

Chapter 1

Translators' aids: User profiles

1.1 User profiles

Translation has traditionally been seen as the work of professional artisans who diligently translate other peoples' text in the best possible manner. It has been considered separate from other activities such as marketing or research and development — if not even subordinate to them. In some respects translation has been a buffer between the internal activities of an organisation and its international contacts.

With the dramatic increase of international contacts the picture has changed. More and more people other than translators or interpreters are personally involved in translation and dealing with people in a foreign language, be it orally or on paper. The amount of text to be translated is growing and so is the number of languages involved. Furthermore, the level of translation that is expected is allowed to vary as information is sometimes needed more for its general contents than for reading pleasure. That is, the translation can be less than perfect in style. All this is starting to make a mark in the arrangement of translation activities in different organisations.

Thus, translation is no more just the activity of individuals but rather a collective process of an organisation. Therefore the concepts of *user* and *user profile* are used in this text to denote collective entities, that is organisations. The actual users of any translators' aid are individual persons, who could also be classified, but this perspective is given less attention here.

1.1.1 Dimensions of translation

Translation activity can be described along several dimensions. These dimensions can be divided into those describing the translated text, the arrangement of translation activity and the external context of translation.

Translated text itself can be described along the following dimensions:

- Quantity of translated text;
- Quantity of text produced directly in a foreign language;
- Quantity of translation work;

- Text type;
- Domain of text;
- Characteristics of source text;
- Languages involved;
- Translation quality;
- Extent of translation work.

The arrangement of translation activity, on the other hand, can be described along the following dimensions:

- Type of translation organisation;
- Job descriptions of people involved in translation;
- Size of translation organisation;
- Medium of translation work.

Finally, the external context of translation in an organisation can be described along the following dimensions:

- Nature of the enveloping organisation;
- Size of enveloping organisation;
- Amount of international activity;
- Nature of international activity;
- Language policy of the enveloping organisation;
- Medium of information production and exchange.

Often, some of these dimensions have more than one value and these different values have varying weights. Therefore, the aforementioned dimensions are most conveniently considered as primary dimensions, which in their turn can be described by secondary dimensions. These secondary dimensions are statistical in nature:

- set of values;
- frequencies of values;
- average value;
- variance of values;
- minimum value;
- maximum value.

1.1.1.1 Quantity of translated text

The most obvious dimension of translated text and translation activity in general is the quantity of translated text. It is also easy to quantify and measure. Quantity can be measured in units of pages or words or even characters, which are all related to each other. Sometimes text is also measured in lines. Pages consist of lines which consist of words which consist of characters. Naturally the amount of words per page depends on the definition of a page, for instance the size of the page and the size of the font. Further aspects are whether to include articles, numerals, punctuation, whitespace characters and abbreviations in the measurement or not. In this text, a standard page is understood to contain 2000 characters including articles, punctuation, spaces and numerals.

The choice of unit of measurement depends on the text type and the country in question. While standard pages are still used for the measurement of literary text, the amount of words is the measurement of choice in software and manuals, especially in conjunction with high end translators' aids. Appendix 1 contains a sample of different standards of measurement of the quantity of translated text in several European countries.

In addition one has to note that in different languages the average quantity of words per page varies according to the properties of the language. For example, a text in Finnish usually adds up to less words than the equivalent text in English. One reason for this difference is that Finnish uses inflection whereas English uses prepositions. The situation is similar with other languages, too. In the experiences of a Swedish translation organisation, technical texts translated from Swedish to English tend to lengthen by 15 percent (in terms of characters), whereas similar text translated from Swedish to French tend to become slightly shorter. A point to remember is whether one is measuring the quantity in the source language or the target language. For software and manuals the quantity is measured from the source language, whereas fictional text such as literature is usually measured in the target language.

Another difference in the measurement of quantity of translated text exists between ideographic languages such as Chinese and Japanese, and alphabetic languages such as European languages. In languages with an alphabet, an individual word is composed of one or more characters, that is letters of the alphabet. On the other hand, a substantial amount individual words in ideographic languages correspond each to an individual character or ideogram. Thus a text of 400 characters in Japanese may roughly correspond to 250 words in English.

The quantity of translated text can be measured text-by-text or on a time scale, usually on a monthly or yearly basis. Quantity measured text-by-text can vary greatly, but usually there is clear minimum and maximum and naturally an average quantity. If a text exceeds a thousand pages or so, it is often divided into smaller sections. Quantity measured by year gives a general picture of translation activity within an organisation. This figure can vary from several hundred pages to tens of thousands of pages a year, depending on the organisation.

1.1.1.2 Text produced directly in a foreign language

A distinction has to be made between text actually translated within an organisation and text produced *directly* in a foreign language. While the former involves mainly fully trained translators, the latter could involve any employee with a need and the ability to communicate in a foreign language. Typically, text produced directly in foreign language is correspondence and other internal communication such as reports, which non-translator employees feel competent to produce themselves. In

fact, the present text is an example of text written directly in a foreign language. Its production has also involved a preference for speed and efficiency of communicating the essentials directly, over the *possibly* better style of a translation, which moreover involves a longer, costlier and indirect process of communicating.

Nowadays, the scope of text types produced in this way is starting to spread, in many organisations, to other text types as well, such as technical and scientific reports and manuals. Such spreading relies quite heavily on the language skills of the employees and is usually restricted to a few core languages. The role of translation organisations in these cases is shifting from brute translation work to language support — proof-reading and fine-tuning texts, and the development and maintenance of translators' aids suited for the needs of other employees. It is essential to note that most of the aids useful in translation can also be use successfully as aids in producing text directly in a foreign language.

All in all, production of text directly in a foreign language is bound to affect the quantity of translated text and translation activity in general within an organisation. Therefore, its quantity is of utmost interest, but, unfortunately, it is difficult to measure, as the text is often a produced alongside of other work and only a fraction, at least for the moment, is processed in some way by actual translation organisations. In any case, the same guidelines that apply to the measurement of translated text apply to the measurement of text produced directly in a foreign language as well.

1.1.1.3 Quantity of translation work

The volume of translated text can also be described by how much time has been used in the translation work. Usually this is measured in person-hours. The amount of work correlates with the quality of the translation and the extent of translation work, which may vary from text to text. In addition, the amount of work depends on the target and source languages. Typically, a full-time professional translator can translate around 5–8 standard pages of text in a standard 8-hour work day.

1.1.1.4 Text types

Text type defines what is the purpose the text. In other words, what is the text used for. Is the text for example supposed to tell how something is used or maintained, or is its aim to coerce someone to buy something? This, in turn, is closely connected with the form of the text: how is the text written; what styles are used. Classification of text types could be continued ad infinitum, but at least the following general classes are usually recognised (based on a classification by JEIDA):

- Product manuals and catalogs;
- Contracts;
- Scientific papers;
- Letters and correspondence;
- Patents;
- Reports;

- Newspaper and magazine articles;
- Advertisements;
- Legal documents;
- Novels and essays;
- Plays and poetry.

The meanings of these classes should need no explanations. It should be obvious that the above list is by no means exhaustive, as well as the fact that the borderlines between the different classes are not always clear-cut. For example, an article in a newspaper or a magazine could either be an editorial, a review, a column, or a feature article — all different types of articles. As another example, it is not too uncommon nowadays to discover in magazines advertisements posing innocently as unbiased articles. Where does one draw the line? Typically, organisations use a wide range of text types.

1.1.1.5 Domain of text

Usually the contents of a text concern some definable subject area. This is called the domain of the text. Classification of the domain of text is even more hazy and endless than that of the text type. A good example of this is the international UDC system used in libraries, in which ten major classes are divided recursively into more and more specific subclasses. Some examples of different domains could be the following:

- Biology;
- Medicine;
- Engineering;
- Chemical engineering;
- Biochemistry;
- Chemistry.

As can be seen, these classes are not mutually exclusive. Biology overlaps partly with medicine, while engineering includes chemical engineering as a subgroup, and biochemistry combines parts of both biology and chemistry. The domains of text of an organisation should correspond to the fields of activity of the organisation. What is of special interest is the group of different domains of text that the organisation uses. The activities of the organisation may concern only a single, narrow domain, or may cover a broad spectrum of different domains.

The domain of text also partly indicates what sort of terminology the text includes. Terminology means a set of words or terms in the vocabulary that is understood to cover and describe the activities of some domain(s) in an organisation. Terminology can be divided hierarchically to different levels:

- General (as in terminology of any formal text);

- Domain specific;
- Organisation specific.

These levels sometimes overlap in the same manner as domains of text or may contain contradictory definitions. For its own part, terminology can be classified endlessly. Under the domain of technical text, successive subclasses of terminology could be for instance:

- Electronics;
- Telecommunications;
- Mobile phone technology;
- Mobile phone terminology of Nokia Mobile Phones.

Terminology used by an organisation and its employees does not, however, necessarily follow generally accepted divisions between different domains of text. Terminology used by an individual employee may happily mix commercial terms with technical terms. Typically, this sort of individual usage and translations of terminology by translators is collected into personal glossaries. What would be of special interest is how much these different glossaries intersect and how well they cover the overall terminology used by an organisation. One could assume it would be in the interest of an organisation to have the glossaries used by its translators and other employees as uniform as possible.

