

STANDARDIZATION AND LANGUAGE PLANNING OF TERMINOLOGY: THE NORWEGIAN EXPERIENCE

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The Norwegian Term Bank

INTRODUCTION

The Norwegian language community is characterized by a considerable public interest in linguistic issues. Standardization of the written language has been an issue of controversy during more than a century, and in the Post-War period, the growing influence from Anglo-American culture has been of concern to the public opinion. Lexical elaboration of the national language is, consequently, considered an important issue of culture, and this also includes terminology planning. My aim here is to give a presentation of principles, practice and results of Norwegian terminology planning seen in this historical context of language policy. I also consider the Nordic context to be of great importance, for historical as well as present-day reasons.

I agree with Maurais (1993) that there is a unilateral relation between terminology and language planning, i.e., terminology work is conceivable without the context of national language planning, but not vice versa. Terminology planning could be analyzed within the framework of two interdependent, but conceptually different functions:

- The cultural function: Terminology work functions as a manifestation of national language elaboration in Einar Haugen's terms. To the language community, it is symbolically important that the national language is terminologically elaborated to function in advanced scientific and technological settings (Maurais 1993).
- The interface function: Terminology functions as the fundamental part of developing efficient and unambiguous communication between specialists, at various levels: the individual, societal, multilingual, institutional and infrastructural.

The methodological and theoretical foundation of Norwegian terminology work is the tradition initiated by Eugen Wüster, "The General Theory of Terminology". It is my hypothesis that this tradition is of special importance to the interface function of terminology, whereas my focus in this paper will be on the cultural and sociolinguistic implications of terminology. Terminology planning is an intersection of two sectors: the needs of the specialists and the socio-cultural climate of the society as a whole. There may be conflict as well as harmony between these two concerns.

In the Norwegian context I think there is a strong, but not always explicitly recognized, consensus that the aim of terminology work should be developing a "functional bilingualism", that is, an efficient interface is dependent on a high

consciousness and competence in the national language, at the individual as well as the societal level. But the connotations carried by the word 'terminology' is concentrated on culture: to most Norwegians, 'terminology work' is synonymous to 'the creating of neologisms'.

THE SOCIOLINGUISTIC CLIMATE

The population of Norway is 4,3 millions, of which somewhere around 97 % are ethnically Norwegians. Consequently, the linguistic culture is relatively homogeneous. There is an ethnic Sami minority estimated to 70 000, 40 000 of which are Norwegian citizens. The corresponding numbers of Sami speakers is however smaller, estimated to 35 000 and 20 000 respectively (Helander 1997). In addition, there are small linguistic minorities mostly due to recent immigration.

A special feature of Norwegian is the competition of two officially recognized standards, Bokmål (BM, lit. "Book Language") and Nynorsk (NN, "New Norwegian"). The stronghold of Nynorsk is the Western parts of the country outside the larger cities. 17 % of Norwegian pupils have Nynorsk as their instructional language, but many of them change to Bokmål during higher levels of education and when entering a professional career. Bokmål is the dominating standard in all sectors of public life, but Nynorsk has a relatively strong position in literature, theatre and university life. The use of Nynorsk in business and industry is insignificant, with self-evident negative consequences for Nynorsk terminology planning.

The two standards Nynorsk and Bokmål cover a continuum of spoken dialects that are typologically equivalent (in contrast to e.g. Icelandic) and mutually comprehensible, but nevertheless very different concerning morphology, phonology and pronunciation. The linguistic distance is characterized by a very high degree of "cognate transparency", and the distance has been reduced by deliberate language planning during most of this century, as the following examples will illustrate:

Orthographic differences such as monophthong vs diphthong has been partially eliminated: BM *sten/stein*, *brøt/braut*, NN *stein*, *braut* ('stone' noun, 'broke' verb, past tense).

Norwegian dialects has a three-gender system that has also been permitted in Bokmål. This is today a source of register variation: BM *mann-en* (masc.), *sol-en* (common gd.), *hus-et* (neutr.) ('the man, sun, house'), or BM/NN: *mann-en*, *sol-a*, *hus-et*.

The process of vowel reduction has caused morphological neutralization in certain Bokmål categories such as the plural, in contrast to Nynorsk: BM plur. indef./def. *hest-er*, *hest-ene* (masc.), *kvinn-er*, *kvinn-ene* (fem.) ('horses', 'women'), NN *hest-ar*, *hest-ane*, *kvinn-er*, *kvinn-ene*. This is a very significant difference, and the same applies to lexical pairs such as BM/NN *jeg/eg* ('I', pronoun), *ikke/ikkje* ('not', neg. adv.) etc.

There is a political and historical process of "nation-building" behind this situation. During four centuries Norway was dominated by her Scandinavian neighbours, most of the time by Denmark through a formal union. The Old Norse written tradition decayed after The Black Death and was completely replaced by Danish, which in its turn was strengthened by the Lutheran reformation. In 1814, after the Napoleonic wars, the union was dissolved. Norway was handed over to Sweden but granted Home Rule and a constitution of its own. To the growing Norwegian national movement it was felt to be unsatisfactory that Danish should still be the

written language in Norway. Consequently, two strategies to create an autonomous Norwegian standard language emerged:

- 1) Knud Knudsen (1812–1895) proposed the "moderate" strategy of gradually adapting the Danish standard to Norwegian urban upper-class speech, which at the time was characterized by a number of Norwegian phonological and morphological features in contrast to Danish. This strategy is represented in the works of Henrik Ibsen and was officially recognized in 1907.
- 2) Ivar Aasen (1813-1896), a self-taught linguist of rural background, proposed the more "radical" strategy of creating a standard norm based directly on rural speech. Eventually his Nynorsk movement became integrated into the political liberal movement leading to the Parliamentary system in 1884 and later the full national independence in 1905. Nynorsk was officially recognized in 1885.

