Dynamics of terminology translation. The approach of Functional Pragmatics to multilingual terminology

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Abstract The representation and communication of specialised knowledge both from intra- and inter-lingual perspectives are substantially affected by the complex nature of knowledge units. These result from the interrelation of referential, conceptual, and linguistic knowledge and are characterised by a constant tension between contrasting but complementary forces, namely a need for stability and precision and the concurrent drift towards variation. These inherent features of specialised knowledge units are considered in the framework of translation activity, with special attention paid to the contribution given by domain specialists to their formation into target languages. An analysis of the multilingual Glossary for Functional Pragmatics and, in particular, of the ongoing work on its Italian section contributes to highlighting the peculiarity of the figure of the domain specialist as (self-)translator. The Glossary offers a direct view of the cognitive and linguistic processes and outcomes of domain specialists' translation and 'optimisation' activity on specialised knowledge units. Indeed it exemplifies how terminological variation can be seen not only as a source of possible irregularity but also as a valuable contribution to knowledge domains in intra- and inter-lingual perspectives. Variation therefore deserves further consideration in Terminology and Translation studies, especially when originates from authors' deliberate cognitive distinctions within domain knowledge.

Keywords terminological translation, Terminological Knowledge Units (TKUs), author terminology, author/specialist translation, terminological formation, specialised knowledge, variation, optimisation

1 Introduction

The representation and communication of specialised knowledge hinge primarily on the complex nature of terminological units, which results from the mutual interaction of the different types of knowledge they convey, namely the referential, conceptual, and linguistic knowledge. Nevertheless, terminological units need to represent and communicate specialised domain knowledge in a precise and univocal manner. Thus, terminology is characterised by a constant tension between contrasting but complementary forces affecting both the delineation and transmission of specialised knowledge units. These forces consist in the need, on the one hand, for precision and stability and, on the other, for dynamicity and variation. This is a central concern for translators, specialists, and especially for terminologists. In translation practice the interplay between terminological regularisation and variation combines with inter-lingual transfer. As a result, even more complex issues derive from the translation of terminological units in both specialised texts and reference works.

An outline of the structured nature of terminology and the issues relating to its multilingual dimension (§ 2) opens the way to the analysis of a particular figure within the panorama of terminology translation, namely the domain specialist (§ 2.1). While this figure is rather neglected in Translation and Terminology studies it has an important role in the introduction of terminological translation into texts. Indeed, specialists often use and/or introduce terminological units into languages different from the one in which they were originally formed; and, in some cases, they also bring in terminological self-translations. The peculiarity of this figure and of the outcomes of its terminological translation consists in the specificity of its competencies, namely a high level of expertise in the specialised domain and usually a lack of professional skill in translation and terminology activity.

The dynamics and features that emerge in the practice of terminological translation made by specialists are analysed (§ 2.2, § 2.3) in order to introduce the consideration of a specific case study, namely the construction of a multilingual *Glossary for Functional Pragmatics* (§ 3), with special attention to the ongoing compilation of its Italian section. Its structural characteristics (§ 3.1) and the formation of the terminological units of this domain in target languages (§ 3.2) are interpreted in the light of the specificity of this reference work. While not being a fully-fledged terminological resource, the *Glossary for Functional Pragmatics* is produced under the supervision of one of the fathers of the theory, and therefore offers basic support to the specialists working in this knowledge field in languages other than German. The analysis of the systematic work for its compilation provides a direct overview of the cognitive and linguistic processes on which the terminological translation made by domain specialists is based.

