times 1993 corpus

This letter describes the terms of an agreement between MULTEXT partner, and The University of Edinburgh, acting through the Human Communication Research Centre (HCRC), in which The University of Edinburgh gives, free of charge, non-exclusive use of a machinereadable version of the copyrighted material described below to MULTEXT partner, for the purposes of use within the multext and mlCc projects.

The HCRC is a department of The University of Edinburgh which inter alia undertakes research into the automatic analysis of natural language texts. It is a partner in the Multilingual Corpora for Cooperation (MLCc) and Multilingual Text Tools and Corpora (multext) projects of the European Union.

The MLCC is an activity which collects machine readable text for the purpose of scientific and humanistic research, and distributes it at cost and without royalties.

The Multext project is an activity which seeks to contribute to the development of generally usable software tools to manipulate and analyse text corpora and to create multilingual corpora with structural and linguistic markup.

Accordingly,

1. The University of Edinburgh agrees to give MULTEXT partner a machine-readable copy of the copyrighted material described below under (10) and licence to analyse it subject to the constraints specified below under (3)-(9).
2. The University of Edinburgh hereby warrants that it has full right and authority from F.T. Business Enterprises Limited to grant these presents.
3. MULTEXT partner shall be licenced to use the material only for the MULTEXT and MLCC projects subject to the provisions of this Agreement. MULTEXT partner further agrees not to redistribute any of the supplied material to any third parties.
4. MULTEXT partner agrees to respect the copyright on the supplied material, which is held by F.T. Business Enterprises Limited.
5. This agreement shall come into effect on the date of signing and shall terminate on the 31st July 1995 unless either party is in breach of the terms of this agreement. In the case of a material breach of this agreement either party may terminate forthwith upon written notice.
6. Upon termination of this agreement, unless another licence is in effect, MULTEXT partner shall delete all copies of this material in their possession.
7. Both parties exclude all liability of whatsoever nature for direct, consequential or indirect loss, economic loss or loss of profit of whatsoever kind suffered by the other.
8. Nothing in this agreement shall be deemed to vest in The University of Edinburgh or in MULTEXT partner any legal or beneficial rights in ownership of the material or in any other data supplied by F.T. Business Enterprises Limited which at all times shall remain the property of F.T. Business Enterprises Limited.
9. Neither party may assign, sub-contract or delegate the rights or obligations under this agreement without the prior written consent of the other, such consent not to be unreasonably withheld in case of an assignment of the full rights and obligations under this agreement by either party to a subsidiary or associated company.
10. The materials consist of the following machine-readable texts: The full text of the editorial content of the Financial Times 1st January 1993-31st December 1993 (copyright 1993 F.T. Business Enterprises Limited).
(Signed) $\qquad$ Date
MULTEXT partner
(Signed) Date
For The University of
Edinburgh

## Appendix C

## Full list of data on tape(s)

This section gives a complete listing of the files provided as the mLCc deliverable. The final deliverables of the Multilingual Corpora for Cooperation (MLCC ) project consist of the following data:

## C. 1 Toplevel files

00COPYRIGHT Text file containing an overview of the current state of the copyright/distribution rights of the various corpora.

00FILELIST.tex Latex format file containing complete inventory of contents of the MLCC Corpus.

00README Introductory file.
00REPORT.tex This Latex report on the MLCC project.
00TODO A text file itemizing actions which still need to be done. 'Should' be empty by the time you get this data.

MLCC-DUTCH Corpus of articles from the Dutch financial newspaper Het Financieel Dagblad, consisting of the editorial content Het Financieel Dagblad of alternate weeks in 1992 and 1993. $(\mathrm{DTD}=$ newspaper.dtd $)$

MLCC-ENGLISH Corpus of articles from the British financial newspaper The Financial Times editions from the year 1993. (DTD = newspaper.dtd)

MLCC-FRENCH Corpus of articles from the French newspaper Le Monde, consisting of two years (1992-1993) of extracts from the Le Monde, being articles with category codes ECO, MDE and INI, approximately ten million words. (DTD $=$ newspaper.dtd)

MLCC-GERMAN Corpus of articles from the German financial newspaper Handelsblatt from the years 1986-1988. (DTD $=$ newspaper.dtd)

MLCC-ITALIAN Articles from the Italian financial newspaper Il Sole 24 Ore covering the years 92/93. $(\mathrm{DTD}=$ tei2. dtd$)$

MLCC-SPANISH Corpus of articles from the Spanish newspaper Expansion from 21/10/91 $-24 / 10 / 91$ and the year 1994. $($ DTD $=$ newspaper.dtd $)$

MLCC-JOCWQ Corpus of extracts from the Journal of the European Commission, Written Questions (1993). This corpus contains written questions asked by members of the European Parliament and their corresponding answers from the European Commission. The corpus is in 9 parallel versions (languages: Danish, Dutch, English, French, German, Greek, Italian, Portuguese and Spanish ). (DTD = tei2.dtd)

MLCC-DEBATES Corpus of European Parliamentary debates from the year 1992-1994. $($ DTD $=$ debates.dtd $)$

BIN Various small programs for accessing the data.
DTD DTDs and other SGML -related data files.

## C. 2 Sub-corpus structure

Each sub-corpus directory contains the following structure:

00COPYRIGHT File containing details of the copyright holder and distribution rights.
OOREADME File containing overall description of the corpus.
licence Directory containing licence agreements.
data Directory containing the SGML marked-up corpus.
editdecl.txt File describing the markup of the corpus and its conversion from the original corpus.
orig Directory containing the original text of the corpus.
prep Directory containing software and details of the markup/SGML conversion process.
doc.tex LATEX documentation file (a chapter of 00REPORT.tex)
doc.body File containing text body of doc.tex.

## C. 3 Full file listing

Numbers occuring before file names are file sizes in kilobytes.

| MLCC-RELEASE: total 628 |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 4 | 00COPYRIGHT | 1 | BIN | 1 | MLCC-GERMAN |
| 0 | 00FILELIST.tex | 1 | DTD | 1 | MLCC-ITALIAN |
| 4 | 00README | 1 | MLCC-DEBATES | 1 | MLCC-JOCWQ |
| 568 | 00REPORT.ps | 1 | MLCC-DUTCH | 1 | MLCC-SPANISH |
| 41 | 00REPORT.tex | 1 | MLCC-ENGLISH |  |  |
| 1 | 00TODO | 1 | MLCC-FRENCH |  |  |


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MLCC-RELEASE/BIN: total 6$1 \quad 00$ README1 |  |  |  |  |  |
| 1 | 00README <br> check-conform | make-filelist |  | textonly |  |
| MLCC-RELEASE/DTD: total 25 |  |  |  |  |  |
| 1 | 00README 3 | deb | ates.dtd |  | newspaper.txt |
| 6 | catalog | deba | tes.dtd.orig |  | p3-dtd |
| 1 | chars.ent 5 | new | spaper.dtd |  | sgmldecl.tei |
| MLCC-RELEASE/DTD/p3-dtd: total 335 |  |  |  |  |  |
| 3 | p2ents.dtd | 1 | teifig2.ent | 3 | 3 teishd2.dtd |
| 4 | p3x.dtd | 4 | teifron2.dtd | 5 | teispok2.dtd |
| 2 | p3xents.dtd | 9 | teifs2.dtd | 2 | 2 teispok2.ent |
| 3 | sgmldecl.tei | 8 | teifsd2.dtd | 9 | 9 teistr2.dtd |
| 9 | tei2.dtd | 1 | teigen2.dtd | 6 | 6 teitc2.dtd |
| 5 | teiana2.dtd | 15 | teigis2.ent | 2 | 2 teitc2.ent |
| 1 | teiana2.ent | 25 | teihdr2.dtd | 3 | 3 teite2f.dtd |
| 1 | teiback2.dtd | 3 | teikey2.ent | 4 | 4 teite2n.dtd |
| 2 | teicert2.dtd | 8 | teilink2.dtd | 2 | 2 teiterm2.dtd |
| 22 | teiclas2.ent | 3 | teilink2.ent | 2 | 2 teiterm2.ent |
| 21 | teiclas2.ent.orig | - 1 | teimix2.dtd | 7 | 7 teitran2.dtd |
| 30 | teicore2.dtd | 10 | teind2.dtd |  | 1 teitran2.ent |
| 10 | teicorp2.dtd | 2 | teind2.ent | 12 | 2 teitsd2.dtd |
| 15 | teidict2.dtd | 6 | teinet2.dtd |  | 2 teitsd2a.dtd |
| 5 | teidict2.ent | 7 | teiphys2.dtd | 11 | 1 teitsd2b.dtd |
| 6 | teidram2.dtd | 1 | teiphys2.ent |  | 3 teivers2.dtd |
| 1 | teidram2.ent |  | teipl2.dtd |  | 2 teivers2.ent |
| 3 | teifig2.dtd | 2 | teipros2.dtd |  | 8 teiwsd2.dtd |

## C.3.1 Parallel Debates Corpus

MLCC-RELEASE/MLCC-DEBATES: total 36
1 00COPYRIGHT 16 doc.body 1 orig
12 00README 1 doc.tex 1 prep

1 00TODO 1 editdecl.txt
1 data 1 manmod
MLCC-RELEASE/MLCC-DEBATES/data: total 16
10 bernou 2 tapesascii 4 tapesmopas

MLCC-RELEASE/MLCC-DEBATES/data/bernou: total 64459
640 deb930419-23.da.sgm.gz 712 deb940207-11.de.sgm.gz

624 deb930419-23.en.sgm.gz 768 deb940207-11.el.sgm.gz
672 deb930419-23.es.sgm.gz 632 deb940207-11.en.sgm.gz
672 deb930419-23.nl.sgm.gz
664 deb930419-23.pt.sgm.gz
648 deb930524-28.da.sgm.gz
632 deb930524-28.en.sgm.gz
680 deb940207-11.es.sgm.gz
696 deb940207-11.fr.sgm.gz
664 deb940207-11.it.sgm.gz
680 deb940207-11.nl.sgm.gz
deb940207-11.pt.sgm.gz
deb940223-24.da.sgm.gz
deb940223-24.de.sgm.gz
deb940223-24.el.sgm.gz
deb940223-24.en.sgm.gz
deb940223-24.es.sgm.gz
deb940223-24.fr.sgm.gz
deb940223-24.it.sgm.gz
deb940223-24.nl.sgm.gz
deb940223-24.pt.sgm.gz
deb940307-07.da.sgm.gz
deb940307-07.de.sgm.gz
deb940307-07.el.sgm.gz
deb940307-07.en.sgm.gz
deb940307-07.es.sgm.gz
deb940307-07.fr.sgm.gz
deb940307-07.it.sgm.gz
deb940307-07.nl.sgm.gz
deb940307-07.pt.sgm.gz
deb940308-11.da.sgm.gz
deb940308-11.de.sgm.gz
deb940308-11.el.sgm.gz
deb940308-11.en.sgm.gz
deb940308-11.es.sgm.gz
deb940308-11.fr.sgm.gz
deb940308-11.it.sgm.gz
deb940308-11.nl.sgm.gz
deb940308-11.pt.sgm.gz
deb940323-24.da.sgm.gz
deb940323-24.de.sgm.gz
deb940323-24.el.sgm.gz
deb940323-24.en.sgm.gz
deb940323-24.es.sgm.gz
deb940323-24.fr.sgm.gz
deb940323-24.it.sgm.gz
deb940323-24.nl.sgm.gz
deb940323-24.pt.sgm.gz
deb940418-22.da.sgm.gz
deb940418-22.de.sgm.gz
deb940418-22.el.sgm.gz
deb940418-22.en.sgm.gz
deb940418-22.es.sgm.gz
deb940418-22.fr.sgm.gz
deb940418-22.it.sgm.gz
deb940418-22.nl.sgm.gz
deb940418-22.pt.sgm.gz
deb940502-06.da.sgm.gz
deb940502-06.de.sgm.gz
deb940502-06.el.sgm.gz
deb940502-06.en.sgm.gz
deb940502-06.es.sgm.gz
deb940502-06.fr.sgm.gz
deb940502-06.it.sgm.gz
648

| MLCC-RELEASE/MLCC-DEBATES/data/tapesascii: total 141 |  |  |  |
| ---: | :--- | :--- | :--- |
| 344 | deb920113-17.en.sgm.gz | 648 | deb920914-18.fr.sgm.gz |
| 368 | deb920113-17.fr.sgm.gz | 680 | deb921026-30.fr.sgm.gz |
| 544 | deb920210-14.en.sgm.gz | 672 | deb921116-20.fr.sgm.gz |
| 600 | deb920210-14.fr.sgm.gz | 680 | deb921214-18.fr.sgm.gz |
| 72 | deb920309-09.en.sgm.gz | 696 | deb930118-22.fr.sgm.gz |
| 79 | deb920309-09.fr.sgm.gz | 648 | deb930208-12.fr.sgm.gz |
| 448 | deb920310-13.en.sgm.gz | 112 | deb930308-08.fr.sgm.gz |
| 496 | deb920310-13.fr.sgm.gz | 624 | deb930309-12.fr.sgm.gz |
| 544 | deb920406-10.en.sgm.gz | 648 | deb930419-23.fr.sgm.gz |
| 600 | deb920406-10.fr.sgm.gz | 656 | deb930524-28.fr.sgm.gz |
| 632 | deb920511-15.fr.sgm.gz | 664 | deb930621-25.fr.sgm.gz |
| 632 | deb920608-12.fr.sgm.gz | 704 | deb930712-16.fr.sgm.gz |
| 680 | deb920706-10.fr.sgm.gz | 672 | deb930913-17.fr.sgm.gz |

