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Terminology and Specialized Translation

1. *Introduction*

In the last two centuries increasingly rapid developments in science and technology have considerably extended the range of specialized terminology, so that it is vital to identify or clarify the meaning of a higher and higher number of terms to make communication easier and prevent misunderstandings both among experts and between experts and the lay public. Correspondingly, the volume of technical and scientific – i.e. specialized – translations has steadily gone up. Today, translation is not only practised more than ever, it is also studied more. As a consequence, quality standards now tend to be higher. For specialized translating this implies that both linguistic and subject-specific knowledge is required to produce high-quality translations which can read like originals (Wright 1993: 70-71).

The most frequently cited aspect of special languages and hence of specialized translation is terminology, though it is often assumed that terms do not create major problems in translation because in any two languages they tend to overlap and are, by and large, devoid of connotations (Mayer 1998: 74-75). Contrary to general expectation, however.

> Technical texts – even those handled exclusively by experts – do not consistently use specialized technical vocabulary, nor does

Textus XII (1999), pp. 369-390.

> such vocabulary consist exclusively of established terms. Particularly in subject areas where research leads to constant reshaping and expansion of established knowledge, the use of speculative language favors certain lexical patterns that permit quasi-provisional semantic shapes to be sketched out where conceptualization and standardization have not yet generated definitive expressions. (Opitz 1990: 1508)

Therefore, one-to-one correspondence of translation equivalents is less frequent than is generally believed, so that terminological investigation prior to or during translating can be extremely complex and time-consuming. Traditionally, translators have relied on lexicographic works, such as dictionaries and glossaries, and parallel/comparable texts to solve terminological problems. Specialized lexicology and its practical application, specialized lexicography, are based on a tradition dating back several centuries. Terminology as a discipline is much younger as it can be traced back to Wüster's work in the 1930s, whereas its practical application, terminography, was only established in 1975 by ISO standard 1087 laying down the vocabulary to be used in terminology and terminology work (Bergenholtz & Tarp 1995: 10). Ever since, the differences in approach between lexicology and terminology on the one hand and lexicography and terminography on the other hand have been much debated. However, language for special purposes (LSP) lexicology and terminology are not independent disciplines, their subject matter coincides and they draw heavily from each other. The main differences between their practical applications are summarized in the following table:

LEXICOGRAPHY	TERMINOGRAPHY
Follows a semasiological approach (from word to concept), i.e. is word-oriented	Uses an onomasiological approach (from concept to its denomination(s)), i.e. is concept-oriented
Aims at description	Aims at information, description, normalization, standardization, professional communication, linguistic-cultural intermediation

Includes all parts of speech (nouns, verbs, adjectives, adverbs, determiners, pronouns, prepositions, conjunctions and expletives) and provides all grammatical information pertaining to the word	Mainly consists of nouns and noun groups, verbs, and sometimes adjectives, etc. (as in LSP there is a strong tendency to nominalization) and cites only relevant grammatical information (usually deviations from usage in standard language)
Generally uses an alphabetical order. Any other arrangement is comparatively rare	Follows a systematic concept structure: alphabetical order is often a consequence of re-organization (especially in computer-assisted terminography)
Treats polysemous words in single entries and homonyms with different derivations in separate entries but following an alphabetical order	Treats polysemous meanings of the same term and homonyms in separate entries
Usually treats synonyms separately (except in thesauri)	Treats synonyms together with their corresponding main term
Uses all kinds of sources (including dictionaries)	Uses specialized documentation, either oral or written
Provides information following principles that can be quite different, especially from language to language	Presents information according to international standards

(adapted from Cabré 1996: 19-24 and Wright & Budin 1997: 328)

The differences outlined in the table above should be regarded as orientations since boundaries between lexicography and terminography are not clear-cut (Bergenholtz & Tarp 1995: 10; Mayer 1998: 84). As Sager put it (1989: 168),

> The lexicographer records what the regulatory and creative work of the terminologist has established as current usage; the terminologist needs the documentation provided in dictionaries in order to carry out his special task of maintenance engineer of subject vocabularies and technical communication. Their work overlaps in the description of existing usage.