2 Terminological Knowledge Units: their nature, functions, and translation

Terminology epitomises the rationale of specialised communication, namely the representation and transmission of the core units of disciplinary and technical knowledge domains.¹ The *representation* and *transmission* functions of terminology can be considered as a mutually exclusive disjunction (Cabré 1997: 54–55) or as a dichotomy of complementary aspects, as they are intended here. Terminology results from a tension between a need for units which can provide clear-cut 'syntheses' of the specialised knowledge of a domain and the fact that they are also communicative and cognitive units which interact with general language (Kageura 2002: 14–16) in linguistic as well as in cognitive and experiential contexts (Temmerman 2000, Faber 2012). The final result is an 'unstable equilibrium' of regularity and variation within the threefold dimensions of knowledge, (domain) reality, and natural languages, including the cultural and experiential planes. The interactions of knowledge units and of whole terminology systems are multiplied and amplified when a multilingual context is taken into account.

Here the complex structure of specialised knowledge units is also highlighted by using 'Terminological Knowledge Units' (TKUs) instead of 'terms' for identifying and designating them. More precisely, TKU refers to specialised semiotic units, mostly but not exclusively linguistic in nature, which combine different types of knowledge (i. e. linguistic, mental/conceptual, and referential). TKUs can be defined as "integrated and relational units that can undergo variations and modifications (in time, space, cultures, paradigms etc.)" (Leonardi 2009: 40). They are "integrated units because in them linguistic, mental, and referential matter coalesce in a close interplay. They are relational units as they are organised to shape a knowledge domain whose (internal) constitution and (external) outline are delineated by the correlation of"

¹ The theory of 'Terminology' will be graphically distinguished from 'terminology' as a collection of Terminological Knowledge Units. Similarly, capital initials will be used to indicate other disciplines mentioned here.

their components (Leonardi 2009: 40). TKU is preferred to 'term' which might be ambiguous as it is often used in the Terminology literature not only for indicating designations exclusively but also their association to conceptual contents. 'Concept' and 'designation' are adopted to refer exclusively to the mental and linguistic constituents of TKUs respectively; for working purposes it is assumed that they can be taken in isolation from the other components of TKUs. For the aim of the present paper the distinction traced by Temmerman (2000: 43) between the categorial and prototypical nature of the knowledge content of TKUs is not taken into account.

TKUs and their inter-lingual equivalence are necessarily a central issue for specialised translation² because they delineate and communicate the core units of knowledge domains (Rogers 2008), and are therefore a focal means of knowledge transmission and construction. Yet, as specialised Translation studies highlight, terminological translation cannot be taken in isolation but needs to be incorporated into a wider dimension. In this way it can be observed in its interaction with other textual factors which affect the nature and behaviour of TKUs within texts (Gerzymisch-Arbogast 2008, Thelen 2015). Different contemporary Terminology theories share this orientation and consider TKUs as communicative items, that is to say complex entities which need to be treated as such both in the intra- and inter-linguistic perspective (Gaudin 1993, 2003, Bourigault/Slodzian 1999, Cabré 1999, Temmerman 2000, Faber 2012).

An (inter-lingual) approach to TKUs that considers their complex structure cannot ignore that they also need to meet the requirements of clear and accurate knowledge communication. A balance might be found by introducing the concept of 'optimisation', originally defined by Schubert (2011: 25, cf. 42-43) as "[t]he idea that it is purposeful to improve specialized communication by deliberate interference". Optimisation here is intended as a factor that *limits* the irregularities of natural language, rather than as a procedure for creating (semi-)artificial univocal language and communication systems. It can be considered as an *adjustment* of language and the other communicative components to the needs of users in the specific situations that delineate the domain of specialised discourse. This adjustment implies increased regulation, but does not lead to a complete transformation of linguistic and communicative media and strategies into 'artificial' tools. As a matter of fact optimisation is distinct from the normative activity related to the intervention of official standardisation organisations. Adjustments can also arise spontaneously in specific situations, where specialists share cognitive, referential, linguistic, and communicative knowledge, or they can be fostered by authoritative figures within a knowledge domain. Therefore, optimisation is used here as an interpretive key for the consideration of the features that characterise the approach to the translation of Functional Pragmatics (FP) TKUs.