MLCC-RELEASE/MLCC-DEBATES/data/tapesmopas: total 31192

| 384 | deb920113-17.es.sgm.gz | 704 | deb921116-20.es.sgm.gz |
| :--- | :--- | :--- | :--- |
| 384 | deb920113-17.nl.sgm.gz | 704 | deb921116-20.nl.sgm.gz |
| 624 | deb920210-14.es.sgm.gz | 672 | deb921214-18.da.sgm.gz |
| 624 | deb920210-14.nl.sgm.gz | 656 | deb921214-18.en.sgm.gz |
| 592 | deb920310-13.es.sgm.gz | 712 | deb921214-18.es.sgm.gz |
| 592 | deb920310-13.nl.sgm.gz | 704 | deb921214-18.nl.sgm.gz |
| 624 | deb920406-10.es.sgm.gz | 688 | deb930118-22.da.sgm.gz |
| 624 | deb920406-10.nl.sgm.gz | 720 | deb930118-22.es.sgm.gz |
| 608 | deb920511-15.en.sgm.gz | 720 | deb930118-22.nl.sgm.gz |
| 664 | deb920511-15.es.sgm.gz | 712 | deb930118-22.pt.sgm.gz |
| 656 | deb920511-15.nl.sgm.gz | 664 | deb930128-22.en.sgm.gz |
| 608 | deb920605-12.en.sgm.gz | 640 | deb930208-12.da.sgm.gz |
| 656 | deb920608-11.nl.sgm.gz | 624 | deb930208-12.en.sgm.gz |
| 656 | deb920608-12.es.sgm.gz | 672 | deb930208-12.es.sgm.gz |
| 656 | deb920706-10.en.sgm.gz | 680 | deb930208-12.nl.sgm.gz |
| 704 | deb920706-10.es.sgm.gz | 672 | deb930208-12.pt.sgm.gz |
| 704 | deb920706-10.nl.sgm.gz | 112 | deb930308-08.da.sgm.gz |
| 624 | deb920914-18.en.sgm.gz | 96 | deb930308-08.en.sgm.gz |
| 680 | deb920914-18.es.sgm.gz | 112 | deb930308-08.es.sgm.gz |
| 680 | deb920914-18.nl.sgm.gz | 120 | deb930308-08.nl.sgm.gz |
| 672 | deb921026-30.da.sgm.gz | 120 | deb930308-08.pt.sgm.gz |
| 656 | deb921026-30.en.sgm.gz | 720 | deb930309-12.da.sgm.gz |
| 712 | deb921026-30.es.sgm.gz | 600 | deb930309-12.en.sgm.gz |
| 712 | deb921026-30.nl.sgm.gz | 656 | deb930309-12.es.sgm.gz |
| 664 | deb921116-20.da.sgm.gz | 656 | deb930309-12.nl.sgm.gz |
| 648 | deb921116-20.en.sgm.gz | 648 | deb930309-12.pt.sgm.gz |

MLCC-RELEASE/MLCC-DEBATES/manmod: total 6
4 bernou 2 tapesmopas

MLCC-RELEASE/MLCC-DEBATES/manmod/bernou: total 90000

| 64 | deb01a94.da.mod.Z | 160 | deb03c94.en.mod.Z | 288 | deb07a94.es.mod.Z |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 928 | deb01a94.de.mod.Z | 176 | deb03c94.es.mod.Z | 304 | deb07a94.fr.mod.Z |
| 1088 | deb01a94.el.mod.Z | 184 | deb03c94.fr.mod.Z | 280 | deb07a94.it.mod.Z |
| 816 | deb01a94.en.mod.Z | 168 | deb03c94.it.mod.Z | 280 | deb07a94.nl.mod.Z |
| 904 | deb01a94.es.mod.Z | 168 | deb03c94.ne.mod.Z | 296 | deb07a94.pt.mod.Z |
| 936 | deb01a94.fr.mod.Z | 176 | deb03c94.po.mod.Z | 856 | deb09a93.da.mod.Z |
| 864 | deb01a94.it.mod.Z | 912 | deb04a93.da.mod.Z | 808 | deb09a93.en.mod.Z |
| 888 | deb01a94.ne.mod.Z | 856 | deb04a93.en.mod.Z | 912 | deb09a93.es.mod.Z |
| 920 | deb01a94.po.mod.Z | 944 | deb04a93.es.mod.Z | 880 | deb09a93.ne.mod.Z |
| 904 | deb02a94.da.mod.Z | 928 | deb04a93.ne.mod.Z | 920 | deb09a93.po.mod.Z |
| 976 | deb02a94.de.mod.Z | 952 | deb04a93.po.mod.Z | 168 | deb09b93.da.mod.Z |
| 1120 | deb02a94.el.mod.Z | 880 | deb04a94.da.mod.Z | 168 | deb09b93.en.mod.Z |
| 856 | deb02a94.en.mod.Z | 976 | deb04a94.de.mod.Z | 176 | deb09b93.es.mod.Z |
| 936 | deb02a94.es.mod.Z | 1128 | deb04a94.el.mod.Z | 192 | deb09b93.fr.mod.Z |
| 968 | deb02a94.fr.mod.Z | 832 | deb04a94.en.mod.Z | 176 | deb09b93.ne.mod.Z |
| 880 | deb02a94.it.mod.Z | 928 | deb04a94.es.mod.Z | 184 | deb09b93.po.mod.Z |
| 920 | deb02a94.ne.mod.Z | 984 | deb04a94.fr.mod.Z | 184 | deb10a93.da.mod.Z |
| 952 | deb02a94.po.mod.Z | 888 | deb04a94.it.mod.Z | 176 | deb10a93.en.mod.Z |
| 184 | deb02b94.da.mod.Z | 896 | deb04a94.ne.mod.Z | 184 | deb10a93.es.mod.Z |
| 192 | deb02b94.de.mod.Z | 952 | deb04a94.po.mod.Z | 200 | deb10a93.fr.mod.Z |
| 216 | deb02b94.el.mod.Z | 920 | deb05a93.da.mod.Z | 184 | deb10a93.ne.mod.Z |
| 168 | deb02b94.en.mod.Z | 864 | deb05a93.en.mod.Z | 192 | deb10a93.po.mod.Z |
| 184 | deb02b94.es.mod.Z | 968 | deb05a93.es.mod.Z | 904 | deb10b93.da.mod.Z |
| 192 | deb02b94.fr.mod.Z | 920 | deb05a93.ne.mod.Z | 840 | deb10b93.en.mod.Z |
| 176 | deb02b94.it.mod.Z | 968 | deb05a93.po.mod.Z | 944 | deb10b93.es.mod.Z |
| 184 | deb02b94.ne.mod.Z | 864 | deb05a94.da.mod.Z | 976 | deb10b93.fr.mod.Z |
| 18 | deb02b94.po.mod.Z | 944 | deb05a94.de.mod.Z | 912 | deb10b93.ne.mod.Z |
| 144 | deb03a94.da.mod.Z | 1080 | deb05a94.el.mod.Z | 976 | deb10b93.po.mod.Z |
| 152 | deb03a94.de.mod.Z | 816 | deb05a94.en.mod.Z | 848 | deb11a93.da.mod.Z |
| 176 | deb03a94.el.mod.Z | 896 | deb05a94.es.mod.Z | 792 | deb11a93.en.mod.Z |
| 136 | deb03a94.en.mod.Z | 944 | deb05a94.fr.mod.Z | 880 | deb11a93.es.mod.Z |
| 152 | deb03a94.es.mod.Z | 872 | deb05a94.it.mod.Z | 904 | deb11a93.fr.mod.Z |
| 152 | deb03a94.fr.mod.Z | 880 | deb05a94.ne.mod.Z | 880 | deb11a93.ne.mod.Z |
| 144 | deb03a94.it.mod.Z | 920 | deb05a94.po.mod.Z | 912 | deb11a93.po.mod.Z |
| 144 | deb03a94.ne.mod.Z | 920 | deb06a93.da.mod.Z | 184 | deb12a93.da.mod.Z |
| 152 | deb03a94.po.mod.Z | 856 | deb06a93.en.mod.Z | 184 | deb12a93.en.mod.Z |
| 696 | deb03b94.da.mod.Z | 960 | deb06a93.es.mod.Z | 192 | deb12a93.es.mod.Z |
| 752 | deb03b94.de.mod.Z | 944 | deb06a93.ne.mod.Z | 200 | deb12a93.fr.mod.Z |
| 864 | deb03b94.el.mod.Z | 984 | deb06a93.po.mod.Z | 192 | deb12a93.ne.mod.Z |
| 656 | deb03b94.en.mod.Z | 976 | deb07a93.da.mod.Z | 200 | deb12a93.po.mod.Z |
| 720 | deb03b94.es.mod.Z | 920 | deb07a93.en.mod.Z | 864 | deb12b93.da.mod.Z |
| 760 | deb03b94.fr.mod.Z | 1032 | deb07a93.es.mod.Z | 824 | deb12b93.en.mod.Z |
| 720 | deb03b94.it.mod.Z | 1016 | deb07a93.ne.mod.Z | 904 | deb12b93.es.mod.Z |
| 720 | deb03b94.ne.mod.Z | 1048 | deb07a93.po.mod.Z | 936 | deb12b93.fr.mod.Z |
| 744 | deb03b94.po.mod.Z | 280 | deb07a94.da.mod.Z | 880 | deb12b93.ne.mod.Z |
| 168 | deb03c94.da.mod.Z | 304 | deb07a94.de.mod.Z | 912 | deb12b93.po.mod.Z |
| 184 | deb03c94.de.mod.Z | 352 | deb07a94.el.mod.Z |  |  |
| 224 | deb03c94.el.mod.Z | 256 | deb07a94.en.mod.Z |  |  |

MLCC-RELEASE/MLCC-DEBATES/manmod/tapesmopas: total 41203

| 480 | 378.1.mod.Z | 816 | 381.3.mod.Z | 744 | 386.4.mod.Z |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 768 | $378.2 . \bmod . Z$ | 864 | 381.4.mod.Z | 128 | 386.5.mod.Z |
| 720 | $378.3 . \mathrm{mod} . \mathrm{Z}$ | 824 | 382.1.mod.Z | 848 | 387.1.mod.Z |
| 6 | 378.3a.mod.Z | 888 | 382.2 .mod.Z | 856 | 387.2 .mod.Z |
| 760 | 378.4.mod.Z | 856 | 382.3 .mod.Z | 872 | 387.3.mod.Z |
| 792 | $378.5 . \mathrm{mod} . \mathrm{Z}$ | 896 | 382.4.mod.Z | 808 | 387.4.mod.Z |
| 496 | 379.1.mod.Z | 2600 | 383.1.rainbow.Z | 144 | 387.5.mod.Z |
| 784 | 379.2.mod.Z | 848 | 384.1.mod.Z | 928 | 388.1.mod.Z |
| 752 | 379.3.mod.Z | 840 | 384.2.mod.Z | 840 | 388.2 .mod.Z |
| 5 | 379.3a.mod.Z | 856 | 384.3.mod.Z | 144 | 388.3.mod.Z |
| 792 | 379.4.mod.Z | 864 | 384.4.mod.Z | 840 | 388.4.mod.Z |
| 816 | $379.5 . \mathrm{mod} . \mathrm{Z}$ | 888 | 385.1.mod.Z | 792 | 389.1.mod.Z |
| 736 | 380.1.mod.Z | 896 | 385.2 .mod.Z | 136 | 389.2.mod.Z |
| 728 | 380.2 .mod.Z | 896 | 385.3.mod.Z | 912 | 389.3.mod.Z |
| 792 | $380.3 . \mathrm{mod} . Z$ | 832 | 385.4.mod.Z | 736 | 390.1.mod.Z |
| 752 | 380.4.mod.Z | 144 | $385.5 . \mathrm{mod}$. Z | 824 | 391.1.mod.Z |
| 808 | $380.5 . \mathrm{mod} . \mathrm{Z}$ | 784 | 386.1.mod.Z | 800 | 392.1.mod.Z |
| 800 | 381.1.mod.Z | 808 | 386.2 .mod.Z |  |  |
| 856 | 381.2.mod.Z | 808 | 386.3 .mod.Z |  |  |