The two founders Aasen and Knudsen had many features in common. They were both great lexicographers and they had a strong purist orientation. Knudsen put a strong effort in creating neologisms to replace international words (e.g. *ord-skifte* 'debate', 'exchange of words').

Up to World War II the competition and rivalry between the two linguistic positions continued to be a part of the social and political struggles of the periods, and several language reforms were launched. In the Post-War period, the efforts to eliminate the problems and to bridging the gap – socially and linguistically – between the standards have been intensified. The shorter linguistic distance has been followed by an increased linguistic variability and a tendency to register splits within and between the standards.

Another result of the linguistic competition is the lack of a generally recognized standard speech. This can to some extent be explained by a relatively high prestige of the spoken dialects. In fact, it has been prohibited by law since 1878 to correct and standardize the speech of Norwegian pupils.

The role of official and deliberate language planning after World War II has been to supervise the cultivation of the two standards and to bridge the gap between them on a sound scientific basis. A language planning body, *The Norwegian Language Council*, was established in 1972, composed of representatives from all language camps and language user organisations, such as media, publishers, authors etc. The scientific part of this work is carried out by a secretariat and an expert committee.

The ideologies underlying Norwegian language planning for the last 150 years can perhaps be characterized as a combination of "nationalism", that is, creating a distinct and autonomous standard language, and "democratism", i.e. the doctrine that language should belong to all classes and groups.

The sociolinguistic climate created by these processes is perhaps best characterized as a complementary interplay of variability and homogeneity. Homogeneity describes the fact that the two standards do not express any clear-cut social distinctions and certainly no ethnic one. They both express a national culture that is relatively homogeneous, although there is a combined regional and social identity expressed through the use of Nynorsk. The Nynorsk users also have a strong sentiment of being a Minority, striving for formal rights and constantly having to promote their language at any level.

A very important result of this situation is the relatively strong public involvement in linguistic issues, which not only includes the internal linguistic rivalry, but also the concern for preserving the national language from external pressure. This

also means that there is a latent public interest in terminology and special language development. Many Norwegians draw a parallel between the Nynorsk struggle for survival and the need to ensure the survival of Norwegian as such. On the other hand, there are others who maintain that the internal combat should be abandoned in order to unite forces against the Anglo-American influence. (Cf. Vikør 1993 for further details).

THE NORDIC CONTEXT

The common Nordic framework is of great importance to the linguistic and cultural work in these countries. The total number of inhabitants amounts to 22 millions. Without idealizing it is possible to say that the Nordic countries form a sort of "extended linguistic community", and the terminology work in each country benefits from this situation to a high degree.

There is an important distinction to be made between 'Scandinavia', consisting of Sweden, Denmark and Norway, and the 'Nordic countries', that also include the independent states of Iceland and Finland as well as the territories of Greenland and the Faroe Islands, which have Home Rule within Denmark. The Sami nation that is split between Finland, Sweden and Norway is also included here. If we take "culture" in a broad sense, the Nordic countries are relatively homogeneous, but the linguistic picture is quite complicated:

Firstly, there are the three (to some extent mutually comprehensible) Scandinavian languages Swedish, Danish and Norwegian, (or rather four, considering the two Norwegian standards). Secondly, the Icelandic and the Faroese languages form the group of "Insular Nordic". Like the Scandinavian languages, they stem from the Old Norse, but they have preserved a higher morphological and orthographical correspondence to Old Norse than have the Scandinavian languages. There are two groups of non-Indo-European languages as well: The Fenno-Ugric family is represented by Finnish and Sami, and finally the Greenlandic dialects that belong to the Inuit (or Eskimoic) family (Vikør 1993).

Throughout the centuries after the Middle Age, Sweden and Denmark were the two great Nordic powers, dominating the other countries and conducting a series of conflicts and wars. Today, however, the Nordic countries are a peaceful region with extensive cultural cooperation. This activity has been encouraged and promoted by the governments of the respective countries since World War II.

In 1952 an assembly of parliamentarians, *The Nordic Council*, was formed, and *The Nordic Language secretariat* was established in 1978 to promote mutual linguistic understanding and harmonization. From 1997 this secretariat has been reorganized as *The Nordic Language Council*. In 1987 the five Nordic states ratified *The Nordic Language Convention*, granting the inhabitants of each state the right to use their own language in communication with the authorities of the other states. This does, however, not apply to Greenlandic, Sami and Faroese.

As we can see, most of the Nordic languages are official national standards of independent states counting from 4 (Norway) to 8 (Sweden) million inhabitants, except Iceland with its 260 000 inhabitants. With a few exceptions the non-independent territories have been dominated by other Nordic countries only: Norway and Iceland by Denmark until 1814 and 1944, Finland and Norway by Sweden until 1809 and 1905.

Consequently, the struggle for Norwegian linguistic independence has in various forms been conducted against Sweden – on the political level – and Danish,

on the linguistic level. Today, a similar situation applies to Greenlandic and Faroese, the languages of societies that have Home Rule within Denmark. The Sami-speaking population has to promote their language vis-a-vis all three governments concerned.

One modification must, however, be made concerning dominance: The repression of the Sami language was most severely carried out by the authorities of Norway, a paradoxical but still perhaps "logical" consequence of the Norwegian nation-building process. Between 1880 and 1959 Sami was prohibited as instructional language in Norway, but not in the other countries (Vikør 1993).

Whether or not the Nordic languages qualify for the designation of "lesser-used languages" (cf. Brekke m.fl. 1996) may be an issue of discussion. It is certainly relevant to the discussion of language preservation and terminology development. I do not, in any case, think it is justified to label the five languages of the independent states as "lesser-used" on the same level as Faroese, Sami and Greenlandic, with numbers of speakers estimated to 50 000, 35 000 and 45 000 respectively (Vikør 1993). Also, the institutional integration of these communities in linguistic collaboration is weaker (perhaps due both to their lack of mutual comprehensibility and comprehensibility to the Scandinavian languages), but things are improving in the case of Sami.