1.1.1.6 Characteristics of source text

Characteristics of the source text describe qualitatively the style of the text. This is partly a subjective dimension, but can also be more objectively described with diligent analysis of the source text. It is also a relative dimension, since it can only be measured against other texts. Taking this in mind it is a useful — and practical — concept only within one particular text type and domain of text, though one could intuitively see differences between the general characteristics of different text types or domains of text. At least hitherto there exist no quantitative, universal norms or standards for characteristics of text. Typically the source text can be characterised as being:

- Repetitive
- Creative
- Terminology-rich
- Restricted language

Repetitiveness means that the text contains more repetitions of individual terms or words, phrases, sentences, and even full paragraphs than what is usual for a particular text type and domain of text. From the point of view of translators' aids, repetitiveness is most significant when it occurs from text to text, though this by no means shuts out repetitiveness within single (long) texts. It may mean word-for-word repetition or similarities in constructions used in the text. Thus, repetitiveness

may also imply that word order or the structure of sentences is more consistent than what is usual for a particular text type and domain. Generally, some text types and domains such as manuals and technical text are considered more repetitive than others, but lately it has been discovered in intuitively unexpected text types such as newspaper articles.

Creativity in the linguistic sense basically means the fullest use of the expressive possibilities of the language in the text. It may imply a large variance of words or the use of rare words and colourful idioms. This may lead to the use of many different terms for the basically same concept for the sake of nuance. Creativity may also imply greater variance of sentence structure and other constructions than what is usual for a particular text type and domain. Often, the concept of idiomaticity is considered synonymous to creative use of language, but what are idioms other than fixed phrases used in a repetitive manner? Creativity is a dubious concept, however, since onetime idioms often turn into generally accepted terms. Typically, creative text is encountered in literature and advertising, but it is by no means limited to these text types. A good example of this can be found from Finnish computer jargon in the early use of the word 'imuroida' — 'to use a vacuum cleaner' in the meaning 'to retrieve data from remote servers'.

Terminology-rich means that a text contains a high proportion of terminology. Understanding terminology-rich text requires knowledge of the specific domain or organisation in question. Typically, terminology-rich text is encountered in scientific and technical texts of any kind.

Restricted language means that the general vocabulary and the terminology used in texts is limited to a small subset of language. Here, ideally, for terms, one concept corresponds to one term, and general language words are restricted in their meanings. Restricted language is usually accompanied by restricted grammar which limits the set of structures used in the texts and usually includes guidelines about word order and the length of sentences. Restricted languages are usually designed for a group of several languages in order to achieve exact correspondences between the different languages.

1.1.1.7 Languages involved

Translation work usually involves many translation directions. A *translation direction* is a pair of languages, of which one is the source language and the other the target language of the translation work. The *source language* is the language of the the original text from which the text is translated. The *target language* is the language into which the text is translated. The direction of the translation is significant, since the ability to translate in one direction does not necessarily imply the ability to translate in the opposite direction. Very often, the target language is the native language of the person doing the translation work.

Typically some translation directions are more important than others. This dimension can be described by the set of translation directions and the respective quantities of text translated in each such pair. This dimension determines what language skills are needed in translation work. It may also help determine how the translation activity should be arranged by the organisation.

Often the term *language pair* is used. This means that text is translated in both directions between two languages. This often implies that the quantities of translated text are roughly equal in both directions, but this is not necessarily the case. Usually, there are at least some language pairs for which translation is done in only one direction.

Normally, the translation directions and language pairs are not random. Usually there is at least

one language which is a major source language or target language or both at the same time. Such a language will be called a *focal language* in this text. Usually, the focal language is the national language, but there may be one or two others. It is even possible that the national language is not a focal language at all. Typically, focal languages are used as intermediary languages when a translation is needed to or from a rare language. In such a case, English is the focal language par excellence.

Typically organisations have up to ten or slightly more translation directions, 2–4 language pairs, and 1–2 focal languages. If translations concern more languages, they are usually done via an intermediary language in which the organisation has the necessary language skills.

1.1.1.8 Translation quality

Until recently, there has basically been only quality translation, meaning the best a translator could reasonably offer. Translation work has strived at near perfection and nothing less. Nowadays, however, demand has arisen for variation along this dimension. Levels of translation quality can be described qualitatively at least in the following terms:

- Raw translation;
- Normal quality translation;
- High quality translation;
- Adaptation of original text.

Raw translation means a translation which conveys the central meaning of the original text. There may be grammatical errors and misspellings, but the text is understandable. Raw translation could easily be seen synonymous to low quality translation. To exemplify, this could be translation of large amounts of scientific abstracts.

Normal quality translation corresponds roughly to the translations of old. The original text is translated fully and the translated text is grammatically correct and reasonably fluent. The text may be somewhat awkward at times, but the contents of the original text should be understood completely from the translation. Typically, this could be a translation of a technical manual.

High quality translation implies that the translated text is both fluent and creative in its use of language. The translation should be assimilated well to the cultural context of the target language. One should not be able to recognise the translated text as a translation. Typically, this could be an advertisement brochure or a literary work.

Adaptation of original text is not the direct translation of text but the production of new text based on foreign language original(s). The resultant text need not correspond sentence by sentence to the originals, but may instead have omissions or reorderings according to what the translator deems appropriate. The resultant text is expected to be fluent language.

The aforementioned classifications are rather vague in their meanings and always vulnerable to subjective opinions. Thus many translators prefer to speak instead about sufficient quality, meaning what the customer expects and accepts. There have also been attempts to make the concept of translation quality more objective by devising quantifiable classifications. One such measurement

is for example the average number of errors per page, though naturally this can hardly describe the style of the translation. Appendix 2 contains a sample of different classifications of translation quality in use in several European countries.

1.1.1.9 Extent of translation work

As quality of translation has started to vary so has the extent of translation work. Sometimes, full translation is not necessary. In other cases, translators are being required to handle new tasks both before and after the actual translation work in addition to merely translating texts. The following classifications can be made:

- Proof-reading and grammar checking;
- Updating old translations;
- Carrying out new translations;
- Editing and translating text;
- Editing and translating text and establishing text layout.

Proof-reading and grammar checking means going through a translation done by another person for possible errors and stylistic fine-tuning. This original writer may vary from a professional translator to an ordinary employee. The length of this work varies naturally with the level of quality of the translated text, which in turn depends on the linguistic skills of the original writer. Typically, proof-reading should take considerably less time than the actual translation work, but in some cases it may lead to rewriting the translated text completely. Proof-reading and grammar checking are typical in organisations where non-translator employees write text directly in foreign languages.

Updating old translations means translating only those parts of the text for which the original text has changed. This requires that the effects of the changes are such that translating the new original in full would take considerably more time than just translating the changes. It also implies that the changes are relatively easy to identify. This type of translation work is typical especially for technical manuals.

Carrying out new translations means doing the translation from scratch. Different levels of doing this have been described above. In addition to merely translating the text, translators are often expected to raise the quality of the text by *editing* the resultant text. Furthermore, translators are sometimes also required to take care of the *layout* of the resultant text. These auxiliary tasks are on the increase and thus require the translator to add extra skills to their profile.

Naturally the level of translation quality corresponds directly with the quantity of translation work. So does the extent of translation work.

1.1.1.10 Type of translation organisation

When translation starts to involve more than one individual, there arise different ways of organising translation activity. In such a case, the organisational model of the enveloping organisation usually influences the organisation of translation. Typical arrangements are the following:

- Freelance translator;
- Translation company;
- Centralised translation activity;
- Decentralised translation activity;
- Subcontracted translation activity;
- Bi/multilingual organisation.

A *freelance translator* represents the traditional organisation of translation. A freelance by definition is an individual who does specified work on a contract basis. Thus, a freelance has no formal relationship with their employer.

A *translation company* is a translation organisation par excellence, since its only or at least major activity is translation. A translation company lives on doing translation work for other organisations, and is thus a subcontractor. Although a translation company may have strong ties to single external organisations or even be a former translation department of an organisation, it must be formally independent and self-sustaining. Translation companies may in turn use some of the aforementioned arrangements.

Centralised translation activity implies concentrating all or at least most translation work and employees involved in translation in a single organisational entity within the enveloping organisation. Usually, this means having an internal translation department. Centralised translation normally includes proof-reading of text produced elsewhere within the organisation and the overall development of translation activity within the organisation. Furthermore, centralised translation activity allows for specialisation among the employees.

In some respects, this corresponds to having a translation company within an organisation. The main difference is that the costs of translation are often allocated only partly to the users of the service or are sometimes even billed into 'sundries'. This difference has lately started to diminish as internal translation departments tend to bill the costs fully to users or have to compete with other external translation options available to the in-house user while covering their own expenses.

Decentralised translation activity means the dispersal of translators to different sections of the organisation. These individuals are, in turn, responsible for all translation activity in their respective section, be it actual translation or proof-reading. Secondly, it can be understood as the distribution of translation activity to all capable employees in the organisation. The latter arrangement usually necessitates the same sort of arrangement for revision and proof-reading.

Subcontracted translation activity involves contracting external organisations to do the translation work needed by the organisation. These subcontractors can be translation companies, freelance translators or nowadays even former internal translation departments. Subcontracting can be done by a job-by-job basis or there may exist long-term relationships. These long-term relationships may involve large-scale cooperation such as exchange of terminology. Often subcontracted translated texts are proof-read within the organisation afterwards. Sometimes subcontracting is also used for proof-reading of text already translated within the organisation.

A *bilingual organisation* has two languages as official languages or at least in common use. In a *multilingual organisation* the number of such languages is more than two. This means that the

employees of an organisation are required to be able to communicate to a certain extent directly in these languages, at least in the own special field. In such an organisation, there should be no need for translation between the languages in question as employees are able to produce text in these languages directly. Usually, however, texts going outside and considered important to the organisation are expected to be edited or at least proof-read. The success of this arrangement depends greatly on the language skills of the employees of the organisation.

Typically, organisations use a combination of the aforementioned arrangements. In some cases, the internal translation department has to live on its own and furthermore compete with external options. In such a case the costs of translation should become real, but, on the other hand, advantages such as long-term development of translation activity may suffer.