Though dictionaries and other lexicographic works may be of

a high quality, translators have often felt that they do not meet their requirements. In typical specialized dictionaries, for example, linguistic information, such as references to grammar and syntactic usage, still plays a minor role (Arntz & Picht 1989: 191). In this respect, subject-specific encyclopaedic dictionaries immediately come to mind as they include definitions, that is, they regard the link between the concept and its linguistic expression – the term – as vital, but they overlook other linguistic data. It is precisely these latter data that are extremely important to translators. Moreover, unless they are computerized, traditional dictionaries cannot be updated very quickly, so that they are unable to keep pace with the rapid developments in science and technology. Therefore, Vermeer was fully justified when – in 1989 – he still listed the following desiderata for dictionaries for translators: (1) dictionary structuring and compilation according to international standards, (2) culture-sensitive semantic data, (3) precision, (4) referral to sources where further information can be found (subject-specific literature), (5) co-operation with people working in related fields (encyclopaedias), (6) creation of translation-oriented dictionaries (1989: 173). Comparatively recent developments in lexicography have gone some way in bridging the gap between lexicographic representation of knowledge and translators' requirements. The introduction of syntagms as headwords, for instance, recognises that concepts may be expressed through groups of words rather than single words, particularly in LSP. In this case, the function of the lexicographic unit is similar to that of the translation unit (Vanhese 1997: 176-177) as they are both the smallest units of meaning that can be taken into account either to identify a concept (lexicographic unit) or to express it in another language (translation unit).

In terminology, on the other hand, also thanks to the new opportunities afforded by the computer, new tools have been developed for terminology management with a view to terminology harmonization, standardization and description. Some of these tools – which mainly take the form of software – are specially designed to meet translators' requirements and have contributed to the development of a special branch of descriptive

terminology, translation-oriented terminography.

2. *Translation and Terminology*

Any inquiry into the relationship between terminology and translation presupposes an awareness that the two disciplines function on different linguistic and cognitive levels, so that they focus on different areas of language study (Sager 1998: 259). In recent years, both translation and terminology have come to be regarded as interdisciplines. As to translation, Snell-Hornby *et al.* (1994: ix) point out that:

> Since the mid-1980s it [translation] has gained recognition as an independent discipline in its own right – or, as one might more aptly put it, given the large number of subjects with which it overlaps, an interdiscipline.

At the same time, terminology was also recognized as an interdisciplinary field of study (Sager 1994: 7-8), as Cabré (1996: 20) later confirmed:

> [...] terminology is an autonomous subject of an interdisciplinary nature. It shapes its own specificity by selecting elements from subject matters to which it owes much of its existence, and by building up its own scientific domain.

As can be seen from the statements quoted above, translation and terminology exhibit a certain degree of similarity at a formal, that is at a theoretical level. Moreover, specialized translation has the same object of study as terminology, namely, special languages. However, it has been argued that, from a linguistic point of view, translators deal with instances of *parole*, while terminologists are basically concerned with the recording of facts of *langue* (Sager 1998: 259). Again, a table may help visualize differences between terminographic work and translating:

TERMINOGRAPHY	TRANSLATION
Is a static process: identification, isolation and description of terminological units	Is a dynamic process: manipulation of SL textual substance to create TL textual substance

Terms are isolated from their context(s) and fitted into an abstract system of concepts	Terms and concepts are used in context
Consists in matching term and concept	Consists in matching textual units
Analytic process except in the creation of new terms	Synthetic process except in the search of terms

(adapted from Sager 1998: 251)

Considering the different approaches followed in terminography and translation, the problem is then how to reconcile them and produce terminographic work that can be helpful to translators. As has been mentioned above, an attempt to address this question is to be found in translation-oriented terminography.

In translation-oriented terminography a distinction is made between systematic terminology management and *ad hoc* terminology management (Wright & Wright 1997: 148). The former consists in collecting terms and concepts from different fields/domains, in constructing concept systems and finally in creating term entries. This type of activity normally takes place when translators/terminologists have time to plan ahead and create or add to the glossaries or term banks they will use for future translations. A translator instead resorts to *ad hoc* terminology management when confronted with one-off translation assignments which may cover highly restricted domains s/he may or may not have tackled before (Wright & Wright 1997: 150). In what follows the focus will be on systematic terminology management to try and show how carefully planned terminographic work can provide useful tools for translators in the form of glossaries and especially computerized term banks. Examples to illustrate the points made will be taken from work currently under way at SSLMIT of the University of Trieste to create a multilingual term bank, TERMit, using dedicated software, Multiterm '95 Professional Plus by Trados.[1]

[1] In most cases considerations of space will not allow us to quote the whole

For translators, the main merit of any terminology management software lies in its flexibility, that is in its ability to represent terms of fields or domains even when these exhibit widely different features. Multiterm, for instance, allows the handling of up to 20 languages, to each of which an index field is assigned. To each term in an index field one or more text fields can be linked. Text fields are used for texts of varying length and format and are therefore suitable for descriptive information such as definitions, contexts, sources, notes, etc. Terminological information can further be classified in different ways by means of attribute fields or lists of attributes from which the relevant one is chosen in each case. Attribute fields include grammar (singular, plural, noun, verb, adjective, etc.). Finally, some fields – system fields – are filled in automatically by the program. They concern the author of each entry, the date of creation and the date when it was last modified (Magris 1996: 143-144). So, the template can be tailored to suit specific requirements, in this case the translator's as opposed to the standardizer's or harmonizer's.