The three Scandinavian languages play a central part in the Nordic collaboration. They are to a high extent mutually intelligible and speakers of one language do not have to change code when communicating with speakers of the two other languages. This linguistic situation has been termed 'semi-communication' by Einar Haugen. The position of the Scandinavian languages as "linguae francae" of Nordic communication has caused some opposition, although mostly tacit, from speakers of Icelandic and Finnish. There are psychological as well as obvious linguistic reasons for this, since especially the Finnish have difficulties with Norwegian and Danish. Using English as a means of communication may become more common in the years to come (further details, cf. Vikør 1993).

TERMINOLOGY IN THE NORDIC COUNTRIES

The Nordic countries have slightly different profiles concerning terminological activities. To some extent this is reflecting differences in their sociolinguistic and linguistic conditions.

After entering the European Community in 1972, Denmark has developed strong educational centres of business language, including theoretical and practical research on terminology and terminology-related activities in the field of computational linguistics. The largest terminology centre in a more traditional sense is, however, found in Sweden, reflecting Sweden's long industrial traditions. In contrast, terminology work in Norway, and particularly in Iceland, is to a much higher extent oriented towards language cultivation in general.

The Nordic terminology collaboration was strengthened in 1976 by the founding of Nordterm, a joint and open-ended body for cooperation between the main terminology institutions in the five countries and the Sami. The purpose of Nordterm is twofold: To promote and assure the Nordic cooperation in this field, and to assure the influence of the Nordic countries in terminology at an international level. Nordterm activities cover the whole range of terminological activities, linking together users as well as practitioners and researchers at the Nordterm Assemblies that take place every second year (*Nordterm - Statutes*, 1995). The national shortcomings of each country's terminology profile have in this manner been somewhat compensated. Terminology has been introduced at university level through a series of

Nordic research courses and seminars in 1978, 1982, 1985, 1990 and 1996. It seems plausible to state that terminology has received the status of a linguistic discipline in its own right (Laurén et al. 1997), and in the Nordic countries, this would probably have been inconceivable without the Nordterm network.

One of the most important aims of the Nordic linguistic cooperation is to prevent the Nordic languages from drifting apart. In order to achieve this it is important to promote linguistic harmonization whenever possible. Lexical and above all terminological harmonization is perhaps the most important aspect of this work, but it seems fairly reasonable to say that the quantitative results of such efforts are modest: Different neologisms come into established use in the different languages, or one of the languages might perhaps not introduce any neologism at all.

A typical example of this is the terms representing the concept of "computer". From the latin root *data* (pl.) the Scandinavian languages has created three different solutions: *se dator* (interpreted as irregular derivation of *data* and the agentive suffix + *or*), *da datamat* (analogy, *data* + *automat*), *no datamaskin* (regular composition of *data* + *machine*). The Finnish solution *tietokone* corresponds to the Norwegian (*tieto* 'knowledge', *kone* 'machine') while the Icelandic equivalent *tölva* is a highly creative combination of derivation from *tala* 'number' and figurative analogy with *völva* 'witch'.

Beyond a large amount of harmonized terms, the main advantage of the Nordic terminology cooperation is this mutual inspiration. Picht & Laurén (1993) speak of a "Nordic approach" to terminology. Concerning the conceptual level the main feature of this approach is said to be an interest in harmonization. On the expression level the main focus is on national language development. This means that in a broader international context, the internal differences of terminology profile between the Nordic countries become less significant and their common features more apparent. The Nordic approach, then, is considered as pragmatic and centre-oriented with respect to the various parametrical positions of terminology theory.

TERMINOLOGY AND TERMINOLOGY INSTITUTIONS IN NORWAY

The institutional organisation of terminology may vary. As for Norway, the following subdivision seems reasonable:

- a) Terminology work in a strict sense, the systematic analysis and diffusion of terms and concepts by means of special dictionaries, glossaries and terminological data bases, most often organized in specific institutions. The main terminology institution in Norway is *The Norwegian Council for Technical Terminology* (RTT), founded as early as 1938. The council is financed partly by government foundings and partly by the sale of dictionaries. It is a Nordterm partner, acting as coordinator of commissions of terminology as well as a link to international bodies such as the ISO.
- b) Terminology work in the framework of general language planning bodies, primarily concerned with the interface between terms and general vocabulary. The *Norwegian Language Council* supervises the language of teaching material and textbooks, and all standardization of neologisms and loanwords are authorized by the council. Essential issues of terminology are in this respect central to the council. Much effort has been put in terminological lexicography in the field of computer science, a field of high socio-cultural and economic prestige.
- c) Terminology as a research discipline at an academic level. The *Norwegian Term Bank* is an institution of the University of Bergen, founded in 1981 as

a branch of computational linguistics at the university. The Term Bank conducts terminology work of the type a above at a commissioned basis. A large terminological data bank has been developed during the last decade, and several courses on terminology have been given. In addition, a research group within the Term Bank is concerned with socio-terminological aspects of terminology, and this group is in close contact with other researchers and research groups within the Nordterm context (Rangnes 1996, Sæbøe 1996).

The institutions mentioned constitute the main institutional infrastructure for terminology in Norway, although terminology is also performed by other academic and professional institutions. There is a general tendency that terminology institutions work separately from institutions concerned with general language. This also applies to the other Nordic countries with the exception of Iceland. In Norway, however, the most significant feature of terminology work during the last two decades is perhaps not the permanent institutions, but rather the "task forces" assigned to specific and large-scale terminology projects in areas of particular political and economical interest. The public awareness of terminology is higher the more significant the subject field in question is in the Norwegian society. If, for instance, a vital sector of the national economy is developed by means of a foreign language, it is easily conceived of as a stronghold of linguistic and cultural "colonization". Conquering and securing the domain then becomes the vital concern of terminology.