2.1 Scientific domain specialists as translators

Terminology and its translation are a concern of different figures in the comprehensive domain of specialised communication: terminologists, translators, and specialists operating in the distinct knowledge areas. The three categories share only in part their specific competencies and

² Here 'translation' and 'translator' include the activities and figures related to both written and oral 'transfer' intended in the comprehensive sense of "multidimensional translation" as illustrated by Gerzymisch-Arbogast (2005/2007).

the aim of their 'interaction' with terminology. But all of them influence the development and features of specific TKUs as well as of Terminology theory and practice. The category of scientific domain specialists is very relevant for Terminology. First of all because they act on terminology systems, by contributing to shaping TKUs and consolidating them through their use in texts. Specialists often intervene with different modalities also in the inter-lingual dimension of terminology. They are active and passive users of translated terminology, both in their specific field and in the interdisciplinarily connected knowledge domains. In particular, they can use and/or introduce TKUs in their texts in a language different from that in which the knowledge units were originally formed. Domain specialists often act as consultants for specialised translators and terminologists, but they can themselves become translators of single TKUs or of whole texts while not being professionals either in the fields of Translation or Terminology.

The influence that the category of specialists exerts on (multilingual) TKU systems is only indirectly considered in Terminology and Translation studies. In these fields scholars are mainly focused on the activity or training of professional terminographers and translators. The usage or introduction of TKUs in target specialised languages is mostly analysed as a 'product' when they are extracted from texts in order to be investigated, represented, and translated in reference works and target texts. Here the focus is on the issues related to the direct contribution of specialists as translators – their activity, the method adopted, the outcomes of their work within TKU systems and the specialised knowledge that they represent and communicate. In order to highlight its specificity this figure will be indicated also as 'translator-specialist'.

In most academic disciplines it is a rather common practice for specialists to identify equivalents of single TKUs and use them in texts. But in some humanities domains even whole texts are translated by specialists of the discipline rather than by professional translators.³ This presupposes an advantage given their in-depth knowledge of the overall subject domain – with the possible exception of translator-specialists working on new sub-domains, as this implies the preliminary understanding and acquisition of novel TKUs in the source language. This might add to the weaknesses inherent in the figure of the translator-specialist, namely its lack of specific Translation and Terminology expertise. A special 'sub-type' of translator-specialist is represented by experts who translate (or revise the translation of) the set of TKUs they use – or possibly even introduced – when they structure texts in a language different from their usual working language. In this case what can be defined 'author (self-)translation' also comes into play.

In order to identify and work with the TKUs used in texts, translators and terminologists need, first of all, to become familiar with the knowledge (sub-)domain under analysis and its linguistic and communicative features in the source and target languages. The delineation of relational bi- or multi-lingual TKU systems is important for both figures, and is particularly relevant for the elaboration of specialised reference works. The activity of terminologists and translators working on TKUs is directed towards detecting or forming in the target language fitting multifaceted but cohesive units considered in their entirety. Whereas the work of translator-specialists usually bypasses, at least in part, the preliminary acquisition of knowledge

³ E. g. in Linguistics this practice is rather widespread and was even more so in the past for Italian and other European languages. Even though English is recognised as the scientific lingua franca, translations of seminal works in this field have often been made by well-known linguists from English as source language and/or into languages other than English.

of the subject in the source language. Domain specialists translate TKUs or complete texts in the (sub-)domain they work into, hence they have the general expertise in the subject and, depending on the specific cases, they might need to fill some knowledge gaps in the phase of identification and understanding of specific TKUs in the original language or text. Author self-translation avoids the phase of knowledge acquisition in the source language as the TKUs they translate belong entirely to their own knowledge domain. Therefore, the (self-)translation of TKUs made by translator-specialists tends to focus mainly on identifying or forming units in the target language that are suitable for transferring specialised knowledge from the source language.