Terminographic entries can take different forms; in general, however, they contain at least the following information: "the entry term(s), a reference number, a subject field, a definition, an indication of the usage" (Sager 1990: 143). The information outlined can be variously presented and integrated with numerous other data. A typical terminographic entry usually contains information which can be variously arranged, but falls into one of the following five categories: conceptual, linguistic, pragmatic, source reference and housekeeping specification (administrative data such as author, date, record number) (Sager 1990: 142-156). The pros and cons of models of entries and the information they include are discussed in detail by Mayer (1998: 91-184) with specific reference to translation-oriented terminography. A typical entry of TERMit would include the following fields: *Con-*

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entry, but only the section which is relevant to the point being made, that is either the Italian or English section. However, the sections of all entries in the two or more languages of a TERMit glossary undergo the same treatment as to fields used and information provided so that they can be regarded more or less as mirror images of each other.

cept field, Context, Definition, Equivalence, Grammar, Lexica, Note, Phraseology, Related words, Source, Subfield, Synonyms and *Variants* (text fields), and *Category, Morphosyntax, Regional label, Style label, Subject, Synonymy, Type of relation* and *Usage label* (attribute fields). Administrative data (*Creation date, Created by* and *Entry number*) are automatically added when a new entry is created. Although considerations of space do not allow all fields to be analyzed in detail, some aspects of entries which have special implications for translation-oriented terminography will be discussed below.

Entry terms are selected by analyzing a corpus consisting of recent documents representing communication between experts, between experts and initiates, and between experts and pupils (Pearson 1998: 36-39). Corpora are usually validated by experts and do not include translations, but only original documents. The reference number is a number for the entry which usually includes further information allowing a topic, a job, etc. to be identified (Sager 1990: 153).

Subject fields are used to identify the entry further and to distinguish the term from its homonyms if the glossary/term bank covers different areas of knowledge. Subject fields are generally selected by referring to some kind of representation of knowledge structure (Bowker 1997: 137-138). At SSLMIT we often refer to classifications for bibliographic purposes and library cataloguing, especially the Dewey Decimal Classification (1993, 1996), though we are aware that these are generally more suitable to describe established subjects with a hierarchical structure rather than rapidly developing sciences or technologies, for which an *ad hoc* knowledge structure may have to be devised with the help of subject experts (Sager 1990: 38). In TERMit general subject classification is provided under the heading *Subject* (such as economics, law, medicine, etc. as in traditional dictionaries), then the topic is further narrowed down under the heading *Subfield*, which therefore shows the specific domain dealt with in the given term collection. The domain is further subdivided using the field *Concept field*, which may prove particularly useful when dealing with subjects drawing their terminology from different disciplines. TERMit, for example, includes a glossary whose structure is partly hierarchical – as to *Subject* (law) and

Subfield (protection of minors on the Internet) – and partly multidimensional to account for rapid developments in the field and to represent domains whose terminology comes from different fields. So, the *Concept field* was used to distinguish terms deriving from the field of the Internet from those originating from legal fields. It included *Concept field*s such as *computing/telecommunications* and *Internet entities* for Internet terminology; and *illegal activities on the Internet, restrictions to freedom of expression on the Internet* for legal terminology (Montagna 1997-98). These data provide translators with the kind of detailed information that helps them decide whether the glossary covers precisely the domain of their assignment and whether they can use the information they find in the term bank for the translation at hand.

The representation of knowledge structure can be further enhanced by explicitation of relationships between objects and concepts designated in a terminological collection so as to outline an ideal tree structure of the discipline under investigation. Relationships can be generic, partitive, polyvalent and complex (Sager 1990: 29). Generic relationships establish a hierarchical order, i.e. they create links whereby a concept can be superordinate, subordinate, coordinate or antonymous to another one. This type of relationship is the most common and can be very useful to translators. In fact, when the TL, compared to the SL, exhibits terminological gaps, a translator may decide that in a given context the use of a generic term, that is the superordinate term is advisable if only general reference is made to a concept and coining a new word or using a definition is not necessary. In the field of building construction, for example, a distinction is made in English between *lintel* and *header*. These structural elements have a similar function, but *lintel* is used in construction systems such as masonry and reinforced concrete, whereas *header* is used in platform frame construction. In Italian no such distinction is made; therefore, where the reference is general rather than specific, the superordinate term *architrave* can be used (Musacchio & Palumbo 1999: 678).

Partitive relationships concern the representation of concepts consisting of parts and of their constituents (Sager 1990: 32). Polyvalent relationships are established when a concept can be

placed in more than one hierarchy (Sager 1990: 33-34). A typical example is given by the theory of supply and demand in economics whose position in the knowledge structure of the discipline could be represented as follows:

economics
microeconomics macroeconomics
theory of supply and demand

Here this theory has been classified as part both of micro- and macroeconomics.