In the Norwegian context there are two such projects worth mentioning: The creation of a national petroleum terminology in the 1980-ies, and the translation of the documentation related to the negotiations for membership in the European Union before 1994. A great concern and interest from the public opinion was common to both projects. In the latter project, the entire legal and economical terminology had to be translated into Norwegian. The former project is, however, better documented.

The discovery of oil and gas on the Norwegian Continental Shelf in the late sixties was followed by a rapid technological and economical development in this business. The activities were lead by multinational companies, mostly American ones, and by means of English as the working language and lingua franca. There was a growing public concern that these large-scale economic activities would become a threat towards the national culture and language. This concern was supported by several research reports documenting that insufficient competence in English would cause dangerous situations (e.g. Flydal 1983). The governmental oil company Statoil responded to this concern in 1983 by deciding to make Norwegian the working language of a new and large oil field. A large-scale terminology project was carried out to meet this demand, involving specialists as well as linguists. The first project was followed by several others. A Norwegian domain in this vital sector was secured, even though it did not imply abandoning English completely.

The symbolic function of this terminology work is important, and I will deal with the experiences from this project in some detail. There are some very important methodological consequences to be examined: The corpus planning strategies applied, i.e. the term formation patterns, must be examined both in the light of Norwegian purism in general and with respect to the interaction of linguists and specialists. Concerning status planning, there are some lessons to be drawn from the particular decision procedures underlying this project.

THE ROLE OF PURISM IN VOCABULARY PLANNING

The term and concept of 'purism' is complicated. At an ideological level preserving the national language always implies some purist motivation, but there is no clear correspondence between ensuring domain at the status level and

implementing certain purist strategies at the corpus level. A uniform policy concerning loanwords does not exist in terminology, nor does it exist in the Norwegian society. The Anglo-American linguistic and cultural influence is a common concern of the Nordic languages, and their ways of dealing with it differ in some interesting ways.

Few people would disagree that Iceland has the strongest purist orientation at the corpus as well as the status level. No distinction is made between general and special language, and large resources are invested in producing special dictionaries and creating indigenous neologisms to cover new and/or special concepts. Earlier, this purism was directed against Danish and international words, today, the main goal is English.

Most people would also agree that Denmark is on the opposite end of the purist scale. In earlier periods in Denmark there has been purist movements against the German influence e.g. in the field of scientific nomenclature, but there are few and weak signs of reaction to the massive invasion of English loans of today. Finland and Sweden may be placed somewhere between Iceland and Denmark on this scale, but for obvious structural reasons a large proportion of English loans are replaced by neologisms in Finnish (Haarala 1983).

The place of Norwegian purism in this scale model is also somewhere in between, and maybe it is best described by the term "ambiguity". In the public opinion there are neither a "laissez-faire" attitude, as we conceive of it in Denmark, nor are there any consistent purist strategies of the Icelandic type. Norwegians identify with Anglo-American culture, and their language is open to English loans, but there is at the same time a great public concern for the cultural dangers and how to prevent them.

These differences are important to terminology insofar as it explains – in my opinion – the different profiles of terminology in the Nordic countries. With respect to the two functions of terminology, Iceland is most highly characterized by the cultural function, followed by Norway. The strong interface function characterizing Denmark on the opposite end of the scale is due to both the lack of interest in neologisms and the advanced research in other fields of terminology. By this comparison I do not want to imply that purism corresponds to linguistic consciousness and anti-purism to a lack of linguistic interest, there is of course more to it than that.

In Norway three main types of purism may be distinguished

Firstly, the purism directed towards international Greco-Latin words. Today, this type of purism is insignificant, in contrast to Iceland. In the terminologies of e.g. medicine, biology and chemistry the existence of Greco-Latin registers are fully recognized, and the efforts of The Norwegian Language Council are restricted to the level of orthography (e.g. *oksyd* > *oksid* 'oxide').

Second, a "selective" purism in Nynorsk, directed against certain borrowed words and affixes of German origin, transmitted into Norwegian through Danish. Today, these affixes are fully accepted in Bokmål as well as in the vernacular of most Norwegians: BM *sikker-het* vs. NN *trygg-leik* ('safety', cf. de 'Sicher-heit'), BM *be-skriv-else* vs. NN *skildr-ing* ('description', cf. de 'Be-schreib-ung'), BM *an-be-fale* vs. NN *til-rå* ('recommend' 'to-advice', cf. de 'emp-fehlen') etc. As we can see, the morphological structure of Bokmål and Nynorsk equivalents is often quite different and the correspondences are not always transparent.

There is a number of arguments supporting this second type of purism: The shunned words and affixes are said to be typical of an "officialese" style pattern, that is: the arguments are based on democratism. They may also be considered

unacceptable for simple historical reasons. I think the main problem is one of tradition and identity, irrespective of the pure historical or democratic motivations. Allowing such elements into Nynorsk may be considered a threat to the autonomous stylistic "profile" of the language, while preventing them no doubt strengthens the tendency of switching to Bokmål completely. The norms are changing, and this has been a controversial issue for many years. The tendency is clear, however: This type of purism is decreasing.

From a terminological point of view the selective purism of Nynorsk is interesting because it demonstrates some significant restrictions on terminology standardization. It is generally accepted that term formation should respect the norms of the language in question. On the other hand, standardization does not allow for variants and synonyms. The subject specialist writing in Nynorsk always confronts the conflict of choosing or creating a neologism that may be accepted by traditionalists on the one hand and to his or her colleagues on the other hand. One example from marketing terminology might illustrate the problem. There is a distinction between NB *anbud* 'tender' and *tilbud* 'offer'. Because the NN tradition is blocking words containing the prefix *an-*, both concepts were until recently covered by the term *tilbod*, containing the cognate roots *-bud/-bod*. The solution nevertheless has been to accept the variant *anbod* in NN. The possible frown from purists has to be balanced by the higher degree of unambiguousness. As long as it is not possible to decide which patterns unanimously correspond to the norms of the language, this problem rests. It may even be sharpened by terminological contexts.