MLCC-RELEASE/MLCC-DEBATES/orig: total 10
4 bernou 1 diskettes 2 newtapes 1 tapesascii 2 tapesmopas

|  |  |  | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 00README | 232 | deb03c94.elz | 304 | deb07a94.enz |
| 952 | deb01a94.daz | 184 | deb03c94.enz | 328 | deb07a94.esz |
| 1048 | deb01a94.dez | 192 | deb03c94.esz | 344 | deb07a94.frz |
| 1176 | deb01a94.elz | 200 | deb03c94.frz | 328 | deb07a94.itz |
| 920 | deb01a94.enz | 192 | deb03c94.itz | 328 | deb07a94.nlz |
| 1008 | deb01a94.esz | 192 | deb03c94.nez | 336 | deb07a94.ptz |
| 1032 | deb01a94.frz | 192 | deb03c94.poz | 944 | deb09a93.daz |
| 960 | deb01a94.itz | 984 | deb04a93.daz | 920 | deb09a93.enz |
| 1000 | deb01a94.nez | 960 | deb04a93.enz | 1000 | deb09a93.esz |
| 1000 | deb01a94.poz | 1056 | deb04a93.esz | 1000 | deb09a93.nez |
| 992 | deb02a94.daz | 1048 | deb04a93.nez | 1008 | deb09a93.poz |
| 1104 | deb02a94.dez | 1048 | deb04a93.poz | 192 | deb09b93.daz |
| 1216 | deb02a94.elz | 976 | deb04a94.daz | 192 | deb09b93.enz |
| 960 | deb02a94.enz | 1072 | deb04a94.dez | 200 | deb09b93.esz |
| 1048 | deb02a94.esz | 1192 | deb04a94.elz | 208 | deb09b93.frz |
| 1080 | deb02a94.frz | 944 | deb04a94.enz | 200 | deb09b93.nez |
| 1016 | deb02a94.itz | 1024 | deb04a94.esz | 208 | deb09b93.poz |
| 1048 | deb02a94.nez | 1072 | deb04a94.frz | 200 | deb10a93.daz |
| 1056 | deb02a94.poz | 1008 | deb04a94.itz | 200 | deb10a93.enz |
| 200 | deb02b94.daz | 1016 | deb04a94.nez | 208 | deb10a93.esz |
| 208 | deb02b94.dez | 1040 | deb04a94.poz | 224 | deb10a93.frz |
| 240 | deb02b94.elz | 992 | deb05a93.daz | 216 | deb10a93.nez |
| 192 | deb02b94.enz | 968 | deb05a93.enz | 216 | deb10a93.poz |
| 208 | deb02b94.esz | 1056 | deb05a93.esz | 992 | deb10b93.daz |
| 208 | deb02b94.frz | 1048 | deb05a93.nez | 968 | deb10b93.enz |
| 200 | deb02b94.itz | 1064 | deb05a93.poz | 1056 | deb10b93.esz |
| 208 | deb02b94.nez | 960 | deb05a94.daz | 1088 | deb10b93.frz |
| 200 | deb02b94.poz | 1064 | deb05a94.dez | 1040 | deb10b93.nez |
| 152 | deb03a94.daz | 1168 | deb05a94.elz | 1064 | deb10b93.poz |
| 168 | deb03a94.dez | 928 | deb05a94.enz | 936 | deb11a93.daz |
| 184 | deb03a94.elz | 1008 | deb05a94.esz | 912 | deb11a93.enz |
| 144 | deb03a94.enz | 1040 | deb05a94.frz | 984 | deb11a93.esz |
| 160 | deb03a94.esz | 992 | deb05a94.itz | 1008 | deb11a93.frz |
| 168 | deb03a94.frz | 1008 | deb05a94.nez | 992 | deb11a93.nez |
| 160 | deb03a94.itz | 1016 | deb05a94.poz | 984 | deb11a93.poz |
| 160 | deb03a94.nez | 1008 | deb06a93.daz | 208 | deb12a93.daz |
| 160 | deb03a94.poz | 992 | deb06a93.enz | 208 | deb12a93.enz |
| 760 | deb03b94.daz | 1080 | deb06a93.esz | 208 | deb12a93.esz |
| 840 | deb03b94.dez | 1072 | deb06a93.nez | 216 | deb12a93.frz |
| 936 | deb03b94.elz | 1080 | deb06a93.poz | 216 | deb12a93.nez |
| 744 | deb03b94.enz | 1072 | deb07a93.daz | 216 | deb12a93.poz |
| 808 | deb03b94.esz | 1048 | deb07a93.enz | 960 | deb12b93.daz |
| 840 | deb03b94.frz | 1144 | deb07a93.esz | 928 | deb12b93.enz |
| 808 | deb03b94.itz | 1144 | deb07a93.nez | 1008 | deb12b93.esz |
| 808 | deb03b94.nez | 1144 | deb07a93.poz | 1024 | deb12b93.frz |
| 816 | deb03b94.poz | 320 | deb07a94.daz | 1008 | deb12b93.nez |
| 184 | deb03c94.daz | 344 | deb07a94.dez | 1008 | deb12b93.poz |
| 208 | deb03c94.dez | 392 | deb07a94.el |  |  |

MLCC-RELEASE/MLCC-DEBATES/orig/diskettes: total 6
1 dadisks 3 dedisks 2 eldisks

MLCC-RELEASE/MLCC-DEBATES/orig/diskettes/dadisks: total 5037

| 392 | ep3_413.da.Z | 496 | ep3_417.da1.Z | 176 | ep3_419.da2.Z |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 480 | ep3_414.da1.Z | 144 | ep3_417.da2.Z | 504 | ep3_420.da1.Z |
| 168 | ep3_414.da2.Z | 488 | ep3_418.da1.Z | 216 | ep3_420.da2.Z |
| 85 | ep3_415.da.Z | 184 | ep3_418.da2.Z | 256 | ep3_421.da1.Z |
| 512 | ep3_416.da.Z | 496 | ep3_419.da1.Z | 440 | ep3_421.da2.Z |

MLCC-RELEASE/MLCC-DEBATES/orig/diskettes/dedisks: total 18176

| 11 | 00README | 41 | 3-421.500.Z | 320 | 3-431.400.Z |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 3-413.100.Z | 2 | 3-421.600.Z | 39 | 3-431.500.Z |
| 17 | 3-413.200.Z | 136 | 3-423.100.Z | 2 | 3-431.600.Z |
| 224 | 3-413.300.Z | 208 | 3-423.200.Z | 128 | 3-432.100.Z |
| 136 | 3-413.400.Z | 328 | 3-423.300.Z | 160 | 3-432.200.Z |
| 63 | 3-413.500.Z | 112 | 3-423.400.Z | 280 | 3-432.300.Z |
| 2 | 3-413.600.Z | 71 | 3-423.500.Z | 160 | 3-432.400.Z |
| 81 | 3-414.100.Z | 2 | 3-423.600.Z | 78 | 3-432.500.Z |
| 184 | 3-414.200.Z | 136 | 3-424.100.Z | 2 | 3-432.600.Z |
| 280 | 3-414.300.Z | 184 | 3-424.200.Z | 128 | 3-433.100.Z |
| 152 | 3-414.400.Z | 280 | 3-424.300.Z | 200 | 3-433.200.Z |
| 35 | 3-414.500.Z | 168 | 3-424.400.Z | 296 | 3-433.300.Z |
| 2 | 3-414.600.Z | 69 | 3-424.500.Z | 176 | 3-433.400.Z |
| 94 | 3-415.100.Z | 3 | 3-424.600.Z | 69 | 3-433.500.Z |
| 1 | 3-415.200.Z | 128 | 3-425.100.Z | 2 | 3-433.600.Z |
| 168 | 3-416.200.Z | 184 | 3-425.200.Z | 78 | 3-434.100.Z |
| 248 | 3-416.300.Z | 296 | 3-425.300.Z | 184 | 3-434.200.Z |
| 160 | 3-416.400.Z | 168 | 3-425.400.Z | 272 | 3-434.300.Z |
| 35 | 3-416.500.Z | 73 | 3-425.500.Z | 168 | 3-434.400.Z |
| 2 | 3-416.600.Z | 2 | 3-425.600.Z | 51 | 3-434.500.Z |
| 120 | 3-417.100.Z | 128 | 3-426.100.Z | 2 | 3-434.600.Z |
| 152 | 3-417.200.Z | 192 | 3-426.200.Z | 144 | 3-435.100.Z |
| 280 | 3-417.300.Z | 288 | 3-426.300.Z | 1 | 3-435.200.Z |
| 144 | 3-417.400.Z | 176 | 3-426.400.Z | 79 | 3-436.100.Z |
| 30 | 3-417.500.Z | 73 | 3-426.500.Z | 74 | 3-436.200.Z |
| 2 | 3-417.600.Z | 2 | 3-426.600.Z | 1 | 3-436.300.Z |
| 128 | 3-418.100.Z | 120 | 3-427.100.Z | 120 | 3-437.100.Z |
| 176 | 3-418.200.Z | 192 | 3-427.200.Z | 168 | 3-437.200.Z |
| 272 | 3-418.300.Z | 496 | 3-427.300.Z | 304 | 3-437.300.Z |
| 144 | 3-418.400.Z | 168 | 3-427.400.Z | 152 | 3-437.400.Z |
| 67 | 3-418.500.Z | 50 | 3-427.500.Z | 53 | 3-437.500.Z |
| 3 | 3-418.600.Z | 2 | 3-427.600.Z | 2 | 3-437.600.Z |
| 120 | 3-419.100.Z | 128 | 3-428.100.Z | 120 | 3-438.100.Z |
| 168 | 3-419.200.Z | 1 | 3-428.600.Z | 168 | 3-438.200.Z |
| 296 | 3-419.300.Z | 192 | 3-429.200.Z | 232 | 3-438.300.Z |
| 152 | 3-419.400.Z | 328 | 3-429.300.Z | 168 | 3-438.400.Z |
| 55 | 3-419.500.Z | 168 | 3-429.400.Z | 66 | 3-438.500.Z |
| 2 | 3-419.600.Z | 76 | 3-429.500.Z | 2 | 3-438.600.Z |
| 120 | 3-420.100.Z | 2 | 3-429.600.Z | 94 | 3-439.100.Z |
| 184 | 3-420.200.Z | 120 | 3-430.100.Z | 62 | 3-439.200.Z |
| 288 | $3-420.300 . Z$ | 192 | $3-430.200 . Z$ | 1 | 3-439.300.Z |
| 168 | $3-420.400 . Z$ | 320 | $3-430.300 . Z$ | 112 | 3-440.100.Z |
| 76 | $3-420.500 . Z$ | 128 | $3-430.400 .7$ | 184 | $3-440.200 . Z$ |
| 3 | 3-420.600.Z | 38 | $3-430.500 .7$ | 240 | 3-440.300.Z |
| 120 | 3-421.100.Z | 2 | 3-430.600.Z | 168 | $3-440.400 .7$ |
| 176 | 3-421.200.Z | 128 | 3-431.100.Z | 75 | 3-440.500.Z |
| 304 | 3-421.300.Z | 176 | 3-431.200.Z | 2 | 3-440.600.Z |
| 68 | 3-421.400.Z | 296 | 3-431.300 |  |  |