2.2 Dynamics and issues of author/specialist TKU translation

When the equivalence of TKUs is well-established in a knowledge domain or in its sub-domains, the specialist's translation activity does not encounter major terminological problems; it might eventually lead to revisions and adaptations of specific TKUs. A more problematic situation arises, however, when the knowledge domain is (relatively) new and its terminology in the target language has to be shaped. In this case, the translator-specialist becomes the creator of TKUs in the target language and his/her work is more similar to that of terminologists and translators. This is due to the fact that the translation process needs to be more systematic and go deeply into the structuring of consistent bilingual correspondences between TKU relational systems.

The translation of a TKU system involves the overall consideration of a series of factors that are relevant for shaping each unit. The textual, communicative, and sociological approaches to the analysis of terminology have highlighted the necessity to consider in the inter-lingual study and formation of knowledge units a series of aspects that also focus on the features and behaviour of TKUs within textual and discursive dimensions (cf. § 2). The following are to be considered among the most relevant conceptual and linguistic TKU interactions that affect the intra- and inter-systemic structure of each unit, namely TKUs have relations: with other TKUs within a knowledge domain; with the other TKUs used in texts devoted to that domain; possibly with other TKUs of neighbouring or related disciplines; with the lexemes and morphosyntactic rules of the general language used in the text; with textual rules and structures; with external reality, which is not just the referential plane but also involves the participants and the aims within the communicative activity, affecting its discursive product from the point of view of genre; with the author and translator, and their cognitive and experiential dimension. This sketch of the complex relations which characterise TKUs is amplified in a translation situation.

Indeed, for a multilingual terminology to be efficient, TKUs have to be considered in their overall relational dimension, and not simply as components of a conceptual system of related units of referential/conceptual knowledge. As discussed above, TKUs are complex units and, in addition to the reciprocal relations internal to the terminological system, they are located within co(n)texts that necessarily influence them. What is identified as a "theory of indeterminacy" in Terminology (Antia et al. 2005) indicates the complexity that emerges in the reality of TKUs, especially when they are contextualised and, to a greater extent, when they are translated.

The creation of a TKU system for a new (sub-)domain in a target language can be characterised by variations and inconsistencies of designations also due to the work of different translator-specialists who act independently of each other and, usually, without applying pre-determined terminological principles and, even less, specific guidelines.⁴ So a regularity of TKUs in the source language can correspond to an irregular use of designations – and even of entire units – in the target language. A diachronic consideration of the TKUs in target specialised texts can reveal a trend towards the stabilisation and regularisation of their variants and synonyms. As regards the conceptual plane, a recently formed TKU system in a target language leaves little room for deliberate substantial modification of focal contents in the overall knowledge domain. This situation favours a prevalence of imported contents in the target TKU system that coincide with those of the source (cf. § 2.3). This may change when new conceptual positions, and hence, new or modified TKUs develop both in mono- and multi-lingual perspectives for satisfying cognitive purposes (Freixa 2006: 64–68).

The absence of a specific authority which can provide terminological translation guidelines for that knowledge field is the natural condition in which author TKU translation usually takes place in scientific domains, particularly in the humanities. Established usage and translation traditions represent the authoritative reference materials in most cases, even though, as suggested above, their univocity and precision are not totally guaranteed. This is especially true for the translation of TKUs that can strongly depend on the specific interpretation of single authors and schools within a general disciplinary domain.⁵ TKUs can be collected in specialised reference works which can include clear-cut interlingual correspondences and definitions, but usually these resources are not able to take into account the faceted dimension of author terminologies.⁶

To sum up on this point, the use of TKUs in specialised texts is sufficient to establish *ipso facto* their status as knowledge units (Antia et al. 2005: 5). Variations deliberately introduced by authoritative sources for cognitive purposes provide specialised communication with expressive TKUs that are capable of bringing relevant and fine-grained distinctions on the level of both content and (communicative) form (cf. Freixa 2006, Fernández-Silva/Freixa/ Cabré 2011).⁷ Whereas, variation due to irregular and incoherent translations – from the intra- and inter-lingual perspectives – can be considered a cause of possible inconsistencies and irregularities in the target language (cf. e. g. Leonardi 2011). This can contribute to a lack of effectiveness in the transmission of specialised contents causing misleading knowledge representations.

