

## Terms in context: A corpus-based analysis of the terminology of the European Union's development cooperation policy

*Judith Kast-Aigner*

**Abstract** This paper is concerned with the terminology the European Union (EU) has created and used with regard to its development cooperation policy during its existence. The idea of fostering the development of less privileged countries by means of preferential trade agreements and financial aid was already incorporated in the Treaty of Rome in 1957, making development cooperation one of the Union's oldest policy areas. Both the concrete concepts and the respective terms applied have been subject to continuous change, the more so as they were strongly influenced by the political and economic situation at the time. The purpose of the paper is to illustrate how tools and techniques developed in corpus linguistics can assist terminologists in compiling terminological information. It presents some of the results of a detailed diachronic study of the English terminology of the EU's development cooperation policy, aiming to describe the conceptual and terminological changes in this field over time. The analysis is based on a corpus of EU texts and supported by linguistic software, viz. WordSmith Tools. The generation of key words and word clusters is complemented by the establishment of terminological domains, which represents a helpful way of structuring the terms, thus facilitating the identification of the main topics of the underlying texts. The use of corpora in terminology opens up the possibility to gather both conceptual and linguistic as well as usage information about the terminological units. It also allows the analysis of concordances that can help to reveal ideological aspects of the terminology involved. The findings may contribute to the knowledge and understanding of European development cooperation among professionals in European and national bodies as well as scholars and teachers in the field of development cooperation.

**Keywords** European Union, development cooperation, EU-specific terminology, economic terms, corpus-based terminology, corpus linguistics, diachronic corpus, terminological domains, collocations, word clusters, lexical change

### 1 Introduction

This paper presents some of the results of a diachronic analysis of the English terminology that the European Union (EU) has created and used in the field of development cooperation since 1957, aiming at portraying the conceptual and terminological changes in this field over time.<sup>1</sup> It is based on a corpus of English language EU documents and assisted by linguistic software, viz. WordSmith Tools. The paper is structured as follows: First, the subject area under investigation is outlined and the research questions to be dealt with in the study are posed. Second, the methodology adopted in the study, i.e. a corpus-based approach to terminology, is described and the rationale for using corpora in terminology work is explained. Third, three examples are presented in order to illustrate the ways in which a corpus-based approach can be employed to generate and structure terminological information. Finally, some summarizing and concluding remarks are made, both with regard to the findings of the research and the methodological approach adopted.

## 2 Research subject: the EU's development cooperation policy

The EU's development cooperation policy has been described as an “understudied area of European politics, despite its economic and political significance” (Arts and Dickson 2004: 3). This view is confirmed by Lister, who points out that books dealing with the EU tend to focus on its internal organisation and neglect its development cooperation policy, although the latter represents one of the Union's first common policies (Lister 1997: 22). Indeed, research in this area appears to be less extensive than one would expect in consideration of the fact that development cooperation has been part of the European project since the very beginning. This also and even more so applies to terminological and linguistic aspects of the EU's development cooperation policy. As a matter of fact, there has not been any work in this field to date that provides more than just a superficial and random compilation of terms, let alone research dealing with the evolution of the terminology since the establishment of a common European development cooperation policy.

### 2.1 Overview

The EU's development cooperation policy dates back as far as 1957, when the Treaty of Rome was signed to create the European Economic Community (EEC). Whereas nowadays the EU is active in virtually every part of the world, the relationship with a group of countries in Africa, the Caribbean and the Pacific, which would later become the so-called *ACP group of states*, was incorporated in the Community's founding treaties, thus representing the EU's oldest relationship in terms of development cooperation. The EU's close ties with this group of states were maintained via several Conventions, viz. the Yaoundé Conventions of 1963 and 1969 (referred to as *Yaoundé I* and *II*), when the signatory states in the South were still colonies of the European countries, and the Lomé Conventions of 1975, 1979, 1984 and 1989 (referred to as *Lomé I, II, III* and *IV*), signed by a continuously growing number of both European and ACP states. At present, the relations between the EU and the ACP group are governed by the Cotonou Partnership Agreement (referred to as *Cotonou*), which was signed in 2000 (Frisch 2008, Grilli 1993, Hewitt and Whiteman 2004).

### 2.2 Research questions

The analysis is part of a larger study, which is meant to provide a comprehensive and systematic overview of the terminology the EU has created and used in the field of development cooperation over time, in particular addressing the following research questions. First, it aims at identifying the key concepts that constitute the EU's development cooperation policy along with the terms in which these concepts manifest themselves. Second, it examines the concepts and terms that were used in the various stages of the EU's development cooperation policy, trying to reveal conceptual and terminological changes over the years. Third, it aims to shed light on the ideological agenda which may have had an impact on the terminology used in this field.