| MLCC-RELEASE/MLCC-DEBATES/orig/diskettes/eldisks: total |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 00README | 352 | ep3_423.gr1.Z | 504 | ep3_432.gr1.Z |
| 464 | ep3_413.gr.Z | 512 | ep3_423.gr2.Z | 320 | ep3_432.gr2.Z |
| 472 | ep3_414.gr1.Z | 536 | ep3_424.gr1.Z | 408 | ep3_433.gr1.Z |
| 280 | ep3_414.gr2.Z | 312 | ep3_424.gr2.Z | 464 | ep3_433.gr2.Z |
| 112 | ep3_415.gr.Z | 544 | ep3_425.gr1.Z | 544 | ep3_434.gr1.Z |
| 352 | ep3_416.gr1.Z | 320 | ep3_425.gr2.Z | 232 | ep3_434.gr2.Z |
| 288 | ep3_416.gr2.Z | 528 | ep3_426.gr1.Z | 152 | ep3_435.gr.Z |
| 504 | ep3_417.gr1.Z | 336 | ep3_426.gr2.Z | 160 | ep3_436.gr.Z |
| 248 | ep3_417.gr2.Z | 536 | ep3_427.gr1.Z | 504 | ep3_437.gr1.Z |
| 496 | ep3_418.gr1.Z | 264 | ep3_427.gr2.Z | 304 | ep3_437.gr2.Z |
| 296 | ep3_418.gr2.Z | 136 | ep3_428.gr.Z | 480 | ep3_438.gr1.Z |
| 520 | ep3_419.gr1.Z | 440 | ep3_429.gr1.Z | 272 | ep3_438.gr2.Z |
| 280 | ep3_419.gr2.Z | 344 | ep3_429.gr2.Z | 168 | ep3_439.gr.Z |
| 536 | ep3_420.gr1.Z | 536 | ep3_430.gr1.Z | 512 | ep3_440.gr1.Z |
| 312 | ep3_420.gr2.Z | 280 | ep3_430.gr2.Z | 256 | ep3_440.gr2.Z |
| 520 | ep3_421.gr1.Z | 520 | ep3_431.gr1.Z |  |  |
| 288 | ep3_421.gr2.Z | 296 | ep3_431.gr2.Z |  |  |

MLCC-RELEASE/MLCC-DEBATES/orig/newtapes: total 9033

| 1 | 00README | 2 | n1.Z | 2 | n28.Z | 1 | n46.Z | 2 | p17.Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | f1.Z | 2 | n10.Z | 2 | n29.Z | 120 | n47.Z | 2 | p18.Z |
| 2 | f10.Z | 1 | n11.Z | 1 | n3.Z | 160 | n48.Z | 1 | p19.Z |
| 1 | f11.Z | 81 | n12.Z | 1 | n30.Z | 296 | n49.Z | 2 | p2.Z |
| 128 | f12.Z | 184 | n13.Z | 128 | n31.Z | 17 | n5.Z | 128 | p20.Z |
| 176 | f13.Z | 272 | n14.Z | 168 | n32.Z | 144 | n50.Z | 192 | p21.Z |
| 288 | f14.Z | 152 | n15.Z | 280 | n33.Z | 53 | n51.Z | 328 | p22.Z |
| 160 | f15.Z | 36 | n16.Z | 136 | n34.Z | 432 | n54.Z | 112 | p23.Z |
| 70 | f16.Z | 1 | n17.Z | 29 | n35.Z | 240 | n6.Z | 71 | p24.Z |
| 2 | f2.Z | 1 | n18.Z | 2 | n36.Z | 136 | n7.Z | 85 | p27.Z |
| 85 | f20.Z | 1 | n19.Z | 2 | n37.Z | 62 | n8.Z | 1 | p28.Z |
| 28 | f22.Z | 2 | n2.Z | 1 | n38.Z | 2 | n9.Z | 1 | p3.Z |
| 70 | f23.Z | 92 | n20.Z | 128 | n39.Z | 2 | p1.Z | 1 | p30.Z |
| 1 | f3.Z | 2 | n21.Z | 3 | n4.Z | 2 | p10.Z | 1 | p31.Z |
| 136 | f4.Z | 2 | n22.Z | 168 | n40.Z | 1 | p11.Z | 120 | p4.Z |
| 184 | f5.Z | 1 | n23.Z | 272 | n41.Z | 120 | p12.Z | 176 | p5.Z |
| 280 | f6.Z | 168 | n24.Z | 144 | n42.Z | 168 | p13.Z | 288 | p6.Z |
| 160 | f7.Z | 248 | n25.Z | 66 | n43.Z | 304 | p14.Z | 168 | p7.Z |
| 70 | f8.Z | 152 | n26.Z | 2 | n44.Z | 160 | p15.Z | 76 | p8.Z |
| 2 | f9.Z | 35 | n27.Z | 2 | n45.Z | 38 | p16.Z | 2 | p9.Z |

MLCC-RELEASE/MLCC-DEBATES/orig/tapesascii: total 54136
38632 tape1.Z 4368 tape3.Z 2216 tape5.Z
4064 tape2.Z 3808 tape4.Z 1048 tape6.Z

| MLCC-RELEASE/MLCC-DEBATES/orig/tapesmopas: total 81973 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 00README | 1472 | 380.5.Z | 1592 | 385.2.Z | 1496 | 388.2.Z | 2112 | 391.7.Z |
| 888 | 378.1.Z | 1456 | 381.1.Z | 1608 | 385.3.Z | 248 | 388.3.Z | 1 | 391.8.Z |
| 1392 | 378.2.Z | 1568 | 381.2.Z | 1496 | 385.4.Z | 1480 | 388.4.Z | 1488 | 392.1.Z |
| 1352 | 378.3.Z | 1512 | 381.3.Z | 248 | 385.5.Z | 1416 | 389.1.Z | 912 | 392.10.Z |
| 1416 | 378.4.Z | 1608 | 381.4.Z | 1456 | 386.1.Z | 224 | 389.2.Z | 1024 | 392.11.Z |
| 1464 | 378.5.Z | 1456 | 382.1.Z | 1464 | 386.2.Z | 1584 | 389.3.Z | 1 | 392.12.Z |
| 880 | 379.1.Z | 1560 | 382.2.Z | 1480 | 386.3.Z | 12 | 389.6.Z | 1792 | 392.3.Z |
| 1400 | 379.2.Z | 1536 | 382.3.Z | 1384 | 386.4.Z | 1344 | 390.1.Z | 264 | 392.4.Z |
| 1360 | 379.3.Z | 1608 | 382.4.Z | 216 | 386.5.Z | 9 | 390.4.Z | 18 | 392.5.Z |
| 1416 | 379.4.Z | 2600 | 383.1.Z | 1576 | 387.1.Z | 1072 | 390.6.Z | 75 | 392.7.Z |
| 1472 | 379.5.Z | 1504 | 384.1.Z | 1592 | 387.2.Z | 1488 | 390.7.Z | 86 | 392.8.Z |
| 1344 | 380.1.Z | 1472 | 384.2.Z | 1608 | 387.3.Z | 1472 | 391.1.Z |  |  |
| 1344 | 380.2.Z | 1480 | 384.3.Z | 1504 | 387.4.Z | 17 | 391.14.Z |  |  |
| 1448 | 380.3.Z | 1512 | 384.4.Z | 248 | 387.5.Z | 752 | 391.3.Z |  |  |
| 1392 | 380.4.Z | 1576 | 385.1.Z | 1624 | 388.1.Z | 1 | 391.4.Z |  |  |

MLCC-RELEASE/MLCC-DEBATES/prep: total 9
2 add-headers 2 new-tei-header 1 tapesmopas
1 bernou 1 new-tei-trailer
1 diskettes 1 tapesascii

| MLCC-RELEASE/MLCC-DEBATES/prep/bernou: total 226 |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 1 | 00README | 1 | final | 1 | unzipall.bat |
| 1 | checksgml.bat | 1 | removebin.bat | 1 | unzipcheck.bat |
| 93 | eurobern.c | 6 | rename.bat |  |  |
| 120 | eurobern.exe | 1 | sgmltag.bat |  |  |

MLCC-RELEASE/MLCC-DEBATES/prep/diskettes: total 1
1 copy.bat.Z
MLCC-RELEASE/MLCC-DEBATES/prep/tapesascii: total 80
1 00README 16 dos2unix.exe 1 final
1 asciitosgml.bat 19 euroasc.c 1 rentape1.bat
1 chksgml.bat 40 euroasc.exe
MLCC-RELEASE/MLCC-DEBATES/prep/tapesmopas: total 186
1 00README 1 conv3.bat 82 europarl.c
1 conv1.bat 2 conv4.bat 96 europarl.exe
1 conv2.bat 1 copyfiles.bat 1 final

## C.3.2 Dutch Newspaper Corpus

MLCC-RELEASE/MLCC-DUTCH: total 28

| 1 | 00COPYRIGHT | 7 | doc.body | 1 | licence |
| :--- | :--- | ---: | :--- | :--- | :--- |
| 2 | 00README | 1 | doc.tex | 1 | orig |
| 1 | data | 13 | editdecl.txt | 1 | prep |


| MLCC-RELEASE/MLCC-DUTCH/data: total 21269 |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| 352 | DUTCH.HFD.sgm.gz | 720 | ed9209.sgm.gz | 816 | ed9306.sgm.gz |  |
| 29 | ENGLISH.HFD.sgm.gz | 832 | ed9210.sgm.gz | 704 | ed9307.sgm.gz |  |
| 784 | ed9201.sgm.gz | 800 | ed9211.sgm.gz | 744 | ed9308.sgm.gz |  |
| 768 | ed9202.sgm.gz | 792 | ed9212.sgm.gz | 768 | ed9309.sgm.gz |  |
| 856 | ed9203.sgm.gz | 856 | ed9213.sgm.gz | 840 | ed9310.sgm.gz |  |
| 880 | ed9204.sgm.gz | 688 | ed9301.sgm.gz | 824 | ed9311.sgm.gz |  |
| 824 | ed9205.sgm.gz | 808 | ed9302.sgm.gz | 976 | ed9312.sgm.gz |  |
| 872 | ed9206.sgm.gz | 784 | ed9303.sgm.gz | 808 | ed9313.sgm.gz |  |
| 816 | ed9207.sgm.gz | 808 | ed9304.sgm.gz |  |  |  |
| 712 | ed9208.sgm.gz | 808 | ed9305.sgm.gz |  |  |  |

MLCC-RELEASE/MLCC-DUTCH/licence: total 11
5 agr-ed-multext-hfd.tex 6 non-disclosure-agr-hfd.tex
MLCC-RELEASE/MLCC-DUTCH/orig: total 21271

| 2 | 00README | 712 | Ed9208.Lst.gz | 808 | Ed9305.Lst.gz |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 352 | DUTCH.HFD.gz | 728 | Ed9209.Lst.gz | 816 | Ed9306.Lst.gz |
| 29 | ENGLISH.HFD.gz | 832 | Ed9210.Lst.gz | 704 | Ed9307.Lst.gz |
| 784 | Ed9201.Lst.gz | 800 | Ed9211.Lst.gz | 744 | Ed9308.Lst.gz |
| 768 | Ed9202.Lst.gz | 792 | Ed9212.Lst.gz | 768 | Ed9309.Lst.gz |
| 856 | Ed9203.Lst.gz | 856 | Ed9213.Lst.gz | 840 | Ed9310.Lst.gz |
| 880 | Ed9204.Lst.gz | 688 | Ed9301.Lst.gz | 816 | Ed9311.Lst.gz |
| 824 | Ed9205.Lst.gz | 808 | Ed9302.Lst.gz | 976 | Ed9312.Lst.gz |
| 872 | Ed9206.Lst.gz | 784 | Ed9303.Lst.gz | 808 | Ed9313.Lst.gz |
| 816 | Ed9207.Lst.gz | 808 | Ed9304.Lst.gz |  |  |

MLCC-RELEASE/MLCC-DUTCH/prep: total 32

| 1 | add-headers | 1 | prep2.pl | 1 | prepE.pl |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | dutch_dtd | 1 | prepA.pl | 4 | script |
| 3 | new-tei-header | 4 | prepB.pl | 1 | script2 |
| 1 | new-tei-trailer | 6 | prepC.pl | 3 | script3 |
| 1 | prep.pl | 1 | prepD.pl |  |  |

## C.3.3 English Newspaper Corpus

MLCC-RELEASE/MLCC-ENGLISH: total 22

| 1 | 00COPYRIGHT | 11 | doc.body | 1 | licence |
| :--- | :--- | ---: | :--- | ---: | :--- |
| 2 | 00README | 1 | doc.tex | 2 | orig |
| 2 | data | 1 | editdecl.txt | 1 | prep |