Finally, when concepts cannot be classified according to generic or partitive relationships they have so-called complex relationships such as cause-effect, process-product, material-property, etc. (Sager 1990: 34-35). As can be seen, information on relationships is important to translators as it helps them acquire the kind of subject-specific knowledge that is essential in their work. However, representation of relationships is often extremely complicated as knowledge structure can be multidimensional. For this reason, in TERMit we have decided to include generic relationships (*superordinate, subordinate, coordinate* and *antonym*) plus another one named *general*, which covers all other types. We are aware that in some cases this structure may prove unsatisfactory and we are constantly studying ways to provide information of this kind clearly, effectively and – if possible – concisely. An example from a glossary on good manufacturing practice in pharmacy will give an idea of what the structure looks like at the moment:

en **component** *Morphosyntax* ***noun*** *Usage label* ***main term***
Source ⇒ ***USP 1994***: 1909
Lexica Found in ⇒ ***Sliosberg 1968***: 114, ⇒ ***Butterworths 1978***: 398 with a general meaning and in ⇒ ***NSOED 1993***: 461 with a different meaning. Not found in ⇒ ***Chiampo 1988***.
Definition Any ingredient intended for use in the ⇒ ***manufacture*** of a ⇒ ***drug product***, including those that may not appear in such drug product.
Source ⇒ ***USP 1994***: 1908
Context There shall be a ⇒ ***quality control*** unit that shall have the responsibility and authority to approve or reject all components,

drug product containers, closures, in-process materials, ⇒ ***packaging material,*** labeling, and drug products, and the authority to review production records to assure that no errors have occurred or, if errors have occurred, that they have been fully investigated.
Source ⇒ ***USP 1994***: 1909
Concept field pharmacology
Related words ⇒ ***medicinal product*** *Type of relation* **super.**
Related words ⇒ ***starting material*** *Type of relation* **coord.**
Related words ⇒ ***active ingredient,*** ⇒ ***excipient*** *Type of relation* **sub.**
Related words formulation *Type of relation* **general**
Synonyms Although the term "ingredient" is not as specific as "component" (it may have a wider range of meaning), it is sometimes found as a synonym for the main term.

en **ingredient** *Morphosyntax* ***noun*** *Usage label* ***common*** *Synonymy (~)*
Source ⇒ ***EEC GMP 1994***: 142
Phraseology active ingredient, inactive ingredient
Context Due to the variability of biological products or processes, some additives or ingredients have to be measured or weighed during the ⇒ ***production*** process (e.g. buffers).
Source ⇒ ***EEC GMP 1994***: 142

(Giorgetta 1997-98)

Definitions are meant to bridge the gap between concept and term; they can be original or taken from authoritative sources (Sager 1990: 146). In TERMit definitions and notes providing background or encyclopaedic information are carefully culled from corpora or worded to give translators a clearer view of these terms and their use. In some cases, ostensive definitions are supplied to help translators visualise any differences between concepts and their designations in different languages. For example, in an Italian-English glossary on the *Highway Code* a table of road signs accompanied by their designations in Italian and English is provided, so that translators can see at a glance whether there are any differences in the real object and also if different terminology is used in English in the United Kingdom and in Ireland (De Renzio 1996-97). However, the scope of definitions in translation-oriented terminography and hence in our term bank is much wider. A far from exhaustive list would include their contribution in term identification and domain un-

derstanding, their function in closing terminological gaps – that is, in providing concise definitions or paraphrases which can be used when a term is missing in the TL – and the help they can give translators in the production of TTs from a semantic and stylistic point of view (Magris 1998: 50).

Indication of usage can be provided in various forms and under different headings. In TERMit we use *Context* and *Note*, as can be seen in the following example:

en **validation** *Morphosyntax* ***noun***
Source ⇒ ***PIC 1996***: 290
Grammar The verb "to validate" is commonly used.
Lexica Found in ⇒ ***Sliosberg 1968***: 464.
Standardization ISO 8402: 2.18
Definition Action of proving, in accordance with the principles of Good Manufacturing Practice, that any ⇒ ***procedure***, ⇒ ***process***, equipment, material, activity or system actually leads to the expected results.
Source ⇒ ***EEC GMP 1994***: 115
Context The batches/runs under validation should be documented comprehensively.
Source ⇒ ***PIC 1996***: 290
Concept field ⇒ ***quality system***
Related words control *Type of relation* **super.**
Related words ⇒ ***qualification*** *Type of relation* **coord.**
Related words ⇒ ***process validation***, ⇒ ***prospective validation***, ⇒ ***concurrent validation***, ⇒ ***retrospective validation***, ⇒ ***revalidation***, ⇒ ***analytical validation*** *Type of relation* **sub.**
Related words validated state, validation studies, ⇒ ***change control***, ⇒ ***validation master plan***, ⇒ ***validation protocol***, ⇒ ***validation report*** *Type of relation* **general**
Note The terms "validation" and "qualification" are defined in the EEC "Guide to Good Manufacturing Practice for Medicinal Products", but the distinction between the two processes is not very clear. Le Hir (cf. ⇒ ***Le Hir 1997***: 13) suggests using the term "qualification" only to define the process prior to validation (e.g.: equipment qualification, product qualification, systems qualification, personnel qualification), whereas the term "validation" should be applied to describe the process consisting in verifying that an operation, carried out according to written procedures, leads to the expected results.