Hence, the synchronic perspective providing a record of current terminology is to be complemented by an analysis of the language of earlier eras of European development cooperation policy. According to Sager, such a diachronic view enables the study of language development as it allows for revealing changes in the meaning of lexical items. In addition, it facilitates the identification of conceptual changes which otherwise may have been difficult

to recognise (Sager 1990: 132). The need for a diachronic perspective is particularly evident considering the plurality of approaches the EU has followed in development cooperation policy since 1957, which are likely to have found their way into language. Furthermore, looking at the evolution of terminology over the last 50 years may provide insight into the ideological forces behind term formation and terminological choices. The latter issue is addressed by Temmerman (2000: 62), who points out that language is used to express human world perception and conception, and Cabré (1999: 23), arguing that terms convey the culture of a people and reflect a certain view of the world.

The paper is meant to outline the findings of the above-mentioned study on the basis of three carefully selected examples. On the one hand, these examples are intended to highlight the major research results, considering that it is not possible to present the entire spectrum within the scope of this contribution. On the other, they aim at reporting on the methodological approach adopted in the study and addressing the research questions outlined above. Two examples are based on the text of the First Lomé Convention of 1975, the so-called *Lomé I corpus*, the first one focussing on the identification and elaboration of key words, the second one showing how word clusters are classified into terminological domains. The third example deals with changes of key words and word clusters over time, tracking the word *cooperation* from 1957 to date.

### 3 Methodological issues

The methodology used in this research may be referred to as *corpus-based terminology*, which has been defined as “a working method which explores a collection of domain-specific language materials (corpus) to investigate terminological issues” (Gamper and Stock 1998/1999: 149). Ahmad and Rogers have identified three main tasks for which electronic text corpora may be used to assist terminologists: viz. to capture, validate and elaborate data (Ahmad and Rogers 2001: 740). Thus, corpora support the terminologist throughout a terminology project: in the early stages when the key issues are to identify term candidates (i.e. to capture data) and to provide evidence for and about term candidates (i.e. to validate data) as well as in the core stages when the main tasks are to compile definitions and to select contextual examples (i.e. to elaborate data).

#### 3.1 Benefits of corpus-based terminology

While machine-readable corpora have been accepted in lexicography and language for general-purpose work for some time, their use and popularity in terminography or language for special-purpose work has been lagging behind. Arguing for their use, Bowker (1996: 30–31) points out three main advantages of corpora in terminology, an approach which she refers to as *corpus-based approach to terminography* or simply *corpus-based terminography*.

Firstly, machine-readable corpora enable terminologists to increase both the speed and the scope of their research. Not only can larger quantities of data be processed more rapidly, thereby exposing terminologists to a larger number of conceptual descriptions, but corpora also allow them to leave out the sections of a text that are terminologically irrelevant and to focus on those parts which are of interest from a terminological point of view (Bowker 1996: 31–32). The latter parts may be referred to as *knowledge-rich contexts*, containing “at least one item of domain knowledge that could be useful for conceptual analysis” (Meyer 2001: 281).

Secondly, a machine-readable corpus makes it easier to investigate syntactic and semantic information as well as linguistic patterns which are difficult to discover when scanning texts manually. The classic example is the study of concordances, also referred to as *key words in context (KWIC)*, in order to identify collocations that may help to improve the use of terms immensely (Bowker 1996: 32).

This argument ties in with the third key strength of corpus-based terminology. In contrast to conventional term banks, which contain hardly any examples of terms in context, corpora present a variety of contexts as well as more extensive contexts which not only provide valuable supplementary information but also help to understand and thus to use terms more effectively (Bowker 1996: 32–33).

The second aspect discussed by Bowker is of particular importance as it highlights the fundamental idea of working with corpora, best described in the words of John Sinclair: “The ability to examine large text corpora in a systematic manner allows access to a quality of evidence that has not been available before” (Sinclair 1991: 4). This ability is relevant for my study in two respects. As mentioned above, information on collocations shows how terms can be used effectively. In addition, concordances enable the study of the relation between language and ideology. In his analyses of texts and text corpora, Stubbs shows that they can reveal patterns of language that institutions use to build up our linguistic, conceptual and ideological view of the world (Stubbs 1996: 59). As Hunston points out, such patterns may convey messages implicitly without the reader being intuitively or consciously aware (Hunston 2002: 109).

### 3.2 Analysing corpora

The analysis of the corpus compiled for the purpose of this study is assisted by concordance software, viz. WordSmith Tools, a programme for looking at how words are used in texts. According to Hunston (2002: 67), key words are a valuable starting point for analysing specialised corpora. The keyness of a word in a text or collection of texts may be characterised in terms of importance and “aboutness” (Scott 2007: 3–4), in the sense that it indicates that the word is important and shows what the text is about, respectively. Most accurately described by Scott and Tribble, “what the text ‘boils down to’ is its keyness, once we have steamed off the verbiage, the adornment, the blah blah blah” (Scott and Tribble 2006: 56). By comparing the relative frequencies of words in two corpora, viz. a smaller, more specialised corpus and a larger, more general one, WordSmith generates the key words for the former (Hunston 2002: 68). More precisely, WordSmith compares the word list of the corpus under investigation, i.e. the corpus of EU texts, with the word list of the British National Corpus (BNC), which is used as a reference corpus. For every word in the corpus under investigation, WordSmith contrasts the patterns of frequency and calculates a keyness score. It is advisable to work through the initial list of key words in order to remove noise as well as words which are clearly not relevant from a terminological point of view, viz. grammatical words (e.g. articles, conjunctions, prepositions) and words that are characteristic of the text type under investigation (e.g. *shall*, *article*, *paragraph*).