MLCC-RELEASE/MLCC-ENGLISH/data: total 68319

| 888 | tape1aa.sgm.gz | 544 | tape1bj.sgm.gz | 888 | tape2ar.sgm.gz |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 880 | tape1ab.sgm.gz | 880 | tape1bk.sgm.gz | 824 | tape2ba.sgm.gz |
| 824 | tape1ac.sgm.gz | 864 | tape1bl.sgm.gz | 904 | tape2bb.sgm.gz |
| 896 | tape1ad.sgm.gz | 872 | tape1bm.sgm.gz | 848 | tape2bc.sgm.gz |
| 888 | tape1ae.sgm.gz | 872 | tape1bn.sgm.gz | 872 | tape2bd.sgm.gz |
| 840 | tape1af.sgm.gz | 840 | tape1bo.sgm.gz | 888 | tape2be.sgm.gz |
| 912 | tape1ag.sgm.gz | 856 | tape1bp.sgm.gz | 864 | tape2b..sgm.gz |
| 824 | tape1ah.sgm.gz | 880 | tape1bq.sgm.gz | 832 | tape2bg.sgm.gz |
| 872 | tape1ai.sgm.gz | 872 | tape1br.sgm.gz | 872 | tape2bh.sgm.gz |
| 896 | tape1aj.sgm.gz | 664 | tape1bs.sgm.gz | 720 | tape2bi.sgm.gz |
| 920 | tape1ak.sgm.gz | 896 | tape2aa.sgm.gz | 864 | tape2bj.sgm.gz |
| 848 | tape1al.sgm.gz | 824 | tape2ab.sgm.gz | 904 | tape2bk.sgm.gz |
| 888 | tape1am.sgm.gz | 864 | tape2ac.sgm.gz | 824 | tape2bl.sgm.gz |
| 95 | tape1an.sgm.gz | 848 | tape2ad.sgm.gz | 888 | tape2bm.sgm.gz |
| 888 | tape1ao.sgm.gz | 848 | tape2ae.sgm.gz | 856 | tape2bn.sgm.gz |
| 848 | tape1ap.sgm.gz | 888 | tape2af.sgm.gz | 848 | tape2bo.sgm.gz |
| 888 | tape1aq.sgm.gz | 912 | tape2ag.sgm.gz | 920 | tape2bp.sgm.gz |
| 864 | tape1ar.sgm.gz | 856 | tape2ah.sgm.gz | 880 | tape2bq.sgm.gz |
| 896 | tape1ba.sgm.gz | 888 | tape2ai.sgm.gz | 776 | tape2br.sgm.gz |
| 896 | tape1bb.sgm.gz | 856 | tape2aj.sgm.gz | 880 | tape3aa.sgm.gz |
| 840 | tape1bc.sgm.gz | 896 | tape2ak.sgm.gz | 880 | tape3ab.sgm.gz |
| 904 | tape1bd.sgm.gz | 904 | tape2al.sgm.gz | 832 | tape3ac.sgm.gz |
| 912 | tape1be.sgm.gz | 904 | tape2am.sgm.gz | 856 | tape3ad.sgm.gz |
| 872 | tape1bf.sgm.gz | 624 | tape2an.sgm.gz | 888 | tape3ae.sgm.gz |
| 896 | tape1bg.sgm.gz | 888 | tape2ao.sgm.gz | 888 | tape3af.sgm.gz |
| 832 | tape1bh.sgm.gz | 832 | tape2ap.sgm.gz | 872 | tape3ag.sgm.gz |
| 904 | tape1bi.sgm.gz | 896 | tape2aq.sgm.gz | 272 | tape3ah.sgm.gz |

MLCC-RELEASE/MLCC-ENGLISH/licence: total 11
6 edin-ft-agreement.tex 5 edin-user-agreement.tex
MLCC-RELEASE/MLCC-ENGLISH/orig: total 67013

| 872 | tape1aa.gz | 848 | tape1ar.gz | 864 | tape1bq.gz | 872 | tape2ao.gz | 840 | tape2bn.gz |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 864 | tape1ab.gz | 880 | tape1ba.gz | 856 | tape1br.gz | 816 | tape2ap.gz | 832 | tape2bo.gz |
| 808 | tape1ac.gz | 872 | tape1bb.gz | 656 | tape1bs.gz | 880 | tape2aq.gz | 904 | tape2bp.gz |
| 872 | tape1ad.gz | 824 | tape1bc.gz | 880 | tape2aa.gz | 872 | tape2ar.gz | 864 | tape2bq.gz |
| 872 | tape1ae.gz | 888 | tape1bd.gz | 800 | tape2ab.gz | 808 | tape2ba.gz | 760 | tape2br.gz |
| 824 | tape1af.gz | 896 | tape1be.gz | 848 | tape2ac.gz | 888 | tape2bb.gz | 864 | tape3aa.gz |
| 896 | tape1ag.gz | 856 | tape1bf.gz | 832 | tape2ad.gz | 832 | tape2bc.gz | 864 | tape3ab.gz |
| 808 | tape1ah.gz | 880 | tape1bg.gz | 832 | tape2ae.gz | 856 | tape2bd.gz | 816 | tape3ac.gz |
| 856 | tape1ai.gz | 816 | tape1bh.gz | 872 | tape2af.gz | 872 | tape2be.gz | 840 | tape3ad.gz |
| 880 | tape1aj.gz | 888 | tape1bi.gz | 896 | tape2ag.gz | 848 | tape2bf.gz | 872 | tape3ae.gz |
| 904 | tape1ak.gz | 536 | tape1bj.gz | 840 | tape2ah.gz | 816 | tape2bg.gz | 872 | tape3af.gz |
| 832 | tape1al.gz | 856 | tape1bk.gz | 872 | tape2ai.gz | 856 | tape2bh.gz | 856 | tape3ag.gz |
| 864 | tape1am.gz | 848 | tape1bl.gz | 840 | tape2aj.gz | 704 | tape2bi.gz | 264 | tape3ah.gz |
| 93 | tape1an.gz | 848 | tape1bm.gz | 880 | tape2ak.gz | 848 | tape2bj.gz |  |  |
| 872 | tape1ao.gz | 856 | tape1bn.gz | 888 | tape2al.gz | 888 | tape2bk.gz |  |  |
| 832 | tape1ap.gz | 816 | tape1bo.gz | 888 | tape2am.gz | 808 | tape2bl.gz |  |  |
| 872 | tape1aq.gz | 840 | tape1bp.gz | 616 | tape2an.gz | 872 | tape2bm.gz |  |  |

MLCC-RELEASE/MLCC-ENGLISH/prep: total 35

| 2 | FT-TAPE-todo | 1 | convert4.perl | 4 | script |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | convert.perl.old | 1 | del_blank.sed | 7 | script2 |
| 3 | convert1.perl | 4 | histogram1 | 1 | transform1.perl |
| 1 | convert2.perl | 3 | new-tei-header | 1 | transform2.perl |
| 3 | convert3.perl | 1 | new-tei-trailer |  |  |

## C.3.4 French Newspaper Corpus

| MLCC-RELEASE/MLCC-FRENCH: total | 30 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 00COPYRIGHT | 9 | doc.body | 1 | licence |
| 2 | 00README | 1 | doc.tex | 2 | orig |
| 4 | data | 8 | editdecl.txt | 1 | prep |


| MLCC-RELEASE/MLCC-FRENCH/data: total 20996 |  |  |  |
| :--- | :--- | :--- | :--- |
| 328 | fr01A1292.01.sgm.gz | 336 | fr01A1293.02.sgm.gz |
| 320 | fr01A1292.02.sgm.gz | 336 | fr01A1293.03.sgm.gz |
| 336 | fr01A1292.03.sgm.gz | 328 | fr01A1293.04.sgm.gz |
| 344 | fr01A1292.04.sgm.gz | 344 | fr01A1293.05.sgm.gz |
| 336 | fr01A1292.05.sgm.gz | 336 | fr01A1293.06.sgm.gz |
| 336 | fr01A1292.06.sgm.gz | 344 | fr01A1293.07.sgm.gz |
| 336 | fr01A1292.07.sgm.gz | 352 | fr01A1293.08.sgm.gz |
| 336 | fr01A1292.08.sgm.gz | 336 | fr01A1293.09.sgm.gz |
| 344 | fr01A1292.09.sgm.gz | 344 | fr01A1293.10.sgm.gz |
| 328 | fr01A1292.10.sgm.gz | 336 | fr01A1293.11.sgm.gz |
| 336 | fr01A1292.11.sgm.gz | 344 | fr01A1293.12.sgm.gz |
| 336 | fr01A1292.12.sgm.gz | 328 | fr01A1293.13.sgm.gz |
| 344 | fr01A1292.13.sgm.gz | 336 | fr01A1293.14.sgm.gz |
| 344 | fr01A1292.14.sgm.gz | 344 | fr01A1293.15.sgm.gz |
| 352 | fr01A1292.15.sgm.gz | 336 | fr01A1293.16.sgm.gz |
| 328 | fr01A1292.16.sgm.gz | 336 | fr01A1293.17.sgm.gz |
| 320 | fr01A1292.17.sgm.gz | 344 | fr01A1293.18.sgm.gz |
| 320 | fr01A1292.18.sgm.gz | 328 | fr01A1293.19.sgm.gz |
| 352 | fr01A1292.19.sgm.gz | 328 | fr01A1293.20.sgm.gz |
| 336 | fr01A1292.20.sgm.gz | 352 | fr01A1293.21.sgm.gz |
| 336 | fr01A1292.21.sgm.gz | 368 | fr01A1293.22.sgm.gz |
| 328 | fr01A1292.22.sgm.gz | 384 | fr01A1293.23.sgm.gz |
| 336 | fr01A1292.23.sgm.gz | 400 | fr01A1293.24.sgm.gz |
| 336 | fr01A1292.24.sgm.gz | 392 | fr01A1293.25.sgm.gz |
| 336 | fr01A1292.25.sgm.gz | 376 | fr01A1293.26.sgm.gz |
| 328 | fr01A1292.26.sgm.gz | 384 | fr01A1293.27.sgm.gz |
| 336 | fr01A1292.27.sgm.gz | 384 | fr01A1293.28.sgm.gz |
| 328 | fr01A1292.28.sgm.gz | 384 | fr01A1293.29.sgm.gz |
| 320 | fr01A1292.29.sgm.gz | 384 | fr01A1293.30.sgm.gz |
| 304 | fr01A1292.30.sgm.gz | 376 | fr01A1293.31.sgm.gz |
| 336 | fr01A1293.01.sgm.gz | 60 | fr01A1293.32.sgm.gz |
|  |  |  |  |

MLCC-RELEASE/MLCC-FRENCH/licence: total 10
5 edin-user-agreement.tex 5 ldc-user-agreement.tex

| MLCC-RELEASE/MLCC-FRENCH/orig: total 21003 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 328 | fr01A1292.01.gz | 328 | fr01A1292.22.gz | 328 | fr01A1293.13.gz |
| 320 | fr01A1292.02.gz | 336 | fr01A1292.23.gz | 336 | fr01A1293.14.gz |
| 336 | fr01A1292.03.gz | 336 | fr01A1292.24.gz | 344 | fr01A1293.15.gz |
| 344 | fr01A1292.04.gz | 336 | fr01A1292.25.gz | 336 | fr01A1293.16.gz |
| 336 | fr01A1292.05.gz | 328 | fr01A1292.26.gz | 336 | fr01A1293.17.gz |
| 336 | fr01A1292.06.gz | 336 | fr01A1292.27.gz | 344 | fr01A1293.18.gz |
| 336 | fr01A1292.07.gz | 328 | fr01A1292.28.gz | 328 | fr01A1293.19.gz |
| 336 | fr01A1292.08.gz | 320 | fr01A1292.29.gz | 336 | fr01A1293.20.gz |
| 344 | fr01A1292.09.gz | 304 | fr01A1292.30.gz | 352 | fr01A1293.21.gz |
| 328 | fr01A1292.10.gz | 336 | fr01A1293.01.gz | 368 | fr01A1293.22.gz |
| 336 | fr01A1292.11.gz | 336 | fr01A1293.02.gz | 384 | fr01A1293.23.gz |
| 336 | fr01A1292.12.gz | 336 | fr01A1293.03.gz | 400 | fr01A1293.24.gz |
| 344 | fr01A1292.13.gz | 328 | fr01A1293.04.gz | 392 | fr01A1293.25.gz |
| 344 | fr01A1292.14.gz | 344 | fr01A1293.05.gz | 376 | fr01A1293.26.gz |
| 352 | fr01A1292.15.gz | 336 | fr01A1293.06.gz | 384 | fr01A1293.27.gz |
| 328 | fr01A1292.16.gz | 344 | fr01A1293.07.gz | 384 | fr01A1293.28.gz |
| 320 | fr01A1292.17.gz | 352 | fr01A1293.08.gz | 384 | fr01A1293.29.gz |
| 320 | fr01A1292.18.gz | 336 | fr01A1293.09.gz | 384 | fr01A1293.30.gz |
| 352 | fr01A1292.19.gz | 344 | fr01A1293.10.gz | 376 | fr01A1293.31.gz |
| 336 | fr01A1292.20.gz | 336 | fr01A1293.11.gz | 59 | fr01A1293.32.gz |
| 336 | fr01A1292.21.gz | 344 | fr01A1293.12.gz |  |  |