(Giorgetta 1997-98)

Further information on usage can be supplied by indications on phraseology. Picht (1993: 442) defines LSP phraseology as follows:

> [...] fachsprachliche Disziplin, die einerseits die syntaktischen Bindungen fachsprachlicher Ausdrucksmittel, ihre Synonyme und Äquivalenz und andererseits die begrifflichen Beziehungen (sowie deren Veränderungen) zwischen fachsprachlichen Elementen untersucht, die zu einer fachlich gültigen und sprachlich korrekten Aussage zusammengefügt werden können.[2]

Within studies on language for general purposes (LGP) some scholars distinguish between phraseological units and idioms: both are lexicalized, reproducible word groups of common usage which have syntactic and semantic stability and may carry connotations, but only the latter have meanings that cannot be derived from the meanings of their constituents (Gläser 1995: 38). To these one could add collocations and semi-fixed phrases which could be assimilated to syntagms rather than set expressions. However, a complete system has not yet been developed for LSP, though it is obvious that it is restricted compared to that of LGP. Gläser (1995: 50-55) has identified the following patterns of phrase formation:[3] adjective+noun (*easy money*), idioms (*high flier*), noun+prepositional phrase (*income velocity of money*), latinisms (*post hoc fallacy*), verb phrases (*to curb inflation*), adverbial phrases (*in high demand*), irreversible binomials (*supply and demand*), noun (*healthy growth*) and verb collocations (*to clear a market*). Though it is clear that phrases can be chosen as terms once the knowledge structure of a given domain has been identified, information on phraseology in translation-oriented terminographic collections is important. In the Italian language of economics, for example, the phrases *lungo/breve periodo* and *lungo/breve termine* are synonymous, but *lungo/breve periodo* collo-

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[2] [...] a special language discipline, which on the one hand investigates the syntactic connections between special language means of expression, their synonyms and equivalence and on the other hand studies the conceptual relations (as well as the modifications) of special language elements that can be fitted together to produce an idiomatically and linguistically correct text in the given special language.

[3] All examples are taken from the field of economics.

cates with the prepositions *in* and *di* (*nel/di lungo/breve periodo*), whereas only *a lungo/breve termine* is normally used. Correct use of collocations and phraseology is part and parcel of producing a specialized translation which can read like a TL original.[4]

Two problems which are addressed both in specialized translation and terminology are synonymy and equivalence. These could be regarded as similar concepts operating on different planes. Synonymy operates at an intralinguistic level, whereas equivalence is interlinguistic, though both concepts are difficult to delimit. Lexicography distinguishes between absolute synonyms and near synonyms. Zgusta states that absolute synonymy occurs when two terms correspond in *designatum, connotation* and *range of application*. The designatum is the essential property of the thing or concept defining it, the connotation consists of all the characteristics associated with a term and the range of application refers to the contexts in which the term can be used (Zgusta 1971 cited in Landau 1989: 105). According to Zgusta, absolute synonymy is rare in the standard language, but common in special languages, and particularly that of medicine (Landau 1989: 105). When two terms correspond in a number of aspects, but not all, they are called near synonyms. Landau refutes Zgusta's statement on absolute synonymy in special languages by quoting *Jones-Nevin syndrome* and *spongiform encephalopathy* as terms which turned out to be synonyms further to a description of the disease and its symptoms and not on the basis of the contexts in which the two terms were used (Landau 1989: 110). In science and technology there can actually be terms that are synonymous if parameters such as style, profession, geography and frequency are taken into account (Landau 1989: 110-111). In terminology too synonymy still has somewhat hazy boundaries, as its definition in many handbooks shows (Arntz & Picht 1989, Sager 1990), and is actually adopted by ISO:

> [Synonymy is the] relation between designations [...] representing only one concept [...] in one language. [...]

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[4] For examples of phraseology in TERMit see the field *Phraseology* under the synonym *ingredient* in the entry *component* quoted above (Giorgetta 1997-98).