The third and of course most significant type of purism in Norway today is of course directed towards English loans. The English influence has been thoroughly investigated by research (e.g. Graedler 1995). Even if more than one linguistic level are concerned, the main focus is on the lexical level. In 1990 the Norwegian Language Council launched a campaign against "unnecessary" use of English, "The Campaign for the Linguistic Environmental Protection" (Vikør 1993). The creation of neologisms and the use of Norwegian in advertising were especially encouraged.

There is no doubt that the campaign was well received by the public opinion but, perhaps surprisingly, it was criticised and to some extent ridiculed by some linguists. There were two reasons for this: Firstly, the connotations signalled by the name of the campaign were considered unacceptable both politically and ethically. Secondly, the fundamental question of scientific legitimacy was raised and it was argued that the English influence was exaggerated. This argument was supported by research from Swedish newspaper corpora showing a percentage of no more than 4 % English loans (Chrystal 1988). Moreover, it was argued with the evidence of the English language and others that extensive borrowing not necessarily threatens a language but on the contrary may enrich it. From this evidence it was not possible at all, according to the critics, to conclude that the Norwegian language suffers any immediate risk of being extinguished. So, why engage in purist campaigns.

Many comments could be made about this criticism. No doubt, the discussion suffered from the fact that the distinction between status and corpus planning initially was not drawn in a clear-cut manner. There were only a few references made to experiences drawn from practical terminology work. If the Norwegian language is not in danger, is it because external pressure does not mean anything or is it due to efficient measures of domain and structure preservation? It seems that the whole question of domain preservation has received greater attention in the last few years following the campaign. This is in my view a very important achievement of the campaign.

Discussions of purism on the level of corpus planning have also received attention during the last few years. Again, the purist orientation is stronger than in the neighbouring countries. In dealing with loanwords, there are three main alternatives:

Firstly, *direct borrowing* without modifications, which is generally considered to be structurally inconvenient and should therefore be avoided. Secondly, the strategy of *assimilation*, making the necessary adjustments of spelling and morphology. And thirdly, *neology*, the creation of a descriptive and independent neologism.

Traditionally, neology has had a certain priority over assimilation at the level of ideology. At present, though, this is an issue of discussion due to an extensive effort in 1996 by the Language Council to assimilate a series of English loans. The strategy of assimilation has been used for many years without any protests or rejection, e.g. *bureau* > *byrå*, *chauffeur* > *sjåfør*, *chocolade* > *sjokolade*, but now, a lot of people did not like the idea of changing *champagne* to *sjampanje* in a parallell (and optional) way. A large number of new word-forms were considered strange and unacceptable: *display* > *displei* (or 'teikn-rute' "character window"), *guide* > *gaid* ('om-vis-ar' "show-er around"), *heade, heading* > *hedde, hedding* (football), *catering* > *keitering* ('mat-forsyn-ing' "food supply"), *safe* > *seif* ('penge-skap' "money cupboard").

There is in many cases a neologism available to these assimilated forms, either as a compound word and/or as a loan translation, as we can see from the examples. So in practice, the number of lexical variants in the language is increased. The arguments for or against such neologisms are very traditional and common in most languages: They may be "descriptive" and "self-explanatory", but also "inconvenient", "boring" or even "ridiculous".

The criticism raised against these suggestions of assimilation was partly supported by the argument of common usage – that it is not wise to change established writing. The argument was also supported by a Nordic (or Scandinavian) argument: There is no intention to change the spelling in Danish or Swedish, and then the original spelling should be preserved in Norwegian as well. None of these arguments are likely to have any impact on the final decision as far as tradition is concerned.

The interplay of assimilation and neology is, on the other hand, more interesting. It was argued that assimilation could be damaging to neology, that is, to the "genuine" use of national linguistic resources. By allowing loans in a direct form, it is assumed, as a matter of pure reasoning, that it is easier to motivate and to promote neology. There is, of course, no evident empirical proof of this assumption.

Due to the controversy raised by these suggestions, the Language Council was instructed by the Ministry of Culture to give a scientific account of the principles underlying the treatment of import words, in order to give a more consistent and coherent treatment in the future. An extensive report is on its way (Sandøy 1997), indicating a dual strategy in the years to come: Intensifying the use of assimilation, but at the same time encouraging neology as far as possible. The main idea seems to be that the two alternative strategies should strengthen each other mutually.

THE INTERPLAY OF GENERAL AND TERMINOLOGICAL VOCABULARY TREATMENT

It is time to return to terminology standardization in a more strict and systematic manner. But I think that a complete account of terminology standardization cannot be given outside the context of general language cultivation. The norms of society, not to mention the norm conflicts, influence the normative work of term formation in crucial ways. This interplay is also affected by the way we draw the demarcation line between general and special language. Terminology theory emphasizes the autonomy and specificity of terms and of terminology methods. It has been argued that by

including terminology in general language as a subset, the result may be severe shortcomings on the part of terminology (Sigurdur Jónsson 1989).

There is no simple answer to this complex problem. As far as term formation is concerned, however, I think that the interplay between general and special language is the essential culture-specific area of terminology theory. The conventions of term formation are highly culture-dependent, but a certain transfer of principles the other way is also conceivable. The central ideal of variant delimitation (the problem of synonymy and monosemy) may for instance also be applied to general language. It is sometimes argued that creating and standardizing a neologism should be considered integrated parts of one and the same operation. There should be no launching of a neologism if it cannot be completely accepted, or, the launching of neologisms increases the number of variants and should therefore be avoided. But there are of course fundamental differences between the context-dependent aim and scope of a terminology planning project and motivational campaigns of the type mentioned above. In the large-scale work on petroleum terminology these dimensions were to some extent mixed, partly due to visionary optimism on the part of terminologists and partly, I think, due to the powerful political mandate supporting the work.