While the resulting list of key words does not represent a final list of terms that require terminological definitions or that are suited for inclusion in a terminological dictionary, it can be useful as it offers an overview of the main subjects covered in the texts and provides the starting point for further analysis, in particular in connection with the calculation of word clusters. As terms are frequently compound words and not single words, it is necessary to identify

word clusters, which may be defined as “words which are found repeatedly together in each others' company, in sequence” (Scott 2004–2007: 225). While forming a tighter relationship than collocates, clusters merely represent repeated strings which may or may not turn out to be true multi-word units (Scott 2007: 19). Biber et al. (2000: 989), who refer to clusters as *lexical bundles*, describe them as sequences of words that show a statistical tendency to co-occur in a particular register. The identification of word clusters requires the user to specify the cluster size (between two and eight words) and a minimum frequency, i.e. a minimum number for the cluster to appear in the results.

In this analysis, the key parameters are a cluster size of two to six words and a minimum frequency of five. As the calculation of clusters merely yields sequences of words that tend to co-occur, the results have to be revised. This step includes the elimination of those clusters that are clearly nothing more than repeated strings. For example, WordSmith identifies the word strings *national authorizing*, *national authorizing officer* and *national authorizing officer shall*, the relevant term clearly being *national authorizing officer*. Likewise, the term *products originating in the ACP States* is of interest from a terminological viewpoint, whereas the word strings *products originating*, *products originating in*, *products originating in the* and *products originating in the ACP* are not. Furthermore, related clusters, described by Scott as clusters “which overlap to some extent with others” (2004–2007: 89), have to be identified. Related clusters that form part of more comprehensive clusters are removed unless they are considered to have a meaning that is independent from the meaning of the latter and occur in the corpus at least five times. For example, WordSmith identifies the word clusters *interest rate* and *interest rate subsidy*, both of which represent independent terms. By contrast, the word strings *European Coal*, *European Coal and*, *European Coal and Steel* and *European Coal and Steel Community* represent a case where some related clusters have to be removed, with *European Coal and Steel Community* as the only meaningful word cluster. The aim of this procedure is to generate a list of multi-word units which represent term candidates in a sense that they are relevant from a terminological point of view and considered to have a separate meaning.

Along the lines of Mahlberg (2007: 198–199), who establishes groups in order to categorise concordances, the resulting word clusters are divided into several categories, each of which characterises a particular theme prevailing in the corpus texts. Despite being a rough approach to analysing clusters, this step facilitates the identification of the main characteristics and themes of the underlying texts and makes it easier to grasp the plurality of terms which include the key words identified before. Moreover, the establishment of groups enables a focused view of the various word clusters and assists in raising issues and questions that otherwise might not have come to mind. Mahlberg refers to these groups as *functional groups*, admitting that these categories are neither watertight nor absolutely clear-cut (2007: 199). She also points out that the labels introduced for the functional groups represent so-called *ad hoc labels*, which aim at nothing more than showing the typical characteristics of the group (Mahlberg 2007: 199–200). Unlike Mahlberg, who is interested in the discursive features of texts rather than the terminology used, only those multi-word units are categorised that can be considered to have a separate meaning and appear – to varying extents – useful from a terminological angle. Thus, the term *functional groups* will be replaced with the expression *terminological domains*, referring to groups of word clusters that represent the key topics of the underlying texts.

#### 4 Some results

As outlined in Section 2.1., the relationship between the EU and the ACP group was established in the Treaty of Rome and maintained via several Yaoundé and Lomé Conventions. The current development regime is laid down in the Cotonou Agreement, signed in 2000 and revised in 2005. The texts of these agreements form the corpus, on which the analysis of the terminology of the EU's development cooperation policy is based, with the individual agreements representing different subcorpora. An overview of the corpus and the subcorpora is provided in Table 1.

Table 1: Corpus overview

No.	Year of signature	Agreement	Subcorpus	Corpus size
1	1957	Treaty of Rome	Rome	3,806
2	1963	First Convention of Association	Yaoundé I	14,177
3	1969	Second Convention of Association	Yaoundé II	16,434
4	1975	ACP-EEC Convention of Lomé	Lomé I	31,968
5	1979	Second ACP-EEC Convention	Lomé II	53,164
6	1984	Third ACP-EEC Convention	Lomé III	65,004
7	1989	Fourth ACP-EEC Convention	Lomé IV	96,187
8	1995	Agreement amending the fourth ACP-EEC Convention	Lomé IV <i>bis</i>	23,960
9	2000	Cotonou Partnership Agreement	Cotonou	112,058
10	2005	Agreement amending the Cotonou Partnership Agreement	Rev. Cotonou	23,144

The following three examples are meant to illustrate the methodological approach used in the research as well as some of the key findings of the study. After discussing the identification and analysis of key words in Section 4.1., the grouping of word clusters into terminological domains is dealt with in Section 4.2., with both examples being based on the Lomé I corpus. Section 4.3. examines changes in the usage and frequency patterns of one of the most important key words, viz. *cooperation*, and its collocates from 1957 to date.