> Note: Terms [...] which are interchangeable in all contexts [...] of a subject field [...] are called synonyms, if they are interchangeable only in some contexts [...] they are called quasi-synonyms. (ISO 1087 1990: 5.5)

In translation-oriented terminography synonymy is established at practical rather than theoretical level. It is identified in a restricted field of use – a domain or rather a specific context – and it is based on reference to the same thing or concept. Synonymous terms do not have to be interchangeable in all contexts, they can be used in different types of texts (cf. Mayer 1998: 59-69). This is particularly relevant to translation, as texts to be translated may belong to different types or genres though their topic is the same. Information in glossaries and term banks should help translators choose the most adequate terms in a given context. In the following example taken from the TERMit glossary on the *Highway Code* two Italian equivalents for the English *provisional licence* are provided, the official *autorizzazione per l'esercitazione di guida* and its informal synonym *foglio rosa*. Reading the entry translators can see that the former is the actual term used in the Italian *Codice della Strada* and is therefore suitable for legal documents addressed to experts, whereas the latter is found in instructions on how to get a driving licence and is better used for legal documents meant for lay people. Moreover, in a computerized term bank a synonym such as *foglio rosa* can help translators find the official legal term which, given its length and complexity, might be rather difficult to remember.

> *it* **autorizzazione per l'esercitazione di guida** *Morphosyntax noun group, f. Usage label main term*
> *Source* ⇒ ***Codice 1997:243***
> *Lexica* Assente in ⇒ ***Treccani 1986-1994.***
> *Definition* Autorizzazione rilasciata a chi ne ha fatto domanda per sostenere l'⇒ ***esame per la patente di guida*** ovvero per l'estensione di validità della patente ad altre categorie di veicoli ed è in possesso dei requisiti fisici e psichici prescritti. Essa consente all'aspirante di esercitarsi su veicoli delle categorie per le quali è stata richiesta la ⇒ ***patente*** o l'estensione di validità della medesima, purché al suo fianco si trovi, in funzione di istruttore, persona di età non superiore a sessantacinque anni e, munita di patente valida per la stessa categoria, conseguita da almeno dieci

anni, ovvero valida per la categoria superiore.
Source ⇒ ***Codice 1997:243***
Context Le prove d'esame non possono essere sostenute prima che sia trascorso un mese dalla data del rilascio dell'autorizzazione per l'esercitazione di guida.
Source ⇒ ***Codice 1997:243***
Concept field patenti di guida
Related words ⇒ ***patente di guida,*** ⇒ ***patente di guida conforme al modello comunitario,*** ⇒ ***patente di guida rilasciata da uno Stato estero.*** *Type of relation* ***super.***
Equivalence it-en Tra i termini "provisional licence" e "autorizzazione all'esercitazione di guida" esiste un rapporto di equivalenza parziale: lo scopo del rilascio di tali documenti è identico, ma cambiano due particolari: in primo luogo, la durata della loro validità (ad esempio, tra l'Irlanda e l'Italia esiste una differenza di un anno e mezzo) e, in secondo luogo, le qualità dell'accompagnatore di un ⇒ ***aspirante conducente*** (in tutti e tre i paesi in questione, egli deve possedere una ⇒ ***patente di guida*** valida per il tipo di ⇒ ***veicolo*** guidato dall'aspirante conducente, ma in Irlanda non viene specificato da quanto tempo egli ne deve essere in possesso, mentre nel Regno Unito deve esserne titolare da almeno tre anni e in Italia da almeno dieci).

it **foglio rosa** *Morphosyntax* ***noun group, m.*** *Style label* ***informal***
Source ⇒ ***Rilascio 1997***
Context Il candidato che, nell'arco di tempo di validità del foglio rosa, abbia superato con esito favorevole la sola prova di teoria potrà ottenere, su richiesta che l'esito positivo della prova di teoria venga trascritto sul nuovo foglio rosa che dovesse eventualmente ricevere.
Source ⇒ ***Rilascio 1997***

(De Renzio 1996-97)

Equivalence is a central concept in translation (Scarpa 1997: 3), but it is also controversial because it appears virtually impossible to pin down. In the last two decades it has been repeatedly challenged by theorists, so much so that, summing up the debate, Snell-Hornby stated that it was irrelevant (1988: 13-22). The numerous attempts to pinpoint the nature of equivalence have led to a proliferation of 'types' of equivalence, among which functional equivalence is currently much credited (Scarpa 1997: 8). However, many translation theorists refer to equiva-

lence in general because practitioners are used to this concept rather than because it has any theoretical validity (Baker 1992: 5-6). Further to the development of *Translation Studies* a wider meaning of equivalence has also gained ground:

> the question to be asked in the actual study of translation (especially in the comparative analysis of TT and ST) is not whether the two texts are equivalent (from a certain aspect), but what type and degree of translation equivalence they reveal. (Toury 1980: 47)

As can be seen, this definition is extremely vague as indeed was a more recent, further expansion on the concept by Toury himself (1995: 61):

> Rather than being a single relationship, denoting a recurring type of invariant, it [equivalence] comes to refer to any relation which is found to have characterized translation under a specified set of circumstances.