⁴ This phenomenon was analysed for the constitution of the Italian TKU system of Cognitive Linguistics (Leonardi 2011).

⁵ The following can be considered as an example: *Textart* in FP is deliberately set apart from *Textsorte* which belongs to the domain of Text Linguistics and displays substantial similarities to it (Ehlich 1990: 598–601, cf. Nardi 2015: 65). This distinction is maintained in translated TKUs also from the point of view of the designation: the Italian equivalents of *Textart* and *Textsorte* are *specie testuale* and *tipo di testo* respectively.

⁶ E. g. the principal Terminology TKUs are univocally defined in English and French in the ISO 704:2009 standard, and a multilingual Terminology glossary with definitions is also available (Bessé/Nkwenti-Azeh/Sager 1997) but the Terminology literature offers a wider and more complex spectrum of TKUs and their specific knowledge values that is not recorded in the mentioned resources.

⁷ On the possible sources and effects of TKU variation cf. also Bowker (1997, 1998), Rogers (1999, 2004), Kerremans/Temmerman (2008), and Condamines (2010).

2.3 Secondary TKU formation in author/specialist translation

A preliminary distinction has to be made between what is commonly identified as "primary" and "secondary term formation" (Sager 1990: 80). The former consists in the original creation of a TKU in a language starting from a radically new or newly modified concept to which a designation is assigned in order to complete its representative and communicative function. The latter concerns the creation of a TKU for an existing concept, and may result from the monolingual revision of the terminology of a domain or the knowledge transfer into a different culture.⁸

The constitution of a new knowledge domain in a language and culture naturally implies the primary formation of complete TKUs – with their conceptual, linguistic, and referential values – and their integration into the pre-existing conceptual, linguistic, and interdisciplinary knowledge background;⁹ whereas the reception of a new specialised domain into a target language and knowledge system hinges primarily on the entrance of new concepts. The expressive level has a secondary role, and the source language it belongs to is not a crucial feature of the TKU, as long as it enables specialists to use it in communicative co(n)texts. So, direct loan is often adopted in the initial stages, and only later may the need arise to identify or to shape native linguistic forms (cf. e. g. Leonardi 2011).¹⁰ The latter have to be suitable in order to be specialised so that they can express specific conceptual contents and can be adequately integrated into texts.

The adoption of direct loans as TKU translation strategy is favoured by the cohesion and homogeneity of scientific communities (Sager 1990: 81). Furthermore, users tend to perceive TKUs as unitary language signs and are reluctant to modify one of their components, and "[o]nly appropriate intervention can reverse this very human feeling towards words" (Cabré 1999: 90, cf. 211). Initially, specialists tend to perceive *loans* as *necessary* because foreign language TKUs bring with them new conceptual contents, and no equivalent units are directly available in the target linguistic and conceptual domain. Yet, direct loans do not draw from – and even less do they increase – the expressive potentialities of the target language. In addition, they can cause difficulties in the morphosyntactic processes which characterise their use in texts and the formation of derivative and compound TKUs. The progressive acquisition and development of a specialised knowledge domain also within the target language and culture may favour the identification and use of native designations; this leads to the formation of 'new' TKUs. Old and new designations may coexist in the terminology system, bringing about, in this way, a situation of complete synonymy between the foreign and native TKU form, and what was initially a necessary loan becomes a *luxury* one.

⁸ Indeed, Fischer (2010) considers also a further type of TKU formation procedure, i. e. "multilingual primary term-creation", related to specific contexts of language and translation policy. It consists in the simultaneous identification of designations in different languages for a shared concept (Fischer 2010: 26).

⁹ For example, in the case of FP a special interdisciplinary interaction is represented by the general field of Pragmatics, with which it displays obvious similarities, but also substantial differences. These are clearly underlined by the experts and the translator-specialists of this field in their terminological and/or translation work (cf. e. g. Thielmann in this volume).