##### 4.1 Dealing with key words in the Lomé I corpus

The Lomé I corpus contains the complete text of the First ACP-EEC Convention of Lomé as well as the attached agreements, protocols and declarations, adding up to approximately 32,000 words. Using WordSmith, the word list of the Lomé I corpus is generated, which results in 2,918 entries. Subsequently, the key words are computed by comparing the Lomé I word list with the word list of the reference corpus. The preliminary set of 348 key words is reduced to 276 key words as irrelevant words and noise have to be removed. The top 60 key words are listed in Table 2.

Table 2: Key words of Lomé I corpus vs. BNC

1	ACP*	21	MEASURES	41	PROGRAMMES
2	STATES	22	INDUSTRIAL*	42	AUTHORITIES*
3	PRESIDENT	23	COMMISSION	43	EXPORTER*
4	COMMUNITY	24	TRADE	44	GUINEA*
5	REPUBLIC	25	MAJESTY	45	SECRETARIAT
6	CONVENTION	26	ECONOMIC	46	EXECUTION*
7	STATE	27	LOME*	47	FINANCIAL
8	COOPERATION	28	FIRMS*	48	AUTHORIZING*
9	PRODUCTS	29	CONTRACTING	49	AFFAIRS
10	MINISTERS*	30	MINISTER*	50	CONSULTATIONS
11	COUNCIL	31	AMBASSADORS*	51	MICROPROJECTS*
12	CUSTOMS	32	CONDITIONS	52	TERRITORIES
13	FINANCING	33	AID	53	NATIONALS
14	ORIGINATING	34	APPLICATION	54	FINANCED
15	MEMBER	35	DEVELOPMENT	55	COMMUNITIES
16	PROJECTS*	36	EUROPEAN	56	SIGNATORY
17	CERTIFICATE*	37	REQUEST	57	AGREEMENT
18	CONCERNED	38	EXPORTING*	58	PROVIDED
19	TECHNICAL	39	IMPLEMENTATION	59	BISSAU*
20	GOODS	40	ACCOUNT	60	DAHOMEY

\* new key words in the sense that they did not have the status of key words in any of the former subcorpora

What may appear as nothing more than a list of words at first glance, turns out to contain a lot of useful information on the key elements of the Lomé I Convention.

First, the table gives insight into the key actors and main issues of ACP-EEC cooperation. Several key words refer to the parties involved in the Convention, including both general expressions (e.g. *states*, *member* and *territories*), specific countries and groupings (e.g. *ACP*, which is short for *African, Caribbean and Pacific*; *European*, *Guinea* and *Dahomey*), legal entities and functionaries of the signatory states (e.g. *president*, *ministers* and *authorities*) and of the EEC (*Community*, *Council* and *Commission*). The words *development* and *cooperation* are both among the top 60 key words of Lomé I and can probably be considered the most significant words when it comes to describing the purpose of the Convention: cooperation was deemed an appropriate means of promoting development in the developing countries. The main instruments used to this end were trade and aid, both of which left their mark in the key words of Lomé I. Not only do the terms *trade* and *aid* appear in the top 60, but also numerous other key words are related to trade (e.g. *customs*, *goods*, *originating* and *exporting*) and assistance for projects, i.e. aid (*financing*, *microprojects*, *implementation* and *execution*).

Second, it is sensible to compare the key words of Lomé I with the key words of its predecessors, viz. the Treaty of Rome, Yaoundé I and Yaoundé II, in order to differentiate between terms that had also been used in the pre-Lomé era and terms that first appeared in Lomé I. The comparison shows that almost 40 per cent of the key words of Lomé I (i.e. 109 out of 276) had already been identified as key words in one of the earlier agreements, whereas the remaining ones (i.e. 167 out of 276) emerged as key words in the Lomé I corpus. It is striking that the ratio of old to new words is different among the top 60 key words of Lomé I, with only 17 of 60 (28 per cent) representing key words that had not appeared in any of the former agreements. Apparently, the top key words

include more of those words that cannot be attributed to a particular Convention or stage in the relationship between the Community and the ACP group, but endure more than one generation of agreements, thus being characteristic of ACP-EEC cooperation in general.

Those key words that appeared in Lomé I for the first time (marked with an asterisk in Table 2) may provide information about the new features of the Lomé I Convention, including innovative concepts and instruments, new provisions that are necessary to understand the nature and dynamics of ACP-EEC cooperation and, as in the case of the term *ACP*, references to milestones in the relationship between the Community and the developing countries.