MLCC-RELEASE/MLCC-FRENCH/prep: total 28
1 add-headers 2 prep.perl 3 script
1 final 1 prep2.perl 3 script2
1 fixids.perl 3 prep3.perl 3 structure
2 lemonde.dtd 1 prep4.perl 1 xxx.perl

3 new-tei-header 1 run
1 new-tei-trailer 1 run2

## C.3.5 German Newspaper Corpus

| MLCC-RELEASE/MLCC-GERMAN: total |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| 1 | 00COPYRIGHT | 6 | doc.body | 1 | licence |
| 5 | 00README | 1 | doc.tex | 5 | orig |
| 11 | data | 1 | editdecl.txt | 1 | prep |

MLCC-RELEASE/MLCC-GERMAN/data: total 94472

| 45 | hb001.sgm.gz | 464 | hb071.sgm.gz | 464 | hb141.sgm.gz |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 440 | hb002.sgm.gz | 464 | hb072.sgm.gz | 464 | hb142.sgm.gz |
| 456 | hb003.sgm.gz | 456 | hb073.sgm.gz | 456 | hb143.sgm.gz |
| 456 | hb004.sgm.gz | 464 | hb074.sgm.gz | 448 | hb144.sgm.gz |
| 456 | hb005.sgm.gz | 456 | hb075.sgm.gz | 448 | hb145.sgm.gz |
| 456 | hb006.sgm.gz | 464 | hb076.sgm.gz | 448 | hb146.sgm.gz |
| 456 | hb007.sgm.gz | 464 | hb077.sgm.gz | 456 | hb147.sgm.gz |
| 456 | hb008.sgm.gz | 456 | hb078.sgm.gz | 448 | hb148.sgm.gz |
| 456 | hb009.sgm.gz | 464 | hb079.sgm.gz | 448 | hb149.sgm.gz |
| 448 | hb010.sgm.gz | 456 | hb080.sgm.gz | 440 | hb150.sgm.gz |
| 456 | hb011.sgm.gz | 464 | hb081.sgm.gz | 448 | hb151.sgm.gz |
| 456 | hb012.sgm.gz | 464 | hb082.sgm.gz | 448 | hb152.sgm.gz |
| 448 | hb013.sgm.gz | 464 | hb083.sgm.gz | 456 | hb153.sgm.gz |
| 456 | hb014.sgm.gz | 464 | hb084.sgm.gz | 448 | hb154.sgm.gz |
| 456 | hb015.sgm.gz | 472 | hb085.sgm.gz | 464 | hb155.sgm.gz |
| 456 | hb016.sgm.gz | 464 | hb086.sgm.gz | 456 | hb156.sgm.gz |
| 464 | hb017.sgm.gz | 464 | hb087.sgm.gz | 456 | hb157.sgm.gz |
| 456 | hb018.sgm.gz | 464 | hb088.sgm.gz | 448 | hb158.sgm.gz |
| 448 | hb019.sgm.gz | 456 | hb089.sgm.gz | 400 | hb159.sgm.gz |
| 448 | hb020.sgm.gz | 456 | hb090.sgm.gz | 392 | hb160.sgm.gz |
| 448 | hb021.sgm.gz | 464 | hb091.sgm.gz | 392 | hb161.sgm.gz |
| 456 | hb022.sgm.gz | 464 | hb092.sgm.gz | 392 | hb162.sgm.gz |
| 464 | hb023.sgm.gz | 464 | hb093.sgm.gz | 392 | hb163.sgm.gz |
| 456 | hb024.sgm.gz | 456 | hb094.sgm.gz | 392 | hb164.sgm.gz |
| 456 | hb025.sgm.gz | 456 | hb095.sgm.gz | 392 | hb165.sgm.gz |
| 456 | hb026.sgm.gz | 464 | hb096.sgm.gz | 392 | hb166.sgm.gz |
| 456 | hb027.sgm.gz | 456 | hb097.sgm.gz | 384 | hb167.sgm.gz |
| 456 | hb028.sgm.gz | 464 | hb098.sgm.gz | 392 | hb168.sgm.gz |
| 456 | hb029.sgm.gz | 464 | hb099.sgm.gz | 400 | hb169.sgm.gz |
| 456 | hb030.sgm.gz | 464 | hb100.sgm.gz | 392 | hb170.sgm.gz |
| 456 | hb031.sgm.gz | 456 | hb101.sgm.gz | 392 | hb171.sgm.gz |
| 456 | hb032.sgm.gz | 456 | hb102.sgm.gz | 392 | hb172.sgm.gz |
| 456 | hb033.sgm.gz | 456 | hb103.sgm.gz | 392 | hb173.sgm.gz |
| 456 | hb034.sgm.gz | 456 | hb104.sgm.gz | 400 | hb174.sgm.gz |
| 456 | hb035.sgm.gz | 464 | hb105.sgm.gz | 392 | hb175.sgm.gz |
| 456 | hb036.sgm.gz | 448 | hb106.sgm.gz | 456 | hb176.sgm.gz |
| 456 | hb037.sgm.gz | 472 | hb107.sgm.gz | 456 | hb177.sgm.gz |
| 456 | hb038.sgm.gz | 456 | hb108.sgm.gz | 464 | hb178.sgm.gz |
| 456 | hb039.sgm.gz | 456 | hb109.sgm.gz | 456 | hb179.sgm.gz |
| 440 | hb040.sgm.gz | 456 | hb110.sgm.gz | 464 | hb180.sgm.gz |
| 464 | hb041.sgm.gz | 456 | hb111.sgm.gz | 464 | hb181.sgm.gz |
| 456 | hb042.sgm.gz | 456 | hb112.sgm.gz | 448 | hb182.sgm.gz |
| 464 | hb043.sgm.gz | 480 | hb113.sgm.gz | 456 | hb183.sgm.gz |
| 464 | hb044.sgm.gz | 400 | hb114.sgm.gz | 456 | hb184.sgm.gz |
| 464 | hb045.sgm.gz | 400 | hb115.sgm.gz | 464 | hb185.sgm.gz |
| 464 | hb046.sgm.gz | 400 | hb116.sgm.gz | 456 | hb186.sgm.gz |
| 472 | hb047.sgm.gz | 400 | hb117.sgm.gz | 448 | hb187.sgm.gz |
| 456 | hb048.sgm.gz | 400 | hb118.sgm.gz | 448 | hb188.sgm.gz |
| 472 | hb049.sgm.gz | 400 | hb119.sgm.gz | 456 | hb189.sgm.gz |
| 464 | hb050.sgm.gz | 408 | hb120.sgm.gz | 456 | hb190.sgm.gz |
| 464 | hb051.sgm.gz | 400 | hb121.sgm.gz | 456 | hb191.sgm.gz |
| 464 | hb052.sgm.gz | 400 | hb122.sgm.gz | 456 | hb192.sgm.gz |
| 472 | hb053.sgm.gz | 392 | hb123.sgm.gz | 480 | hb193.sgm.gz |
| 456 | hb054.sgm.gz | 408 | hb124.sgm.gz | 464 | hb194.sgm.gz |
| 464 | hb055.sgm.gz | 400 | hb125.sgm.gz | 472 | hb195.sgm.gz |
| 456 | hb056.sgm.gz | 400 | hb126.sgm.gz | 456 | hb196.sgm.gz |
| 464 | hb057.sgm.gz | 448 | hb127.sgm.gz | 472 | hb197.sgm.gz |
| 464 | hb058.sgm.gz | 464 | hb128.sgm.gz | 464 | hb198.sgm.gz |
| 448 | hb059.sgm.gz | 456 | hb129.sgm.gz | 472 | hb199.sgm.gz |
| 488 | hb060.sgm.gz | 456 | hb130.sgm.gz | 456 | hb200.sgm.gz |
| 464 | hb061.sgm.gz | 464 | hb131.sgm.gz | 472 | hb201.sgm.gz |
| 448 | hb062.sgm.gz | 464 | hb132.sgm.gz | 456 | hb202.sgm.gz |

MLCC-RELEASE/MLCC-GERMAN/licence: total 1 1 00README

MLCC-RELEASE/MLCC-GERMAN/orig: total 106512

|  |  |  |  |  |  | 504 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0.g | 520 |  | 528 |  | 520 | hb.128.gz | 440 |  |
| 512 | hb.003.gz | 528 | hb.045.g | 520 | hb.087.gz | 520 | hb.129.gz | 44 | hb.171.gz |
| 520 | hb.004.gz | 520 | hb.046.gz | 520 | hb.088.g | 520 | hb. $130 . \mathrm{gz}$ | 44 | h. $172 . \mathrm{gz}$ |
| 520 | hb. 005. | 528 | hb. 047 . | 512 | hb. 089 | 528 | hb. 131 | 440 | hb. |
| 512 | 006 | 520 | hb. 048. | 520 | 90 | 528 | . 132 | 448 |  |
|  | hb. 007. | 528 | hb. 049. | 520 | , | 528 | hb.133.82 | 40 | hb. $175 . \mathrm{gz}$ |
| 512 | hb.008.g | 528 | hb.050.gz | 520 | hb.092.g | 528 | hb.134.g | 51 | hb.176.gz |
| 520 | hb.009.g | 520 | hb. 051. | 528 | hb.093. | 520 | hb. 135 . | 512 | b. $177 . \mathrm{gz}$ |
| 512 | hb.010.g | 52 | hb. 052 . | 520 | hb. 094. | 528 | hb. 136 | 520 | hb.178.gz |
| 512 | hb.011. | 528 | hb. 053. | 512 | . 095. | 520 | hb. 137 | 520 | 崖 |
| 512 | hb.012.g | 520 | hb.054. | 528 | .096. | 520 | hb. 138 | 520 | gz |
| 512 | hb.013.gz | 520 | hb.055.gz | 520 | hb.097.g | 520 | hb.139.gz | 520 | b.181.gz |
| 512 | hb.014.g | 512 | hb.056.g | 528 | hb.098.8 | 520 | hb. 140. | 51 | b.182.gz |
| 512 | hb. 015. | 520 | hb. 057. | 520 | hb. 099 | 528 | hb. 141 | 520 | h.183.gz |
| 512 | . 016 | 520 | . 058 | 528 | . 100 | 520 | . 14 | 512 |  |
| 520 | hb. 017 . | 504 | . 059. | 512 | . 101. | 512 | hb. 143 | 520 | gz |
| 520 | hb.018.gz | 536 | hb.060.gz | 12 | hb.102.g | 512 | hb.144.gz | 512 | b.186.gz |
| 512 | hb.019.gz | 520 | hb. 061. | 520 | hb. 103.8 | 504 | hb. 145.9 | 512 | b.187.gz |
| 512 | hb. 020 . | 504 | hb. 062 . | 520 | hb. 104 | 504 | hb. 146 | 504 | hb.188.gz |
| 504 | . 021. | 512 | . 063. | 520 | b. 105 | 512 | hb. 147 | 512 | gz |
|  | hb.022.gz | 504 | .064.g | 504 | hb.106.g | 504 | hb.148.gz | 512 | gz |
|  | hb.023.gz | 512 | hb.065.gz | 528 | hb.107.g | 512 | hb.149.gz | 512 | b.191.gz |
| 512 | hb.024.g | 504 | hb.066. | 520 | hb. 108. | 50 | hb. $150 . \mathrm{g}$ | 520 | b. 192 |
| 512 | hb. 025 | 512 | hb. 067 | 512 | hb. 109 | 504 | hb. 151 | 536 | b.193.gz |
| 12 | b. 026 | 520 | . 068. | 520 | . 110 | 504 | b. 15 | 520 | gz |
|  | hb.027.gz | 512 | hb.069.gz | 512 | hb.111.g | 512 | hb. $153 . \mathrm{gz}$ | 528 | b.195.gz |
|  | hb.028.gz | 512 | hb.070.gz | 512 | hb.112. | 512 | hb.154.gz | 512 | b.196.gz |
| 12 | hb.029.gz | 520 | hb.071. | 536 | hb.113. | 520 | hb. 155. | 528 | b. |
|  | hb. 030 . | 520 | hb. 072 . | 448 | hb. 114 | 512 | hb. 156 | 520 | b. 1 |
|  | hb.031.g | 512 | hb.073. | 448 | hb. 115. | 512 | hb. 157 | 528 |  |
|  | hb.032.gz | 528 | hb.074.gz | 456 | hb.116.gz | 512 | hb.158.gz | 512 | b. $200 . \mathrm{gz}$ |
|  | hb.033.gz | 520 | hb.075.gz | 448 | hb.117.gz | 448 | hb.159.gz | 528 | b.201.gz |
|  | hb.034.g | 520 | hb. 076. | 448 | hb. 118. | 448 | hb. 160 | 520 | b.202.g |
|  | hb.035.g | 520 | hb. 077. | 45 | hb.119. | 44 | hb. 161. | 520 | h. $203 . \mathrm{gz}$ |
| 520 | hb.036.g | 512 | hb.078.g | 456 | hb. $120 . \mathrm{g}$ | 440 | hb. 162. | 528 | b.204.gz |
| 520 | hb.037.gz | 528 | hb.079.gz | 456 | hb.121.gz | 440 | hb.163.gz | 520 | b. $205 . \mathrm{gz}$ |
| 512 | hb.038.gz | 512 | hb.080.gz | 456 | hb.122.gz | 440 | hb.164.gz | 528 | hb.206.gz |
| 512 | hb.039.gz | 520 | hb.081.gz | 448 | hb.123.gz | 440 | hb.165.gz | 528 | h. $207 . \mathrm{gz}$ |
| 520 | hb.040.gz | 520 | hb.082.gz | 456 | hb.124.gz | 448 | hb.166.gz | 520 | hb.208.gz |
| 520 | hb.041.gz | 520 | hb.083.g | 448 | hb.125.gz | 440 | hb. 167.8 | 520 | hb.209.gz |
| 512 | hb.042.g | 520 | b. 084 | 448 | b. 126. |  | b. 168 | 512 | hb. $210 . \mathrm{gz}$ |