On the other hand, there are certain principles internal to terminology whose interaction with general ideologies of language planning is intricate. The principle of motivation is one such example. According to ISO 704, "Accuracy (motivation)" means that "A term should [...] should reflect, as far as possible, the characteristics of the concept which are given in the definition (ISO 704 1987:12)". This principle is often taken to support purism in terminology, that is, purist strategies may be motivated by the "intelligibility argument" (Thomas 1991), the need for easy decoding of the concept. The principle has been associated with the ideology of "democratism" (e.g. Dahlstedt 1967), and it is said to have an ethical dimension – that specialists have an obligation to make themselves understood by everyone, as one Icelandic terminologist puts it (Einar B. Pálsson 1993).

With respect to terminology as well as general language this would mean that the strategy of *neology* serves both purposes better than assimilation: A neologism made by native resources is "democratic" and the characteristics of the concept are better reflected (Myking 1997).

From this ideological point of departure it is possible to harmonize the two functions of terminology, the interface and the cultural function. Principles of terminology are not only affected by a certain cultural climate in society, they also contribute to preserve a climate of this kind. This attitude is a very strong component of terminology in Norway and the other Nordic countries as well. On the other hand, it is rather obvious that it cannot be applied in practice without serious limitations. If it had been possible to do so, terminology would perhaps be able to prescribe a universal policy of loanwords - a goal that is far from being realized (cf. Maurais 1993).

THE SPECIALIST LANGUAGE USER – TRAPPED BETWEEN "INTERFACE" AND "CULTURE"?

The specialist language user is in the centre of the problems discussed above, because of his or hers dual community membership – of the national community and the specialist sub-community. Every type of language planning is in this way affected by the problem of established usage: Irrespective of the merits of a neologism, the specialist tends to prefer the established terms of his group. In recent terminology work in Norway this problem has been extensively dealt with, due to the fact that

collaboration between specialists and linguists has been heavily emphasized in practical work.

The norm conflicts are the more crucial the weaker the status of a language. For instance, specialists using Nynorsk experience a lack of genuine tradition which would be compatible to established usage, as mentioned before. Purist solutions seem to alienate the terms from the users, but the real problem is a lack of pragmatic motivation for terminology planning on the status level. As long as the specialists can manage by means of loans from Bokmål, the linguistic interest in Nynorsk is concentrated on general language. At least to some minority languages, the cultural function alone seems insufficient as a motivation for terminology planning.

In my view the cooperation of specialist and linguists is an important subfield of "socioterminology" (Maurais 1993). Historically, the theory of terminology has focused on the referential functions of language. No technolect is, however, exclusively referential. All technolects also carry certain sociolinguistic and social functions, allowing members of a specialist community to identify with their group. Linguists engaging in terminology cooperation must pay attention to this fact just as much as we demand that specialist respect the norms of the national language. The two demands correspond to each other conversely.

These problems have been clearly demonstrated by the work conducted in the projects on oil terminology (Rangnes 1996, Sæbøe 1996). During the first years of oil exploration a "hybrid" working language developed by lexical interference. For practical purposes it worked well to some extent, but it did not of course conform to general norms. There is ample evidence – in retrospect – that in the process of terminology elaboration sociolinguistic aspects were often neglected. Terms of the "hybrid" language are often described by features such as spontaneous, oral, metaphorical non-academic and economical, but also unsystematic, linguistically non-adapted and non-motivated. Their standardized equivalents, on the other hand, often conform to the norms of general language as well as terminology, being morphologically motivated and systematic, but also often more inconvenient. In the following examples, the standardized equivalents of the right column are contrasted with hybrids in the middle:

<i>kelly</i>	<i>kelly</i>	<i>drivrør</i>	("drive + tube")
<i>rathole</i>	<i>rottehull</i>	<i>drivrørshylse</i>	("drive + tube + cartridge")
<i>mousehole</i>	<i>musehull</i>	<i>rørkopplingshylse</i>	("tube + connecting +cartridge")

The challenge to terminology is to perform a language planning that takes the sociolinguistic factor into consideration, although it may appear as a logical inconsistency to demand that group-identifying features of terminology can be planned with the help of outsiders, i.e. terminologists. At the same time, linguistic attitudes are never static, and there is no evidence that specialists are insensitive to the general norms of language as such. This problem does not have any simple solution, but there are simply no other alternative than encouraging this type of collaboration.

TERMINOLOGY AND THE ROLE OF THE "MARKET"

In this survey I have emphasized the importance of the sociolinguistic climate as a driving force of terminology in Norway. But at the same time there is an inconsistency resulting from the fact that terminological infrastructure is not particularly advanced compared to other Nordic countries such as Denmark. Public opinion seems to be rather unaware of this fact. It might be asked whether there is a

real conflict of priority between the two functions of terminology, but rather, it is my opinion that the real limitations are to be found in the context of market economy. By this I mean that market constraints have not been sufficiently compensated by governmental effort.

In the Nordic countries it seems that there is an interdependence between market orientations and the strength of the interface function. In Finland, there is on the one hand an official Finnish–Swedish bilingualism and on the other hand an open and export-oriented economy. Both factors motivate research and educational activities relevant to terminology. A more systematic approach to translator training is on its way in Sweden due to Sweden's entering the European Union in 1994, and intensified terminological efforts must be expected. The development of terminology-related institutions in Denmark is also explained by Denmark's membership in the European Union in 1972: One important goal of this development has been to strengthen Danish industrial competitiveness. It is also quite interesting with respect to Danish anti-purism and the two functions of terminology that the Danish authorities have explicitly called for developing a "national" language technology including an efficient terminology work (cf. *Dansk sprogteknologi*, 1994).