1.1.1.11 Job descriptions of people involved in translation

Another aspect of the arrangement of translation is the job descriptions of the individuals involved in the translation work, irrespective of the type of organisation. Several typical classifications can be made:

- Professional translators;
- Editors;
- Domain experts;
- Non-translator support personnel;
- Personnel in general.

Full-time *professional translators* are individuals whose main job description — and actual work performed, too — is translation or related tasks such as proof-reading. These people usually have formal training as translators. Sometimes, they can also be people with various backgrounds — for example engineers — who have gained their skills in translation through extensive experience.

Editors are people who use source texts in one language to produce new texts in other languages. In essence, editors are translators, but they adapt the original texts instead of translating them directly. Often editors use many different originals and sources for a single new text.

Domain experts are people who translate texts involved in some specific field or domain. Their primary primary job description can be other than translation, but their expertise in a particular field or domain and its terminology in different languages make them the most capable people to do the translation work.

Non-translator support personnel are people who are neither translators or domain experts but who, nevertheless, perform some amount of translation. Typically, they are secretaries who translate memoranda, correspondence and the like.

Naturally translation can be done by *any employee* regardless of their job description instead of relegating the work to others. This is becoming more and more a necessity as the amount or urgency of translations sometimes exceeds the capacities of the actual translation organisation. This solution depends on the language skills of the individual employee, which is under growing

emphasis. Language engineering is paying increasing attention to meeting translation needs in this area, especially in the EU.

Typically translation is done by a mix of all the different types of personnel mentioned above. The choice of the person making the translation depends on the text to be translated and the future use of the translated text.

1.1.1.12 Size of translation organisation

Size of the translation organisation is for the time being synonymous to the number of people it employs. The larger the organisation is, however, the more people there are who do not perform actual translation. Therefore, the following distinctions should be made:

- Full-time translators;
- Part-time translators;
- Support personnel;
- Administrative personnel.

Typically an organisation has a certain number of *full-time translators* to take care of the steady work load and typical languages involved. *Part-time translators* are used when there is a peak in the work load which has to be addressed immediately. Part-time translators are also often used when there is not sufficient internal knowledge of the languages involved. As opposed to freelancers, part-time translators have a formal working relationship with their employer.

As translation becomes more computerised, *support personnel* are needed for maintenance of the computer networks. The importance of these support personnel is growing all the time. Any organisation also needs *administrative personnel* to monitor, control and develop the translation activity. Often, both support and administrative personnel do some translation work themselves.

1.1.1.13 Medium of translation work

Living in the information age, it would be easy to believe that all office work, and translation too, would be done with computers. This assumption is somewhat premature as the traditional media of translation work have not altogether disappeared. Therefore, the following dichotomy still applies concerning media for translation work:

- Manual;
- Computerised.

Manual media include pen and paper, and the typewriter. *Computerised media* are, on the other hand, personal computers or any type of terminal connected to larger computer systems. There is no doubt that computerised media will eventually replace manual media. The advantages of computers in such simple tasks as correction of errors and data retrieval are insurpassable. On the other hand, the distinction is bound to be drawn differently with the advance of automatic voice and handwriting recognition.

1.1.1.14 Nature of the enveloping organisation

A distinction must be made between the entire parent organisation and the part of the organisation which is serviced by some arrangement of translation. Large organisations, especially, have independent business units, which have the right to set up their own translation arrangements. On the other hand, the use of translation services does not always follow organisational boundaries. Therefore, the concept of *enveloping organisation* is used to refer to the organisational entity which is serviced by a particular, uniform arrangement or combination of arrangements of translation. In a way, it is the organisational boundary within which translation is organised in a similar fashion.

The nature of the enveloping organisation affects translation in two respects. On the one hand, the field(s) of activity of the organisation affect the text types and domains of text produced within the organisation. On the other hand, the the range of the organisation — the countries where it operates and its international ties — affects the languages involved and the language policy of the organisation.

An organisation can have a varying number of different fields of activity. It is often difficult to see where one field ends and another starts, but usually organisational divisions reflect these borderlines, at least from the operational point of view. In any case, with the number and type of fields of activity of an organisation, the following general classifications can be made about the *scope* of the organisation's activity:

- Niche;
- Single industry;
- Multiple industry.

A *niche organisation* typically has a very restricted field of activity, which in a way is a subset of some particular industry. A *single industry organisation* has a larger scope, though all of its activities have a common denominator. These activities can all be grouped under the same field or industry. Thus, the different sets of terminologies used by the organisation are fairly consistent. A typical example is a forestry company, which works in everything from pulp and paper, but has no activity outside the forestry industry. A *multiple industry organisation*, on the other hand, spreads its scope of activities to industries and fields which do not necessarily have much in common. Thus, the sets of terminologies in use can be largely disjoint.

Each individual field of activity can have its own characteristics. The main dividing line involves the *level of complexity* of the field. Based on this point of view the following dichotomy can be made:

- High technology or specialised;
- Low technology or general.

A *high technology field* involves a great deal of specialised technology, which often requires its own highly specialised terminology. A *low technology field* is less specialised, and can get by with more general terminology. This division is not absolute, and different fields of activity can lie anywhere between the two extremes.

On the whole, most organisations nowadays have some level international ties. As the level of international contacts can vary gradually, no clear-cut distinctions can be made. Based on the point of emphasis and organisational status, however, the following classifications can be made:

- Domestic company;
- Domestic public organisation;
- Subsidiary of an international company;
- International company;
- International public organisation.

A *domestic company* or a *domestic public organisation* is based in, and operates mainly within, one country. So does usually a *subsidiary of an international company*, but it typically has strong international ties. *International companies* have operations in many countries. Sometimes some country is dominant — often the country of origin — but it is increasingly common for an international company to be truly international, dealing with many countries of equal rank. An *international public organisation* is similar in the range of countries where it operates. It is also possible that an international public organisation is rather international in terms of its employees than in its actual operations. Thus, it can have an staff of international origin situated in one country but does not have to actually operate in many countries.

1.1.1.15 Size of the enveloping organisation

The size of the enveloping organisation can be described in two ways:

- The number of employees of the enveloping organisation;
- The annual turnover.

The larger the number of employees, the larger the annual turnover. However, this correlation is not iron-clad, and varies from industry to industry.

1.1.1.16 Amount of international activity

Since translation involves international contacts, the amount of international activity is of significant interest. This dimension can be approached using the size of the enveloping organisation as a reference point:

- Number of employees involved directly in international activities;
- Proportion of exports and imports contributing to the overall turnover.

If an organisation is truly international, the above classifications become obsolete. Instead one could examine the following:

- Number of employees in each country of operation;
- Share of overall turnover in each country of operation.

This is often irrelevant since each country has its own arrangement of translation.

1.1.1.17 Nature of international activity

The orientation of international activity can vary. This will, in turn, especially affect the languages involved. Sometimes, this orientation can be rather clear, and the following classifications can be made:

- Export;
- Import;
- Localisation.

These classifications all require the differentiation between the countries where the products or services originate and the countries where they are sold or used. An *export organisation* derives a substantial share of its turnover from sales of its products or services in countries other than the country of their origin. An *import organisation*, on the other hand, generates a substantial share of its turnover from the sales of products or services originating from countries other than the country where the organisation operates. *Localisation* is a special case of an import organisation. In addition to mere sales of foreign products or services, it involves their adaptation to the local environment. Naturally, it is possible for an organisation to be involved in all of these orientations.

1.1.1.18 Language policy of the organisation

The national language of the country where the organisation is situated is no longer necessarily the only working language used by the employees of the organisation. Often, employees are expected to be able to communicate, in some foreign language, at least subjects concerning their own field of work. This applies not only to marketing and public relations personnel but employees in production and research and development. This is typical in international organisations and organisations with a high amount of international activity. The languages may be declared official or may be practically official by being in common use. This situation is called the *language policy* of the organisation. The following classifications can be made:

- National language as official language;
- Foreign language in common use;
- Foreign language as official language;
- National language and a foreign language as official languages;
- Several foreign languages in common use;
- Several languages — not necessarily including the national language — as official languages.

1.1.1.19 Medium of information production and exchange

In the last decade, computers have become the medium of choice for information production in office environments. The electronic form of information is not yet universal, however, and even weaker is its use in information exchange. Text may still be produced on computers and stored on electronic media, but be transmitted as print-outs because of the lack of proper connections. Computer networks are spreading rapidly, but not every organisation can boast with the integration of every employee into its own network, moreover with links to the outside world. Thus, the following dichotomy can be made for media of information production and exchange:

- Non-electronic;
- Electronic.

Non-electronic media, in the case of translation, include paper, tape recordings of spoken text, facsimile machines and the like, that do not yield in the end information in electronic form.

Electronic media include electronic data storage devices such as diskettes and CD-ROMs, and electronic information networks. With electronic media, any information will be ready to use on any computerised medium of translation work, whereas non-electronic media require typing in the information or scanning and data enhancement.

1.1.2 Relationships between different dimensions

All the dimensions mentioned above are certainly not independent of each other. Relationships of various degrees exist between them, which may be both one-way implications or two-way correlations. The following general relationships can be justified:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	o		+								+								
2	+	o	+					+											
3			o								+								
4				o		+		+											
5					o	+					+								
6			+			o					+								
7		+					o			+									
8			+					o		+	+								
9			+						o										
10	+	+								o	+								
11											o								
12											+	o							
13			+										o						
14				+										o					+
15	+	+	+							+					o				+
16	+	+	+				+									o			
17							+										o		
18	+	+					+	+		+								o	
19			+																o

Dimensions 1–19 are as follows:

1. Quantity of translated text
2. Quantity of text produced directly in a foreign language
3. Quantity of translation work
4. Text type
5. Domain of text
6. Characteristics of source text
7. Languages involved
8. Translation quality
9. Extent of translation work
10. Type of translation organisation
11. Job descriptions of people involved in translation
12. Size of translation organisation
13. Medium of translation work
14. Nature of the enveloping organisation
15. Size of enveloping organisation
16. Amount of international activity
17. Nature of international activity
18. Language policy of the enveloping organisation
19. Medium of information production and exchange

We now look in detail at the various implicational relationships established between these dimensions.