The fact that the term *ACP* had not been a key word in the former agreements – in fact, it had not been used at all – may appear unusual, considering that the Lomé I Convention represented the fourth in a series of cooperation agreements between the Community and the developing countries. Only by looking into the texts of the Conventions and learning more about the origin of the ACP group is it possible to discover the reasons why this is the case. This step involves the search for words and word clusters referring to the Community's contracting parties prior to Lomé, which is based on data from the respective subcorpora, viz. Rome, Yaoundé I and Yaoundé II. Part Four of the EEC's founding treaty, the Treaty of Rome, signed in 1957, established an "Association of the Overseas Countries and Territories". At the time, the developing countries covered by the Association were still colonies of the European countries and were referred to as those "non-European countries and territories which have special relations with Belgium, France, Italy and the Netherlands" (European Communities 1957: Article 131). Accordingly, the word clusters *countries and territories* and *special relations* represent two of the most frequent multi-word units in the Rome corpus. The expression *special relations* clearly represents a euphemistic label for the colonial ties that four of the six European founding members had (Hewitt and Whiteman 2004: 133). The Yaoundé Conventions were Conventions of Association, with the newly independent signatory states in Africa being referred to as the *Associated States*. This is reflected in the Yaoundé I corpus, where *Associated States* and *Associated State* appear among the most frequent word clusters and the word *Association* ranks fourth in terms of keyness. The entry of the United Kingdom (UK) into the EEC in 1973 produced a massive extension of the geographical scope of the Community's development cooperation policy, as the former British colonies had to be taken into consideration. Twenty independent Commonwealth countries in Africa, the Caribbean, the Indian and the Pacific Ocean were invited to participate in the Community's negotiations with the Associated States on a new Convention of Association, namely the Convention that was to follow Yaoundé II (European Commission 1973: 5–6). According to Dieter Frisch, former Director General for Development at the European Commission, the English-speaking African states disliked and rejected the word *association* since, in their opinion, it clearly indicated "a second class membership of a post-colonial nature" (Misser 2008: 12). The fact that it was finally dropped was seen as a major step forward and paved the way for the conclusion of Lomé I. Hewitt and Whiteman note that "the linguistic change was significant here; that is, the elimination of the hated expression 'association', so redolent of neo-colonialism" (2004: 140). After the Convention of Lomé I was signed by nine EEC members and an enlarged group of 46 developing countries in February 1975, the non-European signatories to Lomé I joined forces and entered into the Georgetown Agreement, creating the African, Caribbean and Pacific, or *ACP*, group of states as such (Percival 2008: 10). This brief digression on the history of ACP-EEC cooperation is meant to illustrate the idea of using the results of the corpus analysis as a starting point for a detailed investigation of words and word clusters and, consequently,



of the concepts and issues involved. The emergence of the term *ACP* has given rise to a more comprehensive analysis of the terms that were used to refer to the Community's contracting parties prior to Lomé, which in turn reveal information on the relationship between the EEC and these countries at the time.

#### 4.2 Grouping word clusters into terminological domains

The analysis of the Lomé I corpus includes the generation and study of its word clusters. On the basis of the key words of Lomé I and considering the parameters (i.e. 2-6-word clusters with a minimum frequency of five), WordSmith generates a myriad of word strings, which, by eliminating noise and repeated strings, are reduced to 118 multi-word units. Table 3 shows the top 35 word clusters, in the order of frequency of occurrence.

Table 3: Word clusters of Lomé I corpus

No.	Terminological domain	No. of word clusters
1	ACP STATES	320
2	ACP STATE	114
3	COUNCIL OF MINISTERS	85
4	MEMBER STATES	59
5	HEAD OF STATE	50
6	TECHNICAL COOPERATION	32
7	CUSTOMS AUTHORITIES	28
8	MOVEMENT CERTIFICATE	28
9	EUROPEAN COMMUNITIES	26
10	UNITS OF ACCOUNT	25
11	CONTRACTING PARTIES	24
12	COMMITTEE OF AMBASSADORS	19
13	FINANCIAL AND TECHNICAL COOPERATION	19
14	MEMBER STATE	18
15	COUNCIL OF ACP MINISTERS	17
16	COUNTRIES AND TERRITORIES	16
17	EUROPEAN ECONOMIC COMMUNITY	15
18	COUNCIL OF THE EUROPEAN COMMUNITIES	14
19	INDUSTRIAL COOPERATION	14
20	INDUSTRIAL DEVELOPMENT	14
21	PROJECTS AND PROGRAMMES	12
22	EXPORT EARNINGS	12
23	MINISTER FOR FOREIGN AFFAIRS	12
24	STATE SECRETARY	12
25	SECRETARIAT OF THE ACP STATES	11
26	IMPORTING STATE	11
27	ORIGINATING PRODUCTS	11
28	INVITATIONS TO TENDER	10
29	MINISTER OF FINANCE	10
30	PRESIDENT OF THE REPUBLIC OF THE GAMBIA	10

31	CONSULTATIVE ASSEMBLY	9
32	EXCEPTIONAL AID	9
33	DELIVERY PERIOD	9
34	ECONOMIC AND SOCIAL DEVELOPMENT	9
35	RULES OF PROCEDURE	9

These word clusters can be categorised into several terminological domains, each of which represents a particular theme of the Lomé I Convention. Not only does the establishment of terminological domains facilitate the processing of the data, it also and primarily assists in working out the main topics prevailing in the corpus and, thus, in ACP-EEC cooperation.