The debate on equivalence outlined above shows that in translation the idea of lexical equivalence originating from comparative linguistics was popular – particularly for its applications in the field of special languages, but in recent times it has been criticized on the ground that it is restricted to the level of the word (Snell-Hornby 1988: 20). Similarly, in early terminology theory, and especially in translation-oriented terminography, connotations of terms, which made up such a huge part of comparative linguistics and translation, played a minor role, because the focus of investigation was the concept. However, as has been outlined above, translation and terminology operate on different levels, so the question is then how terminography can produce collections of terms that contribute to help translators solve the problems of equivalence they encounter in their work. Being a practical application of a discipline, translation-oriented terminography shuns ideas that are too general to be workable and prefers a pragmatic approach to problems. Therefore, it has drawn from translation the idea of functional equivalence, that is, the idea that in translating not all variables are present in or relevant to all situations, so that the translator has to gather information enabling her/him to decide which aspects should be

given priority in each individual case. At least part of the information required can be drawn from glossaries or term banks specially designed to help translators. Thus, terminographic work proceeds from an identification of concepts and their relationships in a given specialized domain. Denominations of concepts in two or more languages are subsequently verified to establish to what extent they coincide or overlap. Any terminographic investigation of this kind aims to show whether there is full conceptual identity, partial overlapping, whether a concept is wider than another or completely different (Mayer 1998: 70-81). Clearly, cases of full identity or complete diversity are easier to handle, while cases of partial overlapping and inclusion are much more complicated. In the Italian section of the TERMit entry on *provisional licence* quoted above, the note on equivalence (*Equivalence it-en*) explains the degree of overlap of the English term and its Italian equivalents and can thus guide translators in the choice of the most suitable term from a functional viewpoint.

3. *Conclusion*

As can be seen from the problems discussed and the examples quoted above, in translation-oriented terminography a number of strategies have been devised to provide subject-specific knowledge, background information and indications on usage enabling specialized translators to effect the shift from *langue* to *parole* which is essential to their work. Terminological collections based on these principles make it easier for the translator to distinguish between terms and non-terms, relating concepts, different classifying criteria, to choose the suitable term among TL synonyms and more generally TL equivalents, and also to coin new terms or use paraphrases by drawing inspiration from data s/he finds in definitions, contexts, phraseology, etc. Computerized terminology management systems are already included in software for computer assisted translation – the so-called 'translation memory' tools – and allow terminologists/

translators to store a variety of easily retrievable data as it is now recognized that specialized translation does not only imply the solution of terminological problems, but also requires awareness of group conventions (Snell-Hornby 1988: 124) applying in the domain of a given LSP as to style and (morpho-)syntax (Arntz & Picht 1989: 29, Wright 1993: 71-72). In short, some progress has been made towards meeting translators' requirements in this field and interesting work is under way, especially to investigate new ways to extract terms and related linguistic and encyclopaedic information automatically with a view to further improving the quantity and quality of terminological collections.

REFERENCES

Arntz R. and H. Picht, 1989, *Einführung in die Terminologiearbeit*, Olms, Hildesheim.

Baker M., 1992, *In Other Words*, Routledge, London.

Bergenholtz H. and S. Tarp (eds), 1995, *Manual of Specialised Lexicography*, John Benjamins, Amsterdam and Philadelphia.

Bowker L., 1997, "Multidimensional Classification of Concepts and Terms", in S.E. Wright and G. Budin (eds), *A Handbook of Terminology Management*, 1, John Benjamins, Amsterdam and Philadelphia, pp. 133-143.

Cabré M.T., 1996, "Terminology Today", in H. Somers (ed.), *Terminology LSP and Translation. Studies in Language Engineering in Honour of Juan C. Sager*, John Benjamins, Amsterdam and Philadelphia, pp. 15-33.

De Renzio P.E., 1996-97, *Glossario inglese-italiano sul codice della strada. Tre nazioni a confronto: Italia, Regno Unito e Irlanda* (unpublished thesis), Università degli Studi, Trieste.

Dewey M., 1993, *Classificazione decimale Dewey*, Associazione italiana biblioteche, Roma.

Dewey M., 1996, *Dewey Decimal Classification and Relative Index*. Forest Press, Albany (NY).

Giorgetta L., 1997-98, *Le norme di buona fabbricazione dei medicinali: un'indagine terminografica in italiano, inglese e francese* (unpublished thesis), Università degli Studi, Trieste.

Gläser R., 1995, "Relations between Phraseology and Terminology in English for Special Purposes", in *Linguistic Features and Genre Principles of Scientific English*, Lang, Frankfurt am Mein, pp. 33-57.