Quantity of translated text

- Quantity of translation work
- Size of translation organisation

That the quantity of translated text should determine to a great extent the quantity of translation work should be obvious. If translation is arranged within the organisation in a centralised fashion, the quantity of translated text should be reflected in the size of the translation organisation.

Quantity of text produced directly in a foreign language

- Quantity of translated text
- Quantity of translation work
- Extent of translation work

If the production of text in foreign languages — whether directly or via translation — were considered constant, then one can see a relationship the quantity of text produced directly in a written language and the quantity of translated text. The more text were produced directly, the less text would be translated. As the amount of international communication is growing on the whole, however, this correlation is probably not as straightforward. Much of this growth might be channelled directly into the production of text directly in a foreign language, having no direct effect on the quantity of translated text, or vice versa. One could, though, with some certainty, say that the quantity of text produced directly in a foreign language does influence the extent of translation work. The more texts produced directly, the more need there is for proof-reading and grammar checking of these texts. In this way, the volume of directly produced text also, at least indirectly, influences the quantity of translation work.

Quantity of translation work

→ Size of translation organisation

The quantity of translation work influences the size of the translation organisation, if it is carried out in-house. The larger the quantity of translation work, the larger the size of the translation organisation.

Text type

→ Characteristics of source text

→ Translation quality

Different text types seem to have different inherent characteristics. Maybe this a result of what use different text types are put to and how they are written — or should one say — produced. Product manuals and catalogs are often accused of repetitiveness. The same could be said of business correspondence and contracts, which are full of formal phrasing. Advertising, on the other hand, is relatively creative. Novels, essays, plays and poetry are by their nature even more so. Regarding the richness of terminology, one could typically expect to find this trait in technical product manuals. The use of the text also most certainly influences what level of translation quality is expected. Whereas it suffices for a product manual or catalog to be merely understood (correctly), one would expect reading pleasure from a novel or an essay.

Domain of text

→ Characteristics of source text

→ Job descriptions of people involved in translation

As well as text type, the domain of text and its scope most certainly influences the characteristics of the source text. Domain or organisation specific texts are bound to be more terminology-rich than general texts. Thus, they require knowledge of the specific domain, and in this way influence directly the job descriptions of the people involved in the translation.

Characteristics of source text

→ Quantity of translation work

→ Job descriptions of people involved in translation

Though the implication is somewhat feeble, one can assume that the characteristics of text influence the quantity of translation work. If a text is repetitive, it requires less work than if the text were creative. One could also assume that the characteristics of the text would affect the job descriptions of people involved in translation. The more terminology-rich the text is, the more knowledge of the particular domain in question is required. Thus when general texts could be translated by any

translator or even a skillful employee, terminology-rich text would require the skills of a domain expert.

Languages involved

- Type of translation organisation
- Quantity of text produced directly in a foreign language

The languages involved in translation could be seen to influence the combination of different types of translation organisation. Typically, the common languages would be translated within an internal translation department or even be produced directly by any employee, whereas rarely used languages would necessitate the use of subcontractors or freelancers. Therefore, the languages involved would also influence the quantity of text produced directly in a foreign language.

Quality of translation

- Quantity of translation work
- Type of translation organisation
- Job descriptions of people involved in translation

The quality of translation can easily be seen to affect the quantity of translation work. At least indirectly one can expect translation quality to also influence the choice of the type of translation organisation. Whereas low quality translation could be subcontracted to anyone outside, high quality translation, requiring knowledge of the domain in question, could be best performed through internal arrangements for translation or long-term subcontracting relationships. Furthermore, the quality of translation should also have an influence on the job descriptions of the people involved in translation. Whereas a low quality translation could be done by any employee with the necessary language skills, high quality translation would require professional translators or domain experts, depending partly on the text type.

Extent of translation work

- Quantity of translation work

The extent of translation work can easily be seen to influence the quantity of translation work needed. The more tasks in addition to translation involved, the more work effort would be needed.

Type of translation organisation

- Size of translation organisation
- Quantity of translated text
- Quantity of text produced directly in a foreign language

The type of translation organisation does at least indirectly affect the size of translation organisation. If the translation is subcontracted outside, this definitely decreases the amount of internal translation work and thus the size of internal translation organisation. If the organisation is bilingual or multilingual, this in effect makes every employee a part of the translation activity. Whatever translation organisation there would remain, it would be much smaller than if translation were centralised to an internal department, and its work would emphasise on proof-reading instead of actual translation work. Therefore the type of translation organisation would affect the relationship of the quantity of translated text to the quantity of text produced directly in a foreign language.

Size of translation organisation

- Job descriptions of people involved in translation

The size of the translation organisation influences the range of job descriptions. It is a normal

phenomenon that the larger an organisation, the more administrative and support personnel are needed.

Medium of translation work

→ Quantity of translation work

There is a definite relationship between the medium of translation work and quantity. If translation is done manually, it certainly increases the quantity of translation work, as old translations will not be easily available for future use.

Nature of enveloping organisation

→ Text types

→ Language policy of organisation

There is a definite connection between the nature of the enveloping organisation and the domains of text involved in the texts it produces. The fields in which the organisation operates dictate implicitly the domains of text and the terminology used in the texts. While a niche organisation can get along with a small set of specialised terminology gathered in a single glossary, a multiple industry organisation will probably have to keep track of a large range of terminology dispersed in numerous, disparate glossaries. The complexity of each field of operation adds another aspect to the range and nature of terminology used.

The nature of the enveloping organisation also has an effect on the language policy of the organisation. If the organisation is domestic, it is bound to have the national language as the official language. If the enveloping organisation is an international company, it is equally bound to have a foreign language at least in common use. In the case that the organisation is a subsidiary of a foreign company, it could have a foreign language as the official language. In the last two cases the organisation would be bilingual.

Size of enveloping organisation (indirectly)

→ Quantity of translated text

→ Quantity of text produced directly in a foreign language

→ Quantity of translation work

→ Type of translation organisation

→ Language policy of the organisation

It is difficult to say that the size of the enveloping organisation would influence directly any other dimension. One could expect that the size of the enveloping organisation would influence to some extent the quantity of translated text and translation work. The larger the organisation, the more probable it would be that the organisation would have international connections and operations.

One can with some certainty say that the size of the enveloping organisation does have an influence on the type of translation organisation. A small organisation, say under a hundred employees, would probably depend, firstly, on its own employees for translation, as much as possible, and, secondly, on external freelancers and subcontracting, when internal resources would not suffice. In other words, a small organisation would be basically multilingual.

When the organisation is larger, say up to a thousand employees, the arrangement of translation in a centralised manner would become a more feasible arrangement. And if the organisation were even larger, sheer administrative factors would bring about the division of the organisation into smaller, independent business units, which would among other things have the opportunity of making their own choices about the organisation of translation. This could lead to diverging arrangements, but

would nevertheless not render obsolete the need for some level of centralised direction. It might even be in the common interest to continue translation in a centralised manner despite organisational boundaries.

Amount of international activity

- Quantity of translated text
- Quantity of text produced directly in a foreign language
- Quantity of translation work
- Languages involved

It is the amount of international activity of the enveloping organisation, which (together with the size of the organisation) definitely determines the quantity of translated text. The more international connections the organisation has, the more it needs information produced in foreign languages and the more probably its employees would try produce the text directly instead of having it translated. And naturally, the range of the organisation's international activity, that is the countries it operates with, determines the languages involved. Especially if the share of international activity is high, the organisation is bound to have at least one or two foreign languages in common use.

Nature of international activity

- Languages involved

If the nature of international activity of the organisation is specific, it certainly affects the languages involved. In both export and import organisations the focal language would most certainly be the language of the country where the organisation operates. The difference between these two cases would be that, in export organisations, the source language would be the language of the country of operation. In an import organisation, on the other hand, this same language would be the target language.

Language policy of the organisation

- Quantity of translated text
- Quantity of text produced directly in a foreign language
- Type of translation organisation
- Extent of translation work
- Languages involved

The language policy of the organisation is reflected in the extent of translation work. If the organisation has one or more foreign languages in common use or as official languages, less text will be translated from and into these languages and instead more will be produced directly in them. Thus, the emphasis in translation work would shift from actual translation to proof-reading. In addition, the language policy can affect the languages involved in translation. Especially if the organisation has a foreign language, such as English, either in common use or as the official language, this language may actually become the focal language of translation activity. In many cases texts are produced first in this foreign language and only then, if ever, translated to the national language of the country where the organisation operates.

Medium of information production and exchange

- Quantity of translation work

The medium of information production and exchange has a definite influence on the quantity of translation work. The more information is exchanged in non-electronic form, the more time has to be allocated to the transformation of the information to electronic form, for it to be used in a

computerised translation environment.

1.1.2.1 Trends in dimensions

The general trend of internationalisation of any activity or business is one of the main factors influencing translation and its dimensions. The amount of international activity in organisations is definitely on the rise. Thus, the overall quantity of translated text and text produced directly in a foreign language is bound to grow with an ever increasing rate; so will the quantity of translation work. The languages involved are also on the increase. It is, however, practically impossible to translate directly from all possible languages to others. Therefore, some languages are emerging as universal focal languages, in which text is often produced directly. For example, instead of carrying out a translation directly from Finnish to Japanese, a text may be produced directly in English, from which it is in turn translated to Japanese — or any other language for that matter.