MLCC-RELEASE/MLCC-GERMAN/prep: total 14

| 1 | add-headers | 1 | new-tei-trailer | 1 | prepare |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | extract | 2 | prep.perl | 1 | split.perl |
| 1 | final | 1 | prep2.perl | 1 | umlauts.perl |
| 3 | new-tei-header | 1 | prep3.perl |  |  |

## C.3.6 Italian Newspaper Corpus

MLCC-RELEASE/MLCC-ITALIAN: total 19

| 1 | 00COPYRIGHT | 7 | doc.body | 1 | licence |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 00README | 1 | doc.tex | 1 | orig |
| 1 | data | 4 | editdecl.txt | 1 | prep |


| MLCC-RELEASE/MLCC-ITALIAN/data: total 4848 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 200 | sole00.tei.gz | 192 | sole09.tei.gz | 168 | sole18.tei.gz |
| 208 | sole01.tei.gz | 184 | sole10.tei.gz | 208 | sole19.tei.gz |
| 176 | sole02.tei.gz | 184 | sole11.tei.gz | 168 | sole20.tei.gz |
| 208 | sole03.tei.gz | 208 | sole12.tei.gz | 192 | sole21.tei.gz |
| 176 | sole04.tei.gz | 184 | sole13.tei.gz | 152 | sole22.tei.gz |
| 208 | sole05.tei.gz | 208 | sole14.tei.gz | 208 | sole23.tei.gz |
| 160 | sole06.tei.gz | 200 | sole15.tei.gz | 168 | sole24.tei.gz |
| 200 | sole07.tei.gz | 176 | sole16.tei.gz | 136 | sole25.tei.gz |
| 200 | sole08.tei.gz | 176 | sole17.tei.gz |  |  |

MLCC-RELEASE/MLCC-ITALIAN/licence: total 1
1 00README
MLCC-RELEASE/MLCC-ITALIAN/orig: total 4720

| 200 | sole00.txt.gz | 184 | sole09.txt.gz | 160 | sole18.txt.gz |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 200 | sole01.txt.gz | 176 | sole10.txt.gz | 208 | sole19.txt.gz |
| 168 | sole02.txt.gz | 176 | sole11.txt.gz | 160 | sole20.txt.gz |
| 200 | sole03.txt.gz | 200 | sole12.txt.gz | 192 | sole21.txt.gz |
| 168 | sole04.txt.gz | 176 | sole13.txt.gz | 152 | sole22.txt.gz |
| 200 | sole05.txt.gz | 200 | sole14.txt.gz | 200 | sole23.txt.gz |
| 152 | sole06.txt.gz | 192 | sole15.txt.gz | 168 | sole24.txt.gz |
| 200 | sole07.txt.gz | 176 | sole16.txt.gz | 136 | sole25.txt.gz |
| 200 | sole08.txt.gz | 176 | sole17.txt.gz |  |  |

MLCC-RELEASE/MLCC-ITALIAN/prep: total 34

| 2 | TODO | 4 | histogram3 | 1 | odd-words |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | conv.perl | 4 | italian.dtd | 8 | words.pl |
| 4 | histogram | 3 | new-tei-header |  |  |
| 1 | histogram2 | 1 | new-tei-trailer |  |  |

## C.3.7 Parallel Written Questions Corpus

| MLCC-RELEASE/MLCC-JOCWQ: total 70 |  |  |  |  |  |
| ---: | :--- | ---: | :--- | ---: | :--- |
| 1 | 00COPYRIGHT | 34 | doc.body | 1 | licence |
| 6 | 00README | 1 | doc.tex | 12 | orig |
| 13 | data | 1 | editdecl.txt | 1 | prep |

MLCC-RELEASE/MLCC-JOCWQ/data: total 24581

| 59 | exp.joc006.93.da.01.tei.gz | 60 | exp.joc145.93.da.01.tei.gz |
| :---: | :---: | :---: | :---: |
| 63 | exp.joc006.93.de.01.tei.gz | 65 | exp.joc145.93.de.01.tei.gz |
| 56 | exp.joc006.93.en.01.tei.gz | 57 | exp.joc145.93.en.01.tei.gz |
| 61 | exp.joc006.93.es.01.tei.gz | 64 | exp.joc145.93.es.01.tei.gz |
| 61 | exp.joc006.93.fr.01.tei.gz | 64 | exp.joc145.93.fr.01.tei.gz |
| 67 | exp.joc006.93.gr.01.tei.gz | 70 | exp.joc145.93.gr.01.tei.gz |
| 61 | exp.joc006.93.it.01.tei.gz | 63 | exp.joc145.93.it.01.tei.gz |
| 62 | exp.joc006.93.nl.01.tei.gz | 63 | exp.joc145.93.nl.01.tei.gz |
| 61 | exp.joc006.93.pt.01.tei.gz | 63 | exp.joc145.93.pt.01.tei.gz |
| 50 | exp.joc016.93.da.01.tei.gz | 57 | exp.joc155.93.da.01.tei.gz |
| 54 | exp.joc016.93.de.01.tei.gz | 61 | exp.joc155.93.de.01.tei.gz |
| 48 | exp.joc016.93.en.01.tei.gz | 54 | exp.joc155.93.en.01.tei.gz |
| 53 | exp.joc016.93.es.01.tei.gz | 59 | exp.joc155.93.es.01.tei.gz |
| 53 | exp.joc016.93.fr.01.tei.gz | 60 | exp.joc155.93.fr.01.tei.gz |
| 58 | exp.joc016.93.gr.01.tei.gz | 66 | exp.joc155.93.gr.01.tei.gz |
| 52 | exp.joc016.93.it.01.tei.gz | 59 | exp.joc155.93.it.01.tei.gz |
| 53 | exp.joc016.93.nl.01.tei.gz | 59 | exp.joc155.93.nl.01.tei.gz |
| 52 | exp.joc016.93.pt.01.tei.gz | 59 | exp.joc155.93.pt.01.tei.gz |
| 75 | exp.joc032.93.da.01.tei.gz | 41 | exp.joc162.93.da.01.tei.gz |
| 79 | exp.joc032.93.de.01.tei.gz | 44 | exp.joc162.93.de.01.tei.gz |
| 70 | exp.joc032.93.en.01.tei.gz | 39 | exp.joc162.93.en.01.tei.gz |
| 77 | exp.joc032.93.es.01.tei.gz | 43 | exp.joc162.93.es.01.tei.gz |
| 79 | exp.joc032.93.fr.01.tei.gz | 44 | exp.joc162.93.fr.01.tei.gz |
| 85 | exp.joc032.93.gr.01.tei.gz | 47 | exp.joc162.93.gr.01.tei.gz |
| 77 | exp.joc032.93.it.01.tei.gz | 43 | exp.joc162.93.it.01.tei.gz |
| 78 | exp.joc032.93.nl.01.tei.gz | 43 | exp.joc162.93.nl.01.tei.gz |
| 77 | exp.joc032.93.pt.01.tei.gz | 43 | exp.joc162.93.pt.01.tei.gz |
| 76 | exp.joc040.93.da.01.tei.gz | 82 | exp.joc185.93.da.01.tei.gz |
| 82 | exp.joc040.93.de.01.tei.gz | 88 | exp.joc185.93.de.01.tei.gz |
| 72 | exp.joc040.93.en.01.tei.gz | 78 | exp.joc185.93.en.01.tei.gz |
| 79 | exp.joc040.93.es.01.tei.gz | 85 | exp.joc185.93.es.01.tei.gz |
| 80 | exp.joc040.93.fr.01.tei.gz | 87 | exp.joc185.93.fr.01.tei.gz |
| 86 | exp.joc040.93.gr.01.tei.gz | 94 | exp.joc185.93.gr.01.tei.gz |
| 78 | exp.joc040.93.it.01.tei.gz | 86 | exp.joc185.93.it.01.tei.gz |
| 79 | exp.joc040.93.nl.01.tei.gz | 86 | exp.joc185.93.nl.01.tei.gz |
| 79 | exp.joc040.93.pt.01.tei.gz | 85 | exp.joc185.93.pt.01.tei.gz |
| 48 | exp.joc047.93.da.01.tei.gz | 112 | exp.joc195.93.da.01.tei.gz |
| 51 | exp.joc047.93.de.01.tei.gz | 120 | exp.joc195.93.de.01.tei.gz |
| 46 | exp.joc047.93.en.01.tei.gz | 93 | exp.joc195.93.en.01.tei.gz |
| 50 | exp.joc047.93.es.01.tei.gz | 112 | exp.joc195.93.es.01.tei.gz |
| 51 | exp.joc047.93.fr.01.tei.gz | 120 | exp.joc195.93.fr.01.tei.gz |
| 56 | exp.joc047.93.gr.01.tei.gz | 128 | exp.joc195.93.gr.01.tei.gz |
| 50 | exp.joc047.93.it.01.tei.gz | 112 | exp.joc195.93.it.01.tei.gz |
| 51 | exp.joc047.93.nl.01.tei.gz | 112 | exp.joc195.93.nl.01.tei.gz |
| 50 | exp.joc047.93.pt.01.tei.gz | 112 | exp.joc195.93.pt.01.tei.gz |
| 46 | exp.joc051.93.da.01.tei.gz | 56 | exp.joc202.93.da.01.tei.gz |
| 49 | exp.joc051.93.de.01.tei.gz | 60 | exp.joc202.93.de.01.tei.gz |
| 44 | exp.joc051.93.en.01.tei.gz | 53 | exp.joc202.93.en.01.tei.gz |
| 48 | exp.joc051.93.es.01.tei.gz | 58 | exp.joc202.93.es.01.tei.gz |
| 48 | exp.joc051.93.fr.01.tei.gz | 59 | exp.joc202.93.fr.01.tei.gz |
| 53 | exp.joc051.93.gr.01.tei.gz | 64 | exp.joc202.93.gr.01.tei.gz |
| 47 | exp.joc051.93.it.01.tei.gz | 58 | exp.joc202.93.it.01.tei.gz |
| 48 | exp.joc051.93.nl.01.tei.gz | 59 | exp.joc202.93.nl.01.tei.gz |
| 48 | exp.joc051.93.pt.01.tei.gz | 58 | exp.joc202.93.pt.01.tei.gz |
| 62 | exp.joc058.93.da.01.tei.gz | 71 | exp.joc207.93.da.01.tei.gz |
| 67 | exp.joc058.93.de.01.tei.gz | 77 | exp.joc207.93.de.01.tei.gz |
| 59 | exp.joc058.93.en.01.tei.gz | 68 | exp.joc207.93.en.01.tei.gz |
| 65 | exp.joc058.93.es.01.tei.gz | 74 | exp.joc207.93.es.01.tei.gz |
| 66 | exp.joc058.93.fr.01.tei.gz | 77 | exp.joc207.93.fr.01.tei.gz |
| 72 | exp.joc058.93.gr.01.tei.gz | 82 | exp.joc207.93.gr.01.tei.gz |
| 64 | exp.joc058.93.it.01.tei.gz | 75 | exp.joc207.93.it.01.tei.gz |
| 65 | exp.joc058.93.nl.01.tei.gz | 75 | exp.joc207.93.nl.01.tei.gz |