Several word clusters are clearly related to the contracting parties, including the terms *ACP States* and *Member States*. Others refer to the institutions that were involved in the Convention (e.g. *Council of the European Communities* and *Council of ACP Ministers*) as well as the joint institutions set up by Lomé I (e.g. *Council of Ministers* and *Committee of Ambassadors*). A number of word clusters are associated with the key elements of the Convention, viz. trade and aid. For example, the terms *customs authorities*, *movement certificate* and *originating products* are related to trade; the expressions *projects and programmes*, *invitations to tender* and *exceptional aid* are linked to the provision of financial resources. Furthermore, various types of cooperation (e.g. *technical cooperation* and *industrial cooperation*) and forms of development (e.g. *industrial development* and *economic and social development*) are frequently mentioned in the Convention.

Whereas some of the terminological domains arise naturally from the data on closer inspection, there are also multi-word units that appear hard to classify for they do not seem to fall into any particular category. Moreover, word clusters may also relate to more than one domain, making classification a somewhat delicate and difficult task. Considering that decisions may not always be clear-cut and the categories are simply meant to provide a broad overview of the topics covered in the underlying texts, the aim is to arrive at a set of terminological domains that cover all word clusters identified in the corpus.

In this example, the word clusters of Lomé I have been classified into nine terminological domains, each of which characterises a specific topic of the Convention. While these domains cover more than 90 per cent of the clusters, a few multi-word units defy categorisation and are therefore combined and labelled as *Other*. Table 4 lists the terminological domains of the Lomé I corpus.

Table 4: Terminological domains of Lomé I corpus

No.	Terminological domain	No. of word clusters
1	Domain 1 – Parties to the contract	7
2	Domain 2 – Institutions of the Convention / the ACP / the EEC	11
3	Domain 3 – Types of cooperation	7
4	Domain 4 – Types of development	3
5	Domain 5 – Aid-related aspects	20
6	Domain 6 – Trade-related aspects	15
7	Domain 7 – Internal aspects of the Convention	4
8	Domain 8 – Countries involved	7
9	Domain 9 – Bodies / officials of individual countries	37
10	Other	7
Total number of word clusters		118

4.3 Tracking the word “cooperation” over time

The word *cooperation* represents one of the most frequent and stable words used by the Community in the area of development cooperation. While the word *cooperation* per se has endured various generations of Conventions, the adjective collocations connected to *cooperation*, indicating different types of cooperation, have changed considerably over time. Table 5 illustrates the adjectives that co-occur with the noun *cooperation* in the various subcorpora at least five times.

Table 5: Adjective collocates of the noun cooperation\*

Collocate	Rome 1957	Yaoundé		Lomé				Cotonou 2000
		I 1963	II 1969	I 1975	II 1979	III 1984	IV 1989	
		<i>technical</i>	-	x	x	x	x	
<i>financial and technical</i>	-	-	x	x	x	x	-	-
<i>industrial</i>	-	-	-	x	x	x	x	-
<i>regional</i>	-	-	-	x	x	x	x	x
<i>interregional</i>	-	-	-	x	x	-	-	-
<i>trade</i>	-	-	-	x	x	x	x	x
<i>administrative</i>	-	-	-	x	x	x	x	x
<i>close</i>	-	-	-	-	x	x	x	x
<i>agricultural</i>	-	-	-	-	-	x	x	-
<i>international</i>	-	-	-	-	-	x	x	-
<i>cultural and social</i>	-	-	-	-	-	x	x	-
<i>ACP-EEC</i>	-	-	-	-	-	x	x	-
<i>ACP-EC</i>	-	-	-	-	-	-	-	x
<i>development</i>	-	-	-	-	-	x	x	x
<i>development finance</i>	-	-	-	-	-	-	x	x
<i>decentralized</i>	-	-	-	-	-	-	x	x
<i>economic and trade</i>	-	-	-	-	-	-	-	x
<i>cultural</i>	-	-	-	-	-	-	-	x
<i>financial</i>	-	-	-	-	-	-	-	x

\* Both the Lomé IV bis and the revised Cotonou corpus are not part of this analysis, as the respective texts represent amendments to former agreements, viz. Lomé IV and Cotonou respectively.