The economical system in Norway is also open and export-oriented, but the heavy emphasis and dependence on oil and gas exploitation is a special feature giving slightly different connotations to the word "competitiveness". The motivation for a Norwegian oil terminology is a very illuminating example of market-orientation. There were no legislation in a strict sense demanding the use of Norwegian, but the language question entered a complex market strategy of ensuring the political and economical control of the national resources (Sæbøe 1996). This strategy of "Norwegianization" is the result of a "mixed economy" of state intervention and market orientation. The state's own oil company Statoil has for 25 years been the main tool to execute this policy. By responding to a great public concern for the national language and culture, Statoil also defined a linguistic standard to be respected by multi-national companies wanting to compete in the business. So, this explains why the Norwegian language today is used to a great extent by many international oil companies. On the other hand, it also explains why this language policy has not been carried out in complete consequence, not even by Statoil. Today, there even appears to be a reversal following Statoil's orientation towards the international markets, e.g. in the Far East.

As we can see, the strength of the cultural motivation as well as the way of financing it in Norway cannot be fully compared with the Icelandic way. At least to a foreigner, it seems justified to say that the market motivation for terminology have no significant function in Iceland. There, a strong cultural motivation walks hand in hand with governmental efforts and funding.

CONCLUSION

The Norwegian and Nordic experiences in terminological language planning demonstrates how terminology is conditioned by the general socio-cultural climate in the society. There are clear examples of what can be achieved when market conditions and the cultural climate coincide, as well as examples of the shortcomings caused by the market dependence. I have several times touched upon the question of priority conflict between the cultural and the interface functions of terminology. It is no doubt that several differences between the Nordic countries can be analyzed with respect to this dichotomy. On the other hand, it does not seem plausible that a strong and efficient terminology work can be motivated and promoted in all its aspects without the basis of a strong public interest in language.

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LABURPENA / RESUMEN / RÉSUMÉ / ABSTRACT

Terminologiaren normalkuntza eta hizkuntz plangintza: Norvegiaren esperientzia

Artikulu honen gai nagusia Norvegiako hizkuntz plangintza terminologikoari buruzko azterketa da, hau da, erakunde nagusienak, lorpen garrantzitsuenak, hatsapenak eta praktika. Terminologiak hizkuntz plangintza orokorrekin duen harremana aztertzen da eta norvegiarren terminologia esparru nordikoan sartzen da. Terminologia nordikoaren lana bi funtzio garrantzitsuren arabera azaltzen da: funtzio kulturala eta funtzio elkarreragilea. Badirudi funtzio kulturala dela indartsuena norvegiarren ingurunean, arrazoi soziolinguistikoaren eraginagatik.

Ondare historikoa eta giro soziolinguistikoa aurkezten dira eta bi eredu estandarren arteko ezberdintasun linguistiko nagusiak azaltzen dira, adibide batzuen bidez. Bi eredu estandar izan arren, norvegiarren linguistika kulturala homogeneotzat jotzen da. Soziolinguistikaren eragina nabarmena da, jendeak hizkuntzarekin zerikusia duen guztiagatik erakusten du interesa, batez ere, ingelesaren eragin handiagatik. Horren guztiaren ondorio garrantzitsuetako bat da terminologiako gaiei buruzko nolabaiteko interesa.

Ingurune nordikoa eta Eskandinaviako herrialdeetako bereizgarri linguistikoak laburbilduta daude. Arlo askotan gauzatzen da linguistika mailako elkarlana Eskandinaviako herrialdeen artean, eta Nordterm terminologiako sarea elkar sustapenerako eta zientzia garapenerako iturria izan da.

Terminologiako corpus-plangintzaren arauak hizkuntz oinarrien esparru zabalean planteatzen dira, garbizaletasuna eta maileguekin lotzen diren estrategiak nabarmentzen direlarik. Hizkuntza orokorrean hartuta, badirudi asimilazioaren estrategia nagusitzen dela eta neologismoekin batera bultzatzen dela. Terminologian elkarreragina dago garbizaletasunaren eta motibazioaren oinarri terminologikoaren artean. “Nazioaren eraikuntzari” eta “demokratizazioari” buruzko ideologiaren eragina nabari omen da norvegiarren hizkuntz plangintzan, bai corpusari dagokionez eta baita estatusari dagokionez ere.

Norvegiarren terminologia plangintzaren lorpenetako batzuen zertzelada batzuk ere azaltzen dira, bereziki petrolioaren industriari zegokion terminologia nazionalaren sorrera. Proiektu horretan kontuan eduki dira terminoak osatzeko estrategiak eta hizkuntzaren arau orokorrak, adituen eta hizkuntzalarien arteko elkarlana eta lanaren azpian dauden irizpideak eta erabakiak, merkatu estrategia berriek eragindakoak.

Aurkeztutako esperientzietan oinarrituta, ni sozioterminologiako gaiei garrantzi handiagoa ematearen aldekoa naiz terminologiako azterketak egiterakoan.

Normalización y planificación lingüística en terminología: la experiencia noruega

A lo largo del presente artículo se aborda el estudio de la planificación terminológica de la lengua noruega, a saber: sus principales instituciones, sus logros más relevantes, principios y práctica. Se analiza su relación con la planificación lingüística en general y la terminología noruega se enmarca dentro del ámbito de la terminología nórdica, la cual se explica haciendo referencia a dos funciones importantes de la terminología: la función cultural y la función de interacción. La función cultural es la que aparentemente cobra más importancia en el contexto noruego, debido a aspectos del ámbito sociolingüístico.

Tras dar un repaso a los antecedentes históricos y al ámbito sociolingüístico, se pasa a exponer la diferencia más importante entre los dos estándares oficiales mediante algunos ejemplos. A pesar de la existencia de dos estándares escritos, la cultura lingüística noruega se considera homogénea. El ámbito de la sociolingüística está caracterizado por el gran interés del público por todo tipo de cuestiones lingüísticas, especialmente por la gran influencia del inglés. Como resultado cabe resaltar el interés latente que existe por las cuestiones terminológicas.