MLCC-RELEASE/MLCC-JOCWQ/licence: total 12
1 00README 6 non-disclosure-agr-opoce.tex
5 agr-ed-multext-opoce.tex

| MLCC-RELEASE/MLCC-JOCWQ/orig: total 26632 |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 | README | 67 | exp.joc145.93.da.01.gz |
| 64 | exp.joc006.93.da.01.gz | 72 | exp.joc145.93.de.01.gz |
| 68 | exp.joc006.93.de.01.gz | 64 | exp.joc145.93.en.01.gz |
| 60 | exp.joc006.93.en.01.gz | 71 | exp.joc145.93.es.01.gz |
| 66 | exp.joc006.93.es.01.gz | 72 | exp.joc145.93.fr.01.gz |
| 68 | exp.joc006.93.fr.01.gz | 78 | exp.joc145.93.gr.01.gz |
| 74 | exp.joc006.93.gr.01.gz | 70 | exp.joc145.93.it.01.gz |
| 66 | exp.joc006.93.it.01.gz | 69 | exp.joc145.93.nl.01.gz |
| 67 | exp.joc006.93.nl.01.gz | 70 | exp.joc145.93.pt.01.gz |
| 67 | exp.joc006.93.pt.01.gz | 62 | exp.joc155.93.da.01.gz |
| 54 | exp.joc016.93.da.01.gz | 66 | exp.joc155.93.de.01.gz |
| 58 | exp.joc016.93.de.01.gz | 58 | exp.joc155.93.en.01.gz |
| 52 | exp.joc016.93.en.01.gz | 64 | exp.joc155.93.es.01.gz |
| 57 | exp.joc016.93.es.01.gz | 66 | exp.joc155.93.fr.01.gz |
| 58 | exp.joc016.93.fr.01.gz | 73 | exp.joc155.93.gr.01.gz |
| 64 | exp.joc016.93.gr.01.gz | 64 | exp.joc155.93.it.01.gz |
| 56 | exp.joc016.93.it.01.gz | 64 | exp.joc155.93.nl.01.gz |
| 57 | exp.joc016.93.nl.01.gz | 65 | exp.joc155.93.pt.01.gz |
| 57 | exp.joc016.93.pt.01.gz | 44 | exp.joc162.93.da.01.gz |
| 82 | exp.joc032.93.da.01.gz | 47 | exp.joc162.93.de.01.gz |
| 86 | exp.joc032.93.de.01.gz | 42 | exp.joc162.93.en.01.gz |
| 76 | exp.joc032.93.en.01.gz | 47 | exp.joc162.93.es.01.gz |
| 84 | exp.joc032.93.es.01.gz | 48 | exp.joc162.93.fr.01.gz |
| 87 | exp.joc032.93.fr.01.gz | 51 | exp.joc162.93.gr.01.gz |
| 95 | exp.joc032.93.gr.01.gz | 46 | exp.joc162.93.it.01.gz |
| 84 | exp.joc032.93.it.01.gz | 46 | exp.joc162.93.nl.01.gz |
| 84 | exp.joc032.93.nl.01.gz | 46 | exp.joc162.93.pt.01.gz |
| 85 | exp.joc032.93.pt.01.gz | 89 | exp.joc185.93.da.01.gz |
| 83 | exp.joc040.93.da.01.gz | 96 | exp.joc185.93.de.01.gz |
| 89 | exp.joc040.93.de.01.gz | 84 | exp.joc185.93.en.01.gz |
| 80 | exp.joc040.93.en.01.gz | 93 | exp.joc185.93.es.01.gz |
| 87 | exp.joc040.93.es.01.gz | 112 | exp.joc185.93.fr.01.gz |
| 0 | exp.joc040.93.fr.01.gz | 112 | exp.joc185.93.gr.01.gz |
| 112 | exp.joc040.93.gr.01.gz | 94 | exp.joc185.93.it.01.gz |
| 86 | exp.joc040.93.it.01.gz | 92 | exp.joc185.93.nl.01.gz |
| 86 | exp.joc040.93.nl.01.gz | 94 | exp.joc185.93.pt.01.gz |
| 8 | exp.joc040.93.pt.01.gz | 120 | exp.joc195.93.da.01.gz |
| 52 | exp.joc047.93.da.01.gz | 128 | exp.joc195.93.de.01.gz |
| 55 | exp.joc047.93.de.01.gz | 112 | exp.joc195.93.en.01.gz |
| 50 | exp.joc047.93.en.01.gz | 128 | exp.joc195.93.es.01.gz |
| 54 | exp.joc047.93.es.01.gz | 128 | exp.joc195.93.fr.01.gz |
| 56 | exp.joc047.93.fr.01.gz | 136 | exp.joc195.93.gr.01.gz |
| 62 | exp.joc047.93.gr.01.gz | 120 | exp.joc195.93.it.01.gz |
| 54 | exp.joc047.93.it.01.gz | 120 | exp.joc195.93.nl.01.gz |
| 54 | exp.joc047.93.nl.01.gz | 128 | exp.joc195.93.pt.01.gz |
| 55 | exp.joc047.93.pt.01.gz | 60 | exp.joc202.93.da.01.gz |
| 50 | exp.joc051.93.da.01.gz | 64 | exp.joc202.93.de.01.gz |
| 54 | exp.joc051.93.de.01.gz | 57 | exp.joc202.93.en.01.gz |
| 47 | exp.joc051.93.en.01.gz | 63 | exp.joc202.93.es.01.gz |
| 52 | exp.joc051.93.es.01.gz | 65 | exp.joc202.93.fr.01.gz |
| 53 | exp.joc051.93.fr.01.gz | 70 | exp.joc202.93.gr.01.gz |
| 58 | exp.joc051.93.gr.01.gz | 63 | exp.joc202.93.it.01.gz |
| 51 | exp.joc051.93.it.01.gz | 63 | exp.joc202.93.nl.01.gz |
| 52 | exp.joc051.93.nl.01.gz | 64 | exp.joc202.93.pt.01.gz |
| 53 | exp.joc051.93.pt.01.gz | 77 | exp.joc207.93.da.01.gz |
| 67 | exp.joc058.93.da.01.gz | 83 | exp.joc207.93.de.01.gz |
| 73 | exp.joc058.93.de.01.gz | 73 | exp.joc207.93.en.01.gz |
| 64 | exp.joc058.93.en.01.gz | 81 | exp.joc207.93.es.01.gz |
| 70 | exp.joc058.93.es.01.gz | 84 | exp.joc207.93.fr.01.gz |
| 72 | exp.joc058.93.fr.01.gz | 90 | exp.joc207.93.gr.01.gz |
| 79 | exp.joc058.93.gr.01.gz | 81 | exp.joc207.93.it.01.gz |
| 69 | exp.joc058.93.it.01.gz | 80 |  |


| MLCC-RELEASE/MLCC-JOCWQ/prep: | total 90 |  |  |
| ---: | :--- | ---: | :--- |
| 5 | abbrs.pl | 1 | missing-seps-between-numbers.pl |
| 1 | check-p.perl | 3 | new-tei-header |
| 1 | count.pl | 1 | new-tei-trailer |
| 1 | count2.pl | 1 | numpar.perl |
| 2 | generalise.pl | 11 | prep.perl |
| 2 | get_struct.perl | 1 | script |
| 1 | greek-chars.el | 1 | spin.sgm |
| 3 | make-header.perl | 2 | tei.header.template |
| 52 | missing-seps-between-numbers | 1 | tei.trailer.template |

## C.3.8 Spanish Newspaper Corpus

| MLCC-RELEASE/MLCC-SPANISH: total | 18 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 00COPYRIGHT | 5 | doc.body | 1 | licence |
| 1 | 00README | 1 | doc.tex | 1 | orig |
| 2 | data | 5 | editdecl.txt | 1 | prep |

MLCC-RELEASE/MLCC-SPANISH/data: total 22944

| 672 | expan1aa.sgm.gz | 712 | expan1al.sgm.gz | 720 | expan1aw.sgm.gz |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 712 | expan1ab.sgm.gz | 720 | expan1am.sgm.gz | 712 | expan1ax.sgm.gz |
| 704 | expan1ac.sgm.gz | 696 | expan1an.sgm.gz | 704 | expan1ay.sgm.gz |
| 712 | expan1ad.sgm.gz | 720 | expan1ao.sgm.gz | 704 | expan1az.sgm.gz |
| 712 | expan1ae.sgm.gz | 712 | expan1ap.sgm.gz | 720 | expan1ba.sgm.gz |
| 736 | expan1af.sgm.gz | 720 | expan1aq.sgm.gz | 736 | expan1bb.sgm.gz |
| 712 | expan1ag.sgm.gz | 704 | expan1ar.sgm.gz | 704 | expan1bc.sgm.gz |
| 680 | expan1ah.sgm.gz | 704 | expan1as.sgm.gz | 736 | expan1bd.sgm.gz |
| 696 | expan1ai.sgm.gz | 688 | expan1at.sgm.gz | 744 | expan1be.sgm.gz |
| 696 | expan1aj.sgm.gz | 712 | expan1au.sgm.gz | 760 | expan1bf.sgm.gz |
| 704 | expan1ak.sgm.gz | 696 | expan1av.sgm.gz | 184 | expan1bg.sgm.gz |

MLCC-RELEASE/MLCC-SPANISH/licence: total 6
6 non-disclosure-agr-exp-2.tex
MLCC-RELEASE/MLCC-SPANISH/orig: total 22864

| 672 | expan1aa.gz | 712 | expan1al.gz | 720 | expan1aw.gz |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 712 | expan1ab.gz | 720 | expan1am.gz | 712 | expan1ax.gz |
| 696 | expan1ac.gz | 688 | expan1an.gz | 704 | expan1ay.gz |
| 712 | expan1ad.gz | 712 | expan1ao.gz | 704 | expan1az.gz |
| 712 | expan1ae.gz | 704 | expan1ap.gz | 712 | expan1ba.gz |
| 736 | expan1af.gz | 720 | expan1aq.gz | 728 | expan1bb.gz |
| 712 | expan1ag.gz | 704 | expan1ar.gz | 696 | expan1bc.gz |
| 680 | expan1ah.gz | 704 | expan1as.gz | 736 | expan1bd.gz |
| 688 | expan1ai.gz | 688 | expan1at.gz | 744 | expan1be.gz |
| 696 | expan1aj.gz | 704 | expan1au.gz | 760 | expan1bf.gz |
| 696 | expan1ak.gz | 696 | expan1av.gz | 184 | expan1bg.gz |

MLCC-RELEASE/MLCC-SPANISH/prep: total 28

| 1 | add-headers | 1 | new-tei-trailer | 2 | script |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | clean.perl | 1 | prepA.perl | 3 | script2 |
| 4 | clean2.perl | 4 | prepB.perl | 4 | script3 |
| 1 | final | 1 | prepC.perl |  |  |
| 3 | new-tei-header | 1 | replace.perl |  |  |