As the quantity of translated text is growing, the characteristics of source text is shifting from creative to repetitive. More and more texts are 'mass-produced' manuals and the like. At the same time, the new terminology is invented at such a rate it is difficult to keep track of or control it. Updating and revision of old texts are becoming ever more typical activities. In general, the level of translation quality can vary greatly, as not all texts warrant high quality. On the other hand, the extent of translation work is spreading outside pure translation to editing and layout of the text.

As organisations are becoming more international, so are their employees. This is leading to multi-lingual organisations in which text is produced directly in one or more foreign languages. At least in smaller countries, such as Finland, a basic requirement for employment in many organisations is the sufficient knowledge of at least two foreign languages.

The arrangement of translation is on its own part affected by a more general trend towards buying services from external sources instead of generating them internally. This is leading to the dismantling of heavy centralised arrangements for translation in favour of subcontracting translation companies and freelancers. Another form of this development is making internal translation departments independent, self-sustaining business units and making them compete against external competitors.

1.1.3 Typical user profiles

Different users and user organisations naturally have different needs. In translation, however, it often seems not as much a question of differing needs but of differing resources and capabilities. A translator's or translation organisation's main task is translation, not the development of new tools. Many translators' aids demand extensive internal development, which are often outside the capabilities of smaller organisations or individuals. Furthermore, the cost of this development is warranted only when the level of ultimate use exceeds some certain critical point.

There are, in fact, no *typical* user profiles. Most organisations resort to a combination of arrangements of translation, which vary greatly according to the peculiarities of each organisation. Therefore, user profiles could be based on a variety of combinations of different key dimensions of translation. The following user profiles are based on the arrangement of translation activity and the size of the enveloping organisation. This classification is rather descriptive and straightforward, but its weakness is that variance within a particular user profile grouping can sometimes be disturbingly

great. In addition, some of these user profiles, such as organisations with centralised translation activity, are certainly more potential users of translators' aids than others, such as bi/multilingual organisations. Furthermore, it is clear that organisations that have subcontracted all of their translation activity outside represent no direct potential at all in this classification. Another attempt at classification is presented later.

1.1.3.1 Freelance translator

- Quantity of translated text: hundreds of pages a year;
- Quantity of text produced directly in a foreign language: none;
- Quantity of translation work: up to one person-year, often part-time;
- Text type: often text types associated with fiction such as novels, essays, plays, and poetry
- Domain of text: specialisation in a few related domains of text
- Languages involved: single translation direction;
- Translation quality: normal;
- Extent of translation work: actual translation, sometimes proof-reading;
- Medium of translation work: sometimes manual, often computerised;
- Size of translation organisation: one person;
- Job descriptions of people involved in translation: professional translators through education or experience, or domain experts;
- External context: varies from job to job.

Typical translators' aids in use:

- Typewriter: sometimes, decreasing;
- Word processor: very high usage;
- Manual dictionary: very high usage;
- Manual word list: very high usage;
- Spelling checker: high usage, increasing;
- Electronic word list: low usage, increasing;
- Electronic dictionary: low usage, increasing.

1.1.3.2 Small translation company

- Quantity of translated text: up to several thousand pages a year;
- Quantity of text produced directly in a foreign language: none;
- Quantity of translation work: several person-years a year;
- Domain of text: often specialisation in a few related domains of text
- Languages involved: often specialisation in one language pair;
- Translation quality: normal or high;
- Extent of translation work: actual translation;
- Medium of translation work: computerised;
- Job descriptions of people involved in translation: one administrator and support person, the rest being professional translators;
- Size of translation organisation: several employees.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: very high usage;
- Manual word list: high usage, decreasing;
- Electronic word list: high usage;
- Spelling checker: very high usage;
- Electronic dictionary: low usage, increasing.

1.1.3.3 Large translation company

- Quantity of translated text: up to tens of thousands of pages a year;
- Quantity of text produced directly in a foreign language: none;
- Quantity of translation work: according to quantity of translated text;
- Text type: typically text types associated with non-fiction such as reports, manuals and software
- Domain of text: often specialisation in several domains of text, in larger companies often technical or business
- Languages involved: specialisation in several language pairs or one focal language;
- Translation quality: normal or high;

- Extent of translation work: actual translation, increasingly editing and layout;
- Job descriptions of people involved in translation: one administrator and one support person for every ten professional translators;
- Size of translation organisation: tens of employees, at most up to fifty employees, of which many part-time employees.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage, decreasing;
- Manual word list: low usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: low usage;
- Electronic dictionary: high usage, increasing;
- Translator's workbench: high usage;
- Translation memory: low usage, increasing;
- Translation archive: low usage, increasing;
- Machine translation: low usage, increasing.

1.1.3.4 Mid-sized organisation with centralised internal translation department

- Quantity of translated text: thousands of pages of text, up to around ten thousand pages a year;
- Quantity of text produced directly in a foreign language: indefinite, less than quantity of translated text;
- Quantity of translation work: according to quantity of translated text;
- Text type: typically manuals and reports
- Domain of text: according to nature activity of enveloping organisation, primarily technical, secondarily business and administrative text
- Characteristics of source text: not as much creative as terminology-rich, often repetitive as terminology-rich, often repetitive;
- Languages involved: one focal language;
- Translation quality: normal or high;
- Extent of translation work: primarily new translation, secondarily proof-reading and updating, increasingly editing and layout;

- Job descriptions of people involved in translation: one administrator and support person for every ten translators, who are primarily domain experts and secondarily professional translators;
- Size of translation organisation: around ten employees;
- Nature of the enveloping organisation: domestic company with one high technology field of business;
- Size of enveloping organisation: from several hundred up to a thousand employees;
- Amount of international activity: around half of the turnover;
- Nature of international activity: export;
- Language policy of the organisation: national language as official language.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage, decreasing;
- Manual word list: low usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: high usage, decreasing;
- Electronic dictionary: very high usage;
- Translator's workbench: low usage;
- Translation memory: low usage;
- Translation archive: low usage;
- Machine translation: low usage.

1.1.3.5 Large organisation with centralised internal translation department

- Quantity of translated text: from thousands of pages of text up to tens of thousands of pages a year;
- Quantity of text produced directly in a foreign language: indefinite, less than quantity of translated text;
- Quantity of translation work: according to quantity of translated text;
- Text type: manuals, reports, and contracts, sometimes articles
- Domain of text: according to nature of enveloping organisation, equally technical, business and administrative

- Characteristics of source text: not as much creative as terminology-rich, often quite repetitive
- Languages involved: one or two focal languages;
- Translation quality: normal or high;
- Extent of translation work: primarily actual translation, secondly proof-reading and updating, increasingly editing and layout;
- Job descriptions of people performing translation: one administrator and one support person for each ten translators, who are primarily professional translators and secondarily domain experts;
- Size of translation organisation: from ten to over twenty employees;
- Nature of the enveloping organisation: domestic organisation with several fields of business, of which some are high technology;
- Size of enveloping organisation: several thousand of employees;
- Amount of international activity: up to around half the turnover;
- Nature of international activity: increasingly export;
- Language policy of the organisation: national language as official language.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage, decreasing;
- Manual word list: low usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: high usage, decreasing;
- Electronic dictionary: very high usage;
- Translator's workbench: low usage, increasing;
- Translation memory: low usage, increasing;
- Translation archive: low usage, increasing;
- Machine translation: low usage, increasing.

1.1.3.6 Bilingual organisation

- Quantity of translated text: from hundreds to thousands of pages a year;
- Quantity of text produced directly in a foreign language: from hundreds to thousands of pages a year, probably more than the quantity of translated text;
- Quantity of translation work: according to quantity of translated text;
- Text type: articles and correspondence
- Domain of text: technical and scientific
- Characteristics of source text: terminology-rich
- Languages involved: two focal languages, the national language and a foreign language;
- Translation quality: normal;
- Extent of translation work: mainly proof-reading, adaptation of source text and updating old translations;
- Job descriptions of people performing translation: domain experts and employees in general, some professional translators performing proof-reading and adaptation of source text;
- Size of translation organisation: up to ten employees in proof-reading and adaptation, otherwise most of the personnel;
- Nature of the enveloping organisation: domestic company with one or two high technology fields;
- Size of enveloping organisation: several hundred employees;
- Amount of international activity: almost all turnover from international activity;
- Nature of international activity: export;
- Language policy of the organisation: one foreign language at least in common use.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage, decreasing;
- Manual word list: low usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: high usage, decreasing;
- Electronic dictionary: high usage, increasing.

1.1.3.7 Multilingual organisation

- Quantity of translated text: hundreds of pages a year;
- Quantity of text produced directly in a foreign language: hundreds of pages of text a year, probably more than quantity of translated text;
- Domain of text: technical and scientific
- Characteristics of source text: terminology-rich
- Languages involved: one or two focal languages, several translation directions;
- Translation quality: raw, normal and high;
- Extent of translation work: new translation, updating old translations and proof-reading;
- Job descriptions of people performing translation: mainly domain experts and employees in general, some professional translators for proof-reading;
- Size of translation organisation: a few full-time professional translators, otherwise most of the personnel;
- Nature of the enveloping organisation: domestic organisation with a single high field;
- Size of enveloping organisation: from ten up to a hundred employees;
- Amount of international activity: almost all of turnover from international activity;
- Nature of international activity: export;
- Language policy of the organisation: several foreign languages in common use.

Typical translator's aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage, decreasing;
- Manual word list: high usage, decreasing;
- Spelling checker: low usage, increasing;
- Electronic word list: low usage, increasing;
- Electronic dictionary: low usage.