Although Part Four of the Treaty of Rome, setting up the Association of the European colonies, was the predecessor of the Conventions of Yaoundé and covered the same elements, viz. trade and aid, the word *cooperation* was not mentioned at all. Only in Yaoundé did the word *cooperation* appear, mainly in connection with *technical cooperation* and *financial and technical cooperation*. The latter was used as the official term to refer to the provision of financial resources by the Community and included, inter alia, activities in the field of general technical cooperation. While *technical cooperation* appeared both within *financial and technical cooperation* and as an independent term, *financial cooperation* did not exist.

Various forms of cooperation were mentioned throughout Lomé I and II, referring to familiar as well as new concepts. For example, industrial cooperation and administrative cooperation represented completely new subjects of the Community's development cooperation

policy. The concepts ‘trade cooperation’, ‘regional cooperation’ and ‘interregional cooperation’ had existed before, yet they had not been labelled as such. The most frequently used collocations were again *technical cooperation* and *financial and technical cooperation*.

In Lomé III, the concept ‘interregional cooperation’ was subsumed into the concept ‘regional cooperation’. Agricultural cooperation, both the term and the concept, was not a novelty of Lomé III, but gained in importance and visibility since it was dealt with more extensively in a separate section. The term *ACP-EEC cooperation* was introduced, representing a somewhat general way of referring to the relations between the Community and the ACP group. Strangely enough, Lomé III was the first of the Conventions to actually mention the term *development cooperation*, which probably best describes the purpose of the agreements. In the framework of the Lomé Conventions, the terms *ACP-EEC cooperation* and *development cooperation* can be considered synonyms. While *ACP-EEC cooperation* indicates the participating groups of countries, *development cooperation* accentuates the objective of their joint efforts.

The key change in Lomé IV was the fact that the term *financial and technical cooperation* was replaced with *development finance cooperation*. Development finance cooperation included technical cooperation, which still existed as an independent term, and the provision of financial resources. Although *development finance cooperation* was coined only five years later than *development cooperation*, the two terms seem to belong together and complement each other. Development cooperation, i.e. cooperation aimed at the development of the ACP States, has to be supported by development finance cooperation, i.e. financial and technical assistance, to make development possible.

Several forms of cooperation have been abandoned under Cotonou. The term *development finance cooperation* has been maintained, its key elements being technical cooperation and the provision of financial resources. While the former has always been part of the Community's terminology in this field, the latter is increasingly being referred to as *financial cooperation*.

## 5 Conclusions

The aim of this article has been to illustrate the use of corpora in order to identify and explore terms and concepts. Based on the terminology that the EU has created and used in the field of development cooperation, it is meant to show how a corpus-based approach can be adopted in a diachronic analysis of the terminology in a particular field. A corpus-based approach to terminology has been chosen for it is considered to offer several advantages over traditional, paper-based approaches. In fact, the idea of looking at terms in a variety of contexts assists in gathering information about and developing an understanding of the concepts involved. While the application of WordSmith tools to generate key words and word clusters can be considered standard practice, the analysis is enhanced by the establishment of terminological domains, which represents a useful way of organising and structuring terms. The investigation of corpora from different time periods facilitates the identification of terminological and conceptual changes and helps to account for the historical background as well as potential ideological forces at work in order to explain linguistic phenomena. •

## Notes

<sup>i</sup> The author's doctoral thesis will be published by Peter Lang in 2010.