ISO 1087, 1990, *Terminology – Vocabulary*, ISO, Genève.

Landau S., 1989, *Dictionaries. The Art and Craft of Lexicography*, C.U.P., Cambridge and New York.

Magris M., 1996, "La costruzione di una banca dati terminologica presso la S.S.L.M.I.T. di Trieste", in F. Scarpa (ed.), *Rivista Internazionale di Tecnica della Traduzione*, Lint, Trieste, pp. 138-151.

Magris M., 1998, "La definizione in terminologia e nella traduzione specialistica", in F. Scarpa (ed.), *Rivista Internazionale di Tecnica della Traduzione*, E.U.T., Trieste, pp. 37-63.

Mayer F., 1998, *Eintragsmodelle für terminologische Datenbanken. Ein Beitrag zur übersetzungsorientierten Terminographie*, Gunter Narr Verlag, Tübingen.

Montagna A., 1997-98, *La tutela dei minori su Internet: un'indagine terminografica in italiano, inglese e tedesco* (unpublished thesis), Università degli Studi, Trieste.

Musacchio M.T. and G. Palumbo, 1999, "A Model for Translation-oriented Terminology in the Domain of Building Construction", in P. Sandrini (ed.), *TKE '99: Terminology and Knowledge Engineering*, TermNet, Vienna, pp. 671-683.

Neubert A. and G. Shreve, 1992, *Translation as Text*, The Kent State U.P., Kent, Ohio and London, England.

Opitz K., 1990, "The Technical Dictionary for the Expert", in F.J. Hausmann *et al.* (eds), *Wörterbücher – Ein internationales Handbuch*, 2, Walter de Gruyter, Berlin and New York, pp. 1505-1512.

Pearson J., 1998, *Terms in Context*, John Benjamins, Amsterdam and Philadelphia.

Picht H., 1993, "Fachsprachliche Phraseologie", in H. Picht and C. Laurén (eds), *Ausgewählte Texte zur Terminologie*, TermNet – International Network for Terminology, Wien, pp. 439-456.

Sager J.C., 1989, "The Dictionary as an Aid in Terminology", in F. J. Hausmann *et al.* (eds), *Wörterbücher – Ein internationales Handbuch*, 1, Walter de Gruyter, Berlin and New York, pp. 167-170.

Sager J.C., 1990, *A Practical Course in Terminology Processing*, John Benjamins Amsterdam and Philadelphia.

Sager J.C., 1994, "Terminology: Custodian of Knowledge and Means of Knowledge Transfer", in H.B. Sonneveld and K.L. Loening (eds), *Terminology*, 1/1, John Benjamins, Amsterdam and Philadelphia, pp. 7-15.

Sager J.C., 1998, "Terminology Theory", in M. Baker (ed.), *Encyclopedia of Translation Studies*, Routledge, London, pp. 258-262.

Scarpa F., 1997, "Equivalenza funzionale e tipologie testuali nella traduzione", in M. Ulrych (ed.), *Tradurre. Un approccio multidisciplinare*, UTET, Torino, pp. 3-30.

Snell-Hornby M., 1988, *Translation Studies. An Integrated Approach*, John Benjamins, Amsterdam and Philadelphia.

Snell-Hornby M. *et al.* (eds), 1994, *Translation Studies. An Interdiscipline*, John Benjamins, Amsterdam and Philadelphia.

Toury G., 1980, *In Search of a Theory of Translation*, The Porter Institute for Poetics and Semiotics, Tel Aviv.

Toury G., 1995, *Descriptive Translation Studies and Beyond*, John Benjamins, Amsterdam and Philadelphia.

Vanhese G., 1997, "Traduzione tecnico-scientifica e lessicologia", in M. Ulrych

(ed.), *Tradurre. Un approccio multidisciplinare*, UTET, Torino, pp. 175-192.
Vermeer H.J., 1989, "Wörterbücher als Hilfsmittel für unterschiedliche Typen der Translation", in F.J. Hausmann *et al.* (eds), *Wörterbücher – Ein internationales Handbuch*, 1, Walter de Gruyter, Berlin and New York, pp. 171-174.
Wright S. E., 1993, "The Inappropriateness of the Merely Correct: Stylistic Considerations in Scientific and Technical Translation", in S.E. Wright S.E. and L.D. Wright (eds), *Scientific and Technical Translation*, John Benjamins, Amsterdam and Philadelphia, pp. 69-86.
Wright S.E. and G. Budin (eds), 1997, *A Handbook of Terminology Management*, 1, John Benjamins, Amsterdam and Philadelphia.
Wright S.E. and L.D. Wright, 1997, "Terminology Management for Technical Translation", in *A Handbook of Terminology Management*, 1, John Benjamins, Amsterdam and Philadelphia, pp. 147-159.