1.1.3.8 International organisation

- Quantity of translated text: from thousands to tens of thousands of pages a year;
- Quantity of translation work: according to quantity of translated text; technical;
- Text type: typically reports, articles and correspondence
- Domain of text: typically administrative, often scientific or technical
- Characteristics of source text: terminology-rich;
- Languages involved: one or two focal languages;
- Translation quality: normal or high;
- Extent of translation work: primarily new translation, secondarily proof-reading, sometimes adaptation of original text;
- Type of translation organisation: centralised translation activity combined with multilingual organisation;
- Job descriptions of people performing translation: domain experts and employees in general, professional translators for specific languages;
- Size of translation organisation: tens of employees;
- Nature of the enveloping organisation: international organisation with one or several headquarters with employees of many different nationalities;
- Size of enveloping organisation: from hundreds of employees to thousands;
- Amount of international activity: most of the employees involved in international activity, significant amount of employees foreigners;
- Nature of international activity: typically foreign affairs;
- Language policy of the organisation: several foreign languages in common use, of which one is the official language.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage;
- Manual word list: high usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: high usage;
- Electronic dictionary: low usage, increasing;
- Translator's workbench: low usage, increasing;

- Translation memory: low usage, increasing;
- Translation archive: low usage, increasing;
- Machine translation: low usage, increasing.

1.1.4 User profiles: another approach

Perhaps the single most significant factor to describe translation and translation-related activity within an organisational entity is the overall quantity of documentation produced — whether directly or through translation. Of equal significance is how this amount breaks down between different text types and domains, and how it varies on a long-term time-scale. These on their own part depend greatly on the size of the enveloping organisation, its nature and fields of activity, and its amount of international activity. It is clear that the more translation of some type and domain is done within an organisation, the more an organisation will eventually be able to profit from translators' aids — especially the high end ones.

In this context an organisation could have people translating documentation in a central translation department, or writing text by themselves anywhere in the organisation, or even outsiders doing subcontracted translation, as long as they all have access to the same translation tools, and use them, too. This all, of course, depends on a fully functional information network, high computer literacy, and successful indoctrination in the use of new exciting systems, which is maybe utopia for now. Anyway, an ideal organisation could unite all employees in the documentation process and tap into their collective knowledge, instead of isolating translation from the rest of documentation and communication. In this respect, translators' aids could also be considered documentation aids. You can already now, for example, use the same electronic dictionary both for translating text and for writing text directly in that language.

It is another thing to translate these thoughts into distinctive user profiles, since there are no quantum leaps between the quantities of translations of different organisations. In addition, one has to bear in mind that text produced within some organisations is its nature more suitable for particular translators' aids than text produced in others. There are, however, certain critical quantities for the usefulness of certain translators' aids which could serve as milestones. With these in mind, the following rough classification could be presented (using familiar baseball terms):

- Little-league user of translators' aids;
- Middle-league user of translators' aids;
- Major-league user of translators' aids.

These groupings are naturally only reference points on a continuum.

1.1.4.1 Little-league user of translators' aids

- Quantity of translated text: several hundreds of pages a year;
- Translation quality: high;

- Type of translation organisation: freelance translator, small translation company;
- Job descriptions of people performing translation: translation only;
- Size of translation organisation: upto several employees.

Typical translators' aids in use:

- Word processor: high usage, increasing;
- Manual dictionary: high usage;
- Manual word list: high usage, decreasing;
- Spelling checker: high usage, increasing;
- Electronic word list: high usage;
- Electronic dictionary: sometimes, increasing.

1.1.4.2 Middle-league user of translators' aids

- Quantity of translated text: several thousands of pages a year;
- Translation quality: normal or high;
- Type of translation organisation: bi/multilingual organisation, centralised translation activity within a mid-sized organisation;
- Job descriptions of people performing translation: emerging specialisation;
- Size of translation organisation: upto ten employees.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage;
- Manual word list: high usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: high usage, decreasing;
- Electronic dictionary: sometimes, increasing.

1.1.4.3 Major-league user of translators' aids

- Quantity of translated text: several tens of thousands of pages a year;
- Translation quality: raw, normal or high;
- Type of translation organisation: large translation company, centralised translation activity within a large organisation;
- Job descriptions of people performing translation: extensive specialisation;
- Size of translation organisation: tens of employees.

Typical translators' aids in use:

- Word processor: very high usage;
- Manual dictionary: high usage;
- Manual word list: high usage, decreasing;
- Spelling checker: very high usage;
- Electronic word list: high usage, decreasing;
- Electronic dictionary: high usage, increasing;
- Translator's workbench: sometimes, increasing;
- Translation memory: sometimes, increasing;
- Translation archive: sometimes, increasing;
- Machine translation: sometimes, increasing.

1.2 Correlations between user profiles and translators' aids

At the present time, it can be said, as a rule of the thumb, that the larger the translation organisation or unit, the more probable it is that it is using or experimenting with sophisticated translators' aids such as machine translation. In other words, it is these translation organisations that believe that they have the most to gain from the use of these aids — and they are probably right in their belief. This applies the other way, too. The more sophisticated a translators' aid is, the more resources for development and fine-tuning are required to make it fully operational. This is again only possible to achieve in the larger translation organisations.

This situation should change in the future, but it will require extensive work to make these high-end translators' aids truly available to the small users. Affordable prices, proven results, ready-to-use systems, ease of use and compatibility with other systems are just some of the things that will make translators' aids as commonplace as the spread-sheet programs of today. The change is already under way, as tens of thousands of people in the United States are starting to use machine translation on their personal computers for non-work purposes.

At the moment, there are some prerequisites for the use of different translators' aids. At the same time, there are also incentives to start using some of these aids. Sometimes, the choice of a particular aid can be defined rather negatively: that is, if some characteristic of translation is missing. What follows is a summary of these relations.

	A	B	C	D	E	F	G	H	I	J
1	+			+		+	+		+	+
2	+			+		+				
3										
4				+				+	+	+
5		+	+	+	+	+			+	
6		+	+		+	+			+	+
7										
8										+
9										
10							+	+	+	+
11										
12										+
13	+			+	+		+	+	+	+
14										
15										
16										
17										
18										
19								+	+	+

Rows 1–19 are again our dimensions:

1. Quantity of translated text
2. Quantity of text produced directly in a foreign language
3. Quantity of translation work
4. Text type
5. Domain of text
6. Characteristics of source text
7. Languages involved
8. Translation quality
9. Extent of translation work
10. Type of translation organisation
11. Job descriptions of people involved in translation
12. Size of translation organisation
13. Medium of translation work

14. Nature of the enveloping organisation
15. Size of enveloping organisation
16. Amount of international activity
17. Nature of international activity
18. Language policy of the enveloping organisation
19. Medium of information production and exchange

Columns A–J are types of translators' aid:

- A** Word processor;
- B** Manual dictionary;
- C** Manual word list;
- D** Spelling checker;
- E** Electronic word list;
- F** Electronic dictionary;
- G** Translator's workbench;
- H** Translation memory;
- I** Translation archive;
- J** Machine translation.

We now look at the implicational relationships between our dimensions and translators' aids:

Word processor

- ← Quantity of translated text: over several hundred pages a year and/or
- ← Quantity of text produced directly in a foreign language: over several hundred pages a year
- ← Medium of translation work: computerised

The word processor is the basic tool for translation and production of text, or should be. It justifies its cost when quantity of translated or directly produced text exceeds several hundred pages. That limit does not take too long to reach. The only prerequisite naturally is having a computer.

Manual dictionary

- ← Domain of text: general or specific to an established field
- ← Terminology: no organisation specific peculiarities
- ← Characteristics of source text: not terminology-rich

The manual dictionary is the traditional aid to translation. For general translation, it works well. The manual dictionary works as well for specific fields or domains, if their terminology is standardised to the extent that it has been codified in a dictionary of its own. The manual dictionary is, however, of little help when an organisation has its own conventions.

Manual word list

- ← Domain of text: typically technical or scientific
- ← Terminology: field or organisation specific
- ← Characteristics of source text: terminology-rich

The manual word list has typically been used to complement the deficiencies of manual dictionaries. In manual word lists, translators have been able to collect and record field and organisation specific translations. Nowadays, they are becoming obsolete, as the same lists can be transformed to electronic form.

Spelling checker

- ← Quantity of translated text: over several hundred pages a year and/or
- ← Quantity of text produced directly in a foreign language: over several hundred pages a year
- ← Text type: correspondence, novels, manuals, or any type actually
- ← Terminology: general
- ← Medium of translation work: computerised

The spelling checker is useful for any translation. The only prerequisite is having a word processor and using it to produce translations in electronic form. The same basic requirements apply for a spelling checker. It is especially useful for proof-reading. The spelling checker does have one drawback, however, since it cannot deal well with words that are not included in its database.

Electronic word list

- ← Domain of text: typically technical or scientific, sometimes commercial
- ← Terminology: field or organisation specific
- ← Characteristics of source text: terminology-rich
- ← Medium of translation work: computerised

The electronic word list is basically an upgraded, computerised form of the manual word list. Thus, the same requirements apply for it, plus the availability of a word processor.

Electronic dictionary

- ← Quantity of translated text: several hundreds of pages a year in a particular field and/or
- ← Quantity of text produced directly in a foreign language: several hundred pages a year in a particular field
- ← Domain of text: general, technical, commercial, or other established domains
- ← Terminology: general, field or organisation specific
- ← Characteristics of source text: terminology-rich
- ← Medium of translation work: computerised
- ← Type of translation organisation: centralised translation activity, decentralised translation activity, bilingual or multilingual organisation

The electronic dictionary is a sophisticated version of the electronic word list. If there is an existing electronic dictionary which covers the necessary terminology of some field(s), and the organisation's usage does not deviate significantly from it, it can be implemented then and there. In addition, most electronic dictionaries provide for the integration of organisation-specific terminology, which make them even more enticing. However, their prices are at such a level that the quantity of translation should be at least several hundreds of pages a year for each particular field or domain.