## References

- Ahmad, Khurshid/Rogers, Margaret (2001): "Corpus Linguistics and Terminology Extraction." *Handbook of Terminology Management*. Volume 2: *Application-Oriented Terminology Management*. Eds. Sue Ellen Wright/Gerhard Budin. Amsterdam and Philadelphia: John Benjamins Publishing Company. 725–760.
- Arts, Karin/Dickson, Anna K., eds. (2004a): *EU Development Cooperation. From Model to Symbol*. Manchester and New York: Manchester University Press.
- Arts, Karin/Dickson, Anna K. (2004b): "EU Development Cooperation: from Model to Symbol?" Arts/Dickson (2004a): 1–16.
- Biber, Douglas et al. (2000): *Longman Grammar of Spoken and Written English*. Harlow: Longman.
- Bowker, Lynne (1996): "Towards a Corpus-Based Approach to Terminography." *Terminology* 3.1: 27–52.
- Cabré, M. Teresa (1999): *Terminology. Theory, Methods and Applications*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- European Commission (1973): *Memorandum of the Commission to the Council on the Future Relations between the Community, the Present AASM States and the Countries in Africa, the Caribbean, the Indian and Pacific Oceans Referred to in Protocol No 22 to the Act of Accession*. 26.07.2008 <<http://aei.pitt.edu/4279/>>.
- European Communities (1957): *Treaty Establishing the European Economic Community*. 30.12.2008 <<http://eur-lex.europa.eu/en/treaties/index.htm>>.
- Frisch, Dieter (2008): *The European Union's Development Policy. A Personal View of 50 Years of International Cooperation*. (ECDPM Policy Management Report 15). Maastricht: European Centre for Development Policy Management.
- Gamper, Johann/Stock, Oliviero (1998/1999): "Corpus-Based Terminology." *Terminology* 5.2: 147–159.
- Grilli, Enzo R. (1993): *The European Community and the Developing Countries*. Cambridge, etc.: Cambridge University Press.
- Hewitt, Adrian/Whiteman, Kaye (2004): "The Commission and development policy: bureaucratic politics in EU aid – from the Lomé leap forward to the difficulties of adapting to the twenty-first century." Arts/Dickson (2004a): 133–148.
- Hunston, Susan (2002): *Corpora in Applied Linguistics*. Cambridge, etc.: Cambridge University Press.
- Lister, Marjorie (1997): *The European Union and the South*. London and New York: Routledge.
- Mahlberg, Michaela (2007): "Lexical items in discourse: identifying local textual functions of sustainable development." *Text, Discourse and Corpora. Theory and Analysis*. Eds. Michael Hoey/Michaela Mahlberg/Michael Stubbs/Wolfgang Teubert. London and New York: Continuum. 191–218.
- Meyer, Ingrid (2001): "Extracting knowledge-rich contexts for terminography. A conceptual and methodological framework." *Recent Advances in Computational Terminology*. Eds. Didier Bourigault/Christian Jacquemin/Marie-Claude L'Homme. Amsterdam and Philadelphia: John Benjamins Publishing Company. 279–302.
- Misser, François (2008): "ACP-EU cooperation. Milestone events." *The Courier. The Magazine of Africa – Caribbean – Pacific & European Union Cooperation and Relations*, Special Issue March 2008: 11–14.
- Percival, Debra (2008): "Georgetown. The foundation of the ACP Group." *The Courier. The Magazine of Africa – Caribbean – Pacific & European Union Cooperation and Relations*, Special Issue March 2008: 10.
- Sager, Juan C. (1990): *A Practical Course in Terminology Processing*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Scott, Mike (2004–2007): *Oxford WordSmith Tools. Version 4.0*. Oxford, etc.: Oxford University Press.
- Scott, Mike (2007): "Tackling meaning and aboutness with KeyWords." *Materials from 'Corpus Linguistics: An Introductory Seminar & Workshop / Jornadas de Divulgacion de la Linguistica de Corpus (JDLC 2007)'*,

University of Salamanca, 3–6 July 2007.

Scott, Mike/Tribble, Christopher (2006): *Textual Patterns. Key Words and Corpus Analysis in Language Education*. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Sinclair, John (1991): *Corpus, Concordance, Collocation*. Oxford, etc.: Oxford University Press.

Stubbs, Michael (1996): *Text and Corpus Analysis. Computer-Assisted Studies of Language and Culture*. Oxford: Blackwell Publishers.

Temmerman, Rita (2000): *Towards New Ways of Terminology Description. The Sociocognitive Approach*. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Judith Kast-Aigner  
WU Vienna,

Department of Foreign-Language Business Communication  
Institute for English Business Communication  
[judith.kast-aigner@wu.ac.at](mailto:judith.kast-aigner@wu.ac.at)



Walter Manoschek (Hg.)

## Der Fall Rechnitz

Das Massaker an Juden im März 1945

Mit einem Beitrag zum aktuellen Fall „DEUTSCH-SCHÜTZEN“ und Adolf Storms

Mit einem Text zum Thema Endphasenverbrechen in Österreich von Elfriede Jelinek

Mehr als 60 Jahre lang lebte der frühere Angehörige der 5. SS-Panzer-Division „Wiking“ Adolf Storms unbehelligt und unerkannt in der Nähe von Duisburg, bis er im Zuge der Forschungsrecherchen zu vorliegendem Buch von dem Studenten Andreas Forster als mutmaßlicher Täter von Endphasenverbrechen in Deutsch-Schützen ausfindig gemacht wurde. Im November 2009 nun wurde von der Staatsanwaltschaft wegen des Mordes an jüdischen Zwangsarbeitern Anklage gegen Adolf Storms erhoben ...

Das Buch zum Thema Endphasenverbrechen in Österreich beschäftigt sich mit dem Mord an etwa 200 ungarisch-jüdischen Zwangsarbeitern im burgenländischen Rechnitz, wenige Tage vor Einmarsch der Roten Armee im März 1945. Der Politikwissenschaftler Manoschek wagt erstmals die wissenschaftliche Aufarbeitung eines Verbrechens, das bis heute totgeschwiegen, geleugnet oder als Einzelfall abgetan wurde, in Wahrheit aber den Auftakt zu einer Serie von Massenverbrechen an Zwangsarbeitern bildet.

2009. ISBN 978-3-7003-1714-2. Kart., 276 Seiten, € 24,90



WILHELM BRAUMÜLLER

Universitäts-Verlagsbuchhandlung Ges.m.b.H.

A-1090 Wien, Servitengasse 5; Telefon (+43 1) 319 11 59, Telefax (+43 1) 310 28 05

E-Mail: [office@braumueller.at](mailto:office@braumueller.at) <http://www.braumueller.at>