Se resumen el contexto nórdico y las características de las comunidades lingüísticas nórdicas. Hay una cooperación lingüística entre los países nórdicos en muchos campos y la red terminológica Nordterm ha sido una fuente de inspiración mutua y progreso científico.

Los principios de la planificación del corpus de terminología se debaten en el contexto de los principios lingüísticos generales y se enfatiza el papel del purismo y las estrategias ligadas con los préstamos. En líneas generales parece que la estrategia de la asimilación gana terreno, y es fomentada del mismo modo que la adopción de neologismos. En el ámbito de la terminología hay una interacción entre el purismo y el principio terminológico de la motivación. Parece ser que algunas ideologías tales como la “construcción de la nación” y la “democratización” han ejercido influencia en la planificación lingüística en Noruega tanto en lo referente a corpus como a estatus.

También se mencionan algunos aspectos de los logros de la planificación terminológica en Noruega, especialmente la creación de una terminología nacional sobre la industria del petróleo, en el que se hace referencia a las técnicas de creación de términos y normas lingüísticas generales, la cooperación entre especialistas y lingüistas, y las estrategias de mercado que motivan la política y las decisiones subyacentes en este trabajo.

Basándome en las experiencias presentadas, yo me decanto por dar mayor relevancia a las cuestiones socioterminológicas al realizar investigaciones terminológicas.

Normalisation et planification linguistique en terminologie: l'expérience de la Norvège

Le thème général de ce rapport a trait à une étude portant sur la planification du langage terminologique en Norvège. En d'autres termes, ce rapport s'intéresse à ses institutions les plus importantes, ses résultats les plus notables, ses principes et pratiques. Le rapport existant avec la planification linguistique générale s'y trouve analysé, en établissant un cadre pour la terminologie norvégienne. Ladite terminologie y est expliquée sur la base de deux fonctions principales : la fonction culturelle et la fonction d'interface. Dans les conclusions il est signalé que la fonction culturelle paraît comme étant la plus forte dans le contexte norvégien en raison des caractéristiques propres au climat sociolingüistique.

Y sont présentés aussi bien les antécédents historiques que le climat sociolingüistique, en dehors des principales fonctions linguistiques rencontrées entre les deux standards officiels, par le biais de certains exemples. En dépit de l'existence d'un double standard écrit, on y souligne que la culture linguistique norvégienne est homogène. Le climat sociolingüistique se caractérise par un considérable intérêt de la part du public concernant toute sorte de questions linguistiques, spécialement celles ayant trait à la forte

influence de la langue anglaise. L'une des conséquences les plus importantes réside en l'existence d'un intérêt latent vis-à-vis des questions de terminologie.

On y décrit le contexte norvégien et les caractéristiques de différenciation des communautés linguistiques norvégiennes. Il existe une coopération linguistique entre les pays nordiques dans de nombreux domaines. En outre, le réseau Nordterm de terminologie a été une source d'inspiration mutuelle comme de progrès scientifique.

On y aborde les principes de planification du "Corpus" dans le contexte des principes linguistiques généraux, en y mettant l'accent sur le rôle du purisme et des stratégies ayant à voir avec les emprunts de mots. Il semble que la stratégie d'assimilation gagne en importance dans le langage général et s'en trouve stimulée à l'instar de la néologie. Quant à la terminologie, il se produit une interaction entre le purisme et le principe terminologique de motivation. Il y est souligné que des termes tels que "construction d'une nation" et "démocratie" ont influé sur la planification linguistique norvégienne, tant au niveau du "corpus" que du status.

On y analyse également en incise une série de réussites de la planification terminologique norvégienne, notamment dans les travaux visant à créer une terminologie nationale dans l'industrie du pétrole. Ledit projet est discuté dans l'optique des stratégies de formation de termes, de normes linguistiques générales, de coopération entre spécialistes et linguistes, ainsi que de stratégies de marché visant à promouvoir la politique et les décisions subséquentes à ce travail.

Sur la base des expériences présentées, j'estime qu'il convient de mettre plus l'accent sur les questions socio-terminologiques dans le domaine de la recherche terminologique.

Standardization and Language planning of terminology: the Norwegian experience

The general topic of this paper is a survey of terminological language planning in Norway, i.e. its main institutions, important achievements, principles and practice. The relationship to general language planning are discussed, and Norwegian terminology is placed within the Nordic framework. Nordic terminology work is explained with reference to two main functions of terminology: The cultural function and the interface function. It is concluded that the cultural function appears to be the stronger one in the Norwegian context, due to features of the sociolinguistic climate.

The historical background and the sociolinguistic climate are presented, and the main linguistic differences between the two official standards are explained by some examples. In spite of the existence of two written standards, Norwegian linguistic culture is said to be homogeneous. The sociolinguistic climate is characterized by a considerable public interest in language questions of all kinds, especially the strong influence from the English language. One important consequence of this is a latent interest in issues of terminology.

The Nordic context and the distinguishing features of the Nordic linguistic communities are outlined. There is a linguistic cooperation between the Nordic countries in many fields, and the terminology network Nordterm has been a source of mutual inspiration and scientific progress.

Corpus planning principles in terminology are discussed in the context of general language principles, emphasizing the role of purism and of strategies dealing with loanwords. In general language, the strategy of assimilation seems to gain importance and is stimulated together with neology. In terminology, there is an interplay of purism and the terminological principle of motivation. Ideologies such as "nation-building" and

"democratism" are said to have influenced the Norwegian language planning both at the corpus and the status level.

Some achievements of Norwegian terminology planning are also discussed in some detail, especially the work of creating a national terminology in the oil industry. This project is discussed with respect to term formation strategies and general language norms, to the cooperation between specialists and linguists, and to the market strategies motivating the policy and decisions underlying this work.

On the basis of the experiences presented, I argue in favour of a greater emphasis on socioterminological issues in terminological research.