Electronic dictionaries justify their existence also in organisations where non-translator employees translate or produce text in foreign languages themselves. They promote the uniformity of termi-

nology usage, provided there is a central authority to develop the electronic dictionary. Such would especially be the case in bilingual and multilingual organisations. This would require, however, the availability of the electronic dictionary to all the employees in question.

Translator's workbench

- ← Quantity of translated text: several thousands of pages a year
- ← Medium of translation work: computerised
- ← Type of translation organisation: translation company, organisation with centralised translation activity
- ← Medium of information production and exchange: electronic form

A translator's workbench provides for the effective administration of translation work. This is useful especially in larger centralised translation organisations, which translate thousands of pages a year. Naturally, this requires a computerised environment and is greatly facilitated if the source texts are received in electronic form.

Translation memory

- ← Quantity of translated text: several thousands of pages a year for each specific field
- ← Text type: manuals, catalogs, correspondence, and articles
- ← Characteristics of source text: repetitive or
- ← Extent of translation work: updating
- ← Medium of translation work: computerised
- ← Type of translation organisation: translation company, organisation with centralised translation activity
- ← Medium of information production and exchange: electronic form

As the translation memory relies on previous translations, it is the more useful when the text to be translated is a slightly modified version of a previous text or uses similar vocabulary or patterns to previous texts. For the same reasons, if a translation is updated and the changes from time to time remain minor, the use of a translation memory is justified. In addition, it becomes all the more useful with every time it is used to aid translation. Therefore it reaches its maturity when annual quantities of translation move in the range of thousands of pages of translated text. Since different domains and organisations have their own peculiarities, this quantity must apply to each domain and organisation separately. Additionally, this implicitly means that the same translation memory is used in all suitable translation work concerning some particular domain. Text types most suitable for translation memories are manuals, catalogs, correspondence, and even articles, which often have consistent phraseology.

Thus, the organisation of translation must be centralised to a sufficient extent. This is possible in translation companies and organisations with centralised translation activity. Implicitly, translation memories require a computerised environment. Since they retain the original texts, this necessitates receiving the originals in electronic form.

Translation archive

- ← Quantity of translated text: at least thousands of pages a year
- ← Text type: contracts, legal text
- ← Domain of text: not general, typically administrative or legal
- ← Characteristics of source text: context-dependent
- ← Medium of translation work: computerised
- ← Type of translation organisation: translation company, centralised translation activity

← Medium of information production and exchange: electronic form

A translation archive is useful when access is wished to previous translations, but these old translations are used for reference only. Thus, no automatic provision or processing of translations is wished as is the case with a translation memory. Such is a case where similar passages of original text have been translated differently in different contexts. Implicitly again, the same requirements for working environment exist for translation archives as for translation memories.

Machine translation

← Quantity of translated text: thousands of pages of text a year in each particular field

← Text type: not literature such as novels, plays, or poetry

← Characteristics of source text: not creative, not necessarily repetitive, restricted language

← Quality of translation: raw translation, normal quality

← Medium of translation work: computerised

← Type of translation organisation: translation company, organisation with centralised translation activity

← Size of translation organisation: tens of employees

← Medium of information production and exchange: electronic form

Machine translation is a promising aid, but presently it has significant restrictions. Since machine translation systems of any quality are rather costly, it is common opinion that the amount of translated text in a particular field should be at least several thousands of pages a year. As current commercial systems are based on syntactic analysis with little or no semantic analysis, machine translation does not work well when the style or vocabulary varies much. So far, the best results for machine translation have been reached with restricted languages (either naturally restricted in the form of sublanguages or intentionally restricted that the system is presented with input it is known to translate successfully). Therefore, it would be futile to use machine translation for novels, plays, or poetry.

It also has to be noted that a machine translation systems do not remember previous translations, so every sentence is translated from scratch. The system will consistently do the same mistakes (or produce the same correct translation), for some input, umpteen times over. Thus machine translation will not necessarily work efficiently with all repetitive text or updating. It can, however, be appropriate when a raw translation conveying only the basic ideas is needed. In addition, machine translation systems require a considerable amount of implementation, linguistic maintenance and fine-tuning, so explicitly they require substantial human and financial resources. Thus again, they are suited best for large translation companies and organisations with a centralised translation activity. Naturally, machine translation systems require a computerised environment and the original texts in electronic form.

1.3 User case studies

1.3.1 Swedish mid-sized translation company

The organisation in question is a private Swedish translation company which has been in operation for over 30 years. The organisation has an annual turnover of about 4 million SEK and employs at the moment 15 people. The organisation has traditionally specialised in the translation of technical texts. The official language is Swedish and most of the employees are Swedes.

The organisation mainly does translation in-house, but it also uses some ten to twenty subcontractors. The organisation cooperates with the subcontractors by distributing updated glossaries and by returning proof-read and corrected versions of the subcontractors' work. The organisation has a formal monitoring process of translation, in which the exact progress of individual translation works is continuously followed using project management software. The development of the translation process is the responsibility of the managing director, who also makes the choices involving the acquisition of new translation tools.

The organisation translates some 11,000 pages annually. The typical distribution of this amount has been mostly technical text, with some legal text on the side. Presently, however, the organisation is translating the *Official Journal* of the CEC into Swedish, which takes up most of their capacity. The organisation devotes 30% of its capacity to new translations and another 30% to proof-reading and revision. What is interesting, is that translation involving both editing and layout account for an additional 35% on top. Furthermore, 5% of the translators' time is consumed by updating old translations.

Individual texts can vary in length from 50 pages up to a 1,000 pages. The organisation has experienced variation in the characteristics of source text according to text type. Legal text has been considered especially repetitive, whereas advertising has been found idiomatic. As could be expected, technical text has been considered terminology-rich. In general, the organisation translates only into Swedish. The organisation also translates a few hundred pages of legal, commercial, and technical text mainly into English. All translation work aims at high level translation. At the present, 90% of the source texts are received on paper, with the remaining 10% in electronic form, mostly on diskettes.

As translation aids, the organisation uses dictaphones, word processors, and spelling checkers very much. Manual dictionaries, manual word lists, electronic word lists, and electronic dictionaries are used to a high degree. In addition, hyphenation tools, translation archives, and machine translation are sometimes used, whereas the typewriter has been fully retired. While some of these tools are off-the-shelf versions, the organisation has developed in-house versions of an electronic dictionary, translation archive, and translation memory. Furthermore, the organisation has participated, both financially and by providing expertise, in the development of a machine translation system between Swedish and English starting seven years ago. The organisation continues to participate in the steady development of this tool.

1.3.2 International Swedish multiple industry company

The organisation in question is the language services unit of an international Swedish multiple industry company. The parent organisation has a turnover of around 67 billion SEK, of which around half originate from Sweden. There are 70,000 employees in over a hundred countries worldwide, but around half of them work in the country of origin, Sweden. The language services unit is responsible for providing translation services, developing terminology and providing language training for the parent organisation. The language services unit is an independent business unit and is only one possibility among other external sources as a provider of translation service. Thus, divisions of the parent organisation are under no obligation to use the services of the language services unit. Presently, 50% of the capacity of the language services unit is devoted to translation of technical text for a Swedish division of the parent organisation, and 10% to translation of administrative text for the corporate headquarters. The rest of the capacity is used by divisions of the parent

organisation situated in Norway, Germany, and Spain.

The annual turnover of the language services unit is approximately 18 million SEK and it has 17 employees, of which 10 are involved in translation. The employees are of various nationalities and the official language of the unit, as well as of the parent organisation, is English. Of the employees involved in translation, 7 are full-time professional translators or editors, and 4 are support personnel. The unit itself accounts for 40% of the translation work assigned to it. Of the rest, 10% are subcontracted to freelancers and 50% to four translation companies. The unit cooperates with the subcontractors by exchanging terminology. The unit has a formal monitoring process of translation work, in which data regarding specifics of each job, such as source and target languages and the amount of work, are recorded in computerised form.

The unit produces some 8,000 pages of text in English, annually, which amounts to 2,000 person-hours. In addition, the unit translates about 16,500 pages of text a year, which constitutes around 15,000 person-hours. All the translation work includes some amount of editing. The lengths of the translated texts vary from 1 page up to around 200 pages, with the typical length between 10 to 20 pages. Presently, 85% of the source texts are received on paper, with the rest mainly on diskettes.

Of the texts produced directly, 6,000 pages are technical text and 2,000 pages deal with administration. The situation is somewhat similar in translation, divided between 8,500 pages of technical text and 2,000 pages of administrative text. The major translation direction is from Swedish to English, which accounts for half of the translated texts. English seems to be a focal language, as the next biggest portion of translation is from English to Spanish, German, and French: 2,500 pages altogether. Normal quality is the case in 80% of the translations, while high quality is expected of the remaining 20% of translations, being internal directives and policies. Technical text has been found both repetitive and rich in terminology, which is no surprise.

As translation tools, word processors, manual dictionaries, and manual word lists are used very much. Spelling checkers, electronic word lists, and electronic dictionaries are used to a high degree and machine translation is used on occasion. Machine translation is considered useful only for the translation of procedures from English to Spanish and German. Of the other translation tools, dictaphones, type writers, translation archives, translation memories, and translators' workbenches are not used at all, presently. Translation archives and translation memories are under consideration for use in the next few years.

1.3.3 Mid-sized Finnish electronics company

The organisation in question is a Finnish electronics company with a turnover of around 280 million FIM and some 450 employees. Of the turnover, 95% come from exports to over a hundred countries worldwide. Though the employees are of Finnish nationality, English is in common use in addition to Finnish. Thus, the organisation has in fact been bilingual since the beginning of the 1970's, which has been considered a natural solution to a company with such a high ratio of exports. The only personnel exempted from this policy are the factory workers.

Though the organisation has no actual translation organisation as such, there are several translator-editors placed in the three divisions of the organisation. Furthermore, translation activity has been intergrated into the overall production of documentation in the organisation. Around 1400 pages of documentation are produced directly in English by employees, which is proof-read by the aforementioned translator-editors if deemed necessary. Almost all of the employees are capable of

producing satisfactory English. On the other hand, only about 200 pages are translated annually by the organisation from English to mainly French, Spanish and Italian. Thus, English is the focal language of the organisation. Whereas the produced directly in English is evenly divided between mainly marketing and technical text, translated text is purely technical text. The typical length of texts is around 50 pages, varying from 2 upto 100 pages.

What translation is needed, it is mostly done directly from English by subcontracting freelances or delegating the task to agents or daughter organisations abroad. This accounts for about 20% of all documentation. Documentation translated by Finnish freelance translators is proof-read by agents or employees of daughter organisations abroad.

As translation and documentation tools, word processors, spelling checkers, and electronic dictionaries are used very much, followed with hyphenation tools and electronic word lists. Manual aids such as type writers, manual dictionaries, and manual word lists are used sometimes. The organisation is rather happy with its present translation tools, and is mainly considering the adaptation of new electronic dictionaries. Of the translated text, 80% are received through a computer network, the rest being divided evenly between paper and diskettes.

1.3.4 Large international organisation with headquarters in Switzerland

The organisation in question is a UN specialised agency with headquarters in Geneva, Switzerland. The organisation has a biennial budget of 735 million USD and some 1,500 employees representing over 50 nationalities. The nature of the international activity of the organisation is to provide financial and technical expert assistance within its field of specialty. All the employees are involved in the international activity. The organisational is multilingual with 6 languages in common use, of which two — English and French — are the official working languages. All employees except general service staff are required to have a working knowledge of the working languages.

The organisation has an internal translation department, which accounts for 80% of the annual translation load. The remaining 20% of translation is subcontracted to freelances. The internal translation department has 36 employees, of whom 30 are full-time professional translators, 3 are editors and 3 are support personnel. In addition, 8 editors are placed in another department. As of now, the organisation has no formal monitoring process of translation. The development of translation has been assigned to a translator. Actual decisions about the acquisition of translation aids are made by the director of the division.

The organisation translates some 50,000 pages of text annually, which amounted to 73,000 person-hours in 1993. This bulk consists of scientific, administrative, and financial texts. Individual texts vary in length from 1 page up to 300 pages. The texts vary in characteristics also. Administrative text is especially repetitive whereas internal policy papers are relatively idiomatic. In addition, technical reports are rich in terminology, as could be expected. There are 11 translation directions, of which one accounts for almost half of all the translations. There is one focal language, which is English. All translations are done with highest possible quality.

As translation aids, dictaphones, manual dictionaries, and manual word lists are used very much. Word processors and other software such as hyphenation tools, spelling checkers, electronic word lists and a translation archive are sometimes used. In addition, an internally developed term bank system is used to some extent. Presently, translation memories, translator's workbenches, and machine translation are not in use. As a rule, originals for translation are received on paper.

In the next few years, tools not in use at all at the time being, such as translation memories and machine translation, are probably going to be adopted. In addition, the implementation of an electronic mail network intends at increasing the exchange of documents in electronic form and making it easier for translators to access text archives.

1.3.5 Swiss public organisation

The organisation in question is an agency responsible for the linguistic services of a section of the Swiss government, in other words an internal translation department. The organisation has 11 employees who are of either Swiss and French nationality. The actual international activity of the organisation itself is negligible, as it involves only a fraction of the time of one employee. The organisation as well as the whole Swiss government is multilingual, with French, Italian and German as the official languages. All employees are required to master German and French.

The organisation takes care itself of 90% of the translation work assigned to it. The remaining 10% are subcontracted to freelances. Of the 11 employees, 10 are translators and 1 is a secretary. There are around 10 regularly used freelances. The organisation monitors its translation process formally, via a database containing statistical information about incoming and outgoing work. The development of translation is the responsibility of a working group. Permanent translators are given training on a regular basis and surveys are made regularly on the needs of the translators. Decisions on the acquisition of translation aids are made by computing support personnel through the working group.

The organisation produces directly in a foreign language about 500 pages of text annually, amounting to 300 person-hours. Furthermore, the organisation translates about 3,300 pages of original text a year, amounting to 3,400 person-hours. Together, these account for some 15% of the annual capacity of the organisation. Of the remaining time, 60% goes to proof-reading and revision, and 25% to updating old translations.

The translated texts are mainly political and scientific text, followed by journalism, correspondence, and legal texts. The length of the texts varies from half a page to around 150 pages, with the typical length being 2 pages. No distinction is made between different levels of quality: all texts are expected to be of equal quality. There is one major translation direction, which is from German to French. The characteristics of text vary according to text type. Correspondence and public announcements are especially repetitive. Scientific and administrative texts are considered terminology-rich. Communiqués and most of the other texts are particularly idiomatic.

As translation aids, word processors, manual dictionaries, and spelling checkers are used very much. Manual word lists, hyphenation tools, electronic word lists, electronic dictionaries and a translation archive are used to a high degree, whereas dictaphones are used only sometimes. Translation memories, translator's workbenches and machine translation are not used at all. For some specific domains, terminological databases are prepared by domain experts. The translation aids are developed with central direction, with aids being both in common and personal use. In the next few years, new electronic dictionaries, translation archives and translation memories are under consideration. Presently, all source texts are received in paper form.

1.3.6 Freelance translator

The following profile is based on a survey done for the Professional Association of Certified Translators, Interpreters and Terminologists in Quebec (CPTIAQ) in 1993.

Of all the respondents to the survey, over a third (399 persons) considered themselves freelances in private practice. The major users of their translation services were private companies with or without their own linguistic service units, translation companies, and government bodies, which together accounted for half of their clients. While 46% of the freelance translators had fewer than five clients, 24% had between five and nine clients, and 30% ten or more clients during the year. The fields of activity of the two principal clients of freelance translators were in decreasing order of importance services in general, government services, finance and insurance, business services, and manufacturing. An interesting fact is that half of the freelance translators subcontracted to other freelance translators.

For most of the freelance translators, actual translation formed the most important part of their workload, followed by some revision and proofreading. Before becoming freelances, two-thirds of them had been salaried translators. Almost all are freelances by choice and would not want to change their situation.

It is short of a rule that freelances submit their work in computerised form or use computerised work tools. Work is usually submitted as a computer or word processor printout, on diskette, or transmitted electronically. Regarding the usage of translators' aids, it is difficult to say anything definite on behalf of the freelance translators since the survey used as the source did not distinguish between them and salaried employees in this respect. One can, however, consider the overall results at least indicative. All in all, 95% of all the respondents used a personal computer to do their translation work. As translators' aids, external (65% of respondents) and internal or personal terminology banks (48%), spelling checkers (55%) and advanced word processors (60%) are the tools used most often. These tools are also those in which employing organisations invest the most. On the contrary, other tools such as translation archives, translators' workbenches, and computer-aided as well as machine translation are used very little, and employing organisations did not seem interested in investing them. As per telecommunications, telefax machines and modems are used by about half of the respondents, with electronic mail trailing at 30%.

Although the CPTIAQ survey indicates that high end translators' aids may be for the moment outside the reach of individual freelance translators because of their cost or their relatively high need of resources, the benefits provided by these aids might be in the interest of their contractors. One could assume that consistency in the texts of an organisation — whether in terminology or on the general level from one text to another — would be a worthwhile pursuit. In addition, there would be no point for an organisation to have passages of text similar to earlier translations translated over and over again. One solution could be that organisations would divert some resources to the development of electronic term banks or dictionaries with their own specific usage of terminology and provide these tools to the freelance translators that they subcontract. Many Finnish companies do in fact cooperate with their freelances in this manner. In addition, organisations might well run texts to be translated through translation memories so that whatever would be subcontracted outside would indeed be new translation. This sort of division of labor is already under consideration at least in one large German company. These are just some ways in which freelance translators (and their contractors) could benefit from every level of translators' aids despite the limits of their individual resources.

1.4 Appendices

1.4.1 Appendix 1

Different standards of measurement of the quantity of translated text in several European countries:

Country	Unit	Definition
Denmark	page	2000 characters including numerals and spaces
	line	60 characters including numerals and spaces
	hourly rate	-
	'ark'	32000 characters including numerals and spaces (approximately)
Finland	word	excluding punctuation and spaces
	page	26 lines of 60 characters including numerals and spaces
	page	2000 characters including numerals and spaces
	page	30 lines of 67 characters including numerals and spaces
France	word	-
	normal 'arkki'	32000 characters including numerals and spaces (approximately)
	page	30 lines of 10 words
	word	-
Germany	manuscript page	30 lines of 60 characters including numerals and spaces
	page	30 lines of 55 characters
Sweden	page	2000 characters including numerals and spaces
	'ark'	32000 characters including numerals and spaces (approximately)
United Kingdom	units of 1000 words	-

In general, measurement of quantity of translation varied according to text type. Typically, fiction such as general literature was measured in pages in the target language, which was invariably the national language of the country in question. On the other hand, especially software and manuals were measured from the source language, with word or character as the unit of increasing preference.

1.4.2 Appendix 2

Different classifications of the quality of translated text in Europe:

As a rule, the quality of translation as such has not been hitherto classified or standardised in Europe. At least in the UK, however, many translation companies adhere to the ISO 9000 standard, but this applies only as far as the quality of translation procedures. The situation will probably change in the future, since at least the Finnish Association of Translators and Interpreters (SKTL) and LISA have set up within the last year working groups to devise guidelines for the classification of quality of translation.