¹⁰ The principal strategies for TKU formation as a result of the transfer of specialised knowledge are translingual borrowing – which includes direct loans and loan translations (ISO 704:2009 § B. 4.2, B 4.3) –, and terminologisation (ISO 704:2009 § B. 3.3).

3 A terminological viewpoint on author TKU translation in the Italian *Glossary for Functional Pragmatics*

FP is a relatively recent sub-domain of linguistic studies which originated at the beginning of the 1970s with the works by Ehlich and Rehbein (Ehlich 1972, Ehlich/Rehbein 1976, 1979, cf. Redder 2008). It is "a theory of linguistic action" which "conceives of language as a complex of form-function-nexus anchored in reality as societal practice" (Redder 2008: 133); it is rooted in Karl Bühler's field theory and the Pragmatics studies emerging in those years. In contrast to the common practice of using English as the scientific lingua franca, FP has been codified mainly in German (cf. Titscher et al. 2000: 183). Nevertheless, translations and studies written in other languages started to appear, and this led to the necessity to compile a multilingual terminology of FP. An alphabetic German-English-Dutch Glossary for Functional Pragmatics (Ehlich et al. 2006; hereafter *Glossary*) is intended as a reference model for the translation of FP TKUs into English and Dutch. The Italian section of the Glossary is being developed by Antonella Nardi under Konrad Ehlich's supervision (Nardi 2015 and in this volume).¹¹ The multilingual Glossary can be considered a special case in the panorama of author terminology because the translation process and its product are carried out in collaboration with one of the fathers of the theory. The peculiarity of this situation makes it an interesting case study because in this humanities domain a figure who is a leading expert in the knowledge field under examination intervenes with a 'guiding' and 'optimising' function on the terminological work of linguists and FP domain experts. In addition, for some of the TKUs in the Glossary, the process is delineated as one of author self-translation.

The optimisation facet of FP TKUs in the different target languages takes place in a systematic translation process characterised by a regularising approach to the TKUs of this domain. Translation equivalents are identified within the vocabulary of target languages and univocally fixed in a one to one correspondence with the German original TKUs. The preference for the use of terminologisation and loan translation can be explained by the fact that great importance is given to the necessity of enabling the different natural languages to be efficient means of specialised knowledge communication (Ehlich 2006 and in this volume). The underlying intention is to enhance and take advantage of the inherent richness and expressive capabilities of natural languages. On the one hand, this approach favours the specialisation of the representative and communicative potential of language even when applied to new specialised knowledge. On the other hand, it aims at guaranteeing a clear and precise conceptual transmission also in the inter-lingual perspective.

3.1 Structural characteristics of the Glossary

This reference work is not conceived as a self-contained terminological resource centred on concepts but rather as a basic support that FP specialists can use in text production. It aims at optimising FP TKU translation by clearly identifying the given equivalents in languages other than German. This explains its structural and organisational characteristics and limits, which are counterbalanced by the advantage of having a resource that provides clear-cut ter-

¹¹ An important contribution to Nardi's work was the FP Translation Workshop held at the University of Macerata during the spring semester 2014, conceived as a collaborative work of systematic TKU translation (cf. *Introduction* in this volume).

minological correspondences guaranteed by the direct supervision of a leading expert of the FP domain.¹² The *Glossary* is monodirectional and lists TKUs alphabetically for the German language providing equivalents in the target languages. Only its electronic format allows users to find terminological correspondences also starting from the target languages. Phrases and derivative TKUs are nested under what is considered to be the head-TKU. The system displays repetitions of entries and sub-entries, as is typical in electronic reference works. Complex and compound TKUs are usually nested under different entries with which they have a conceptual or formal relation.¹³

The Glossary does not provide definitions or further conceptual and linguistic information for the TKUs listed. It requires therefore complete domain knowledge or the possible use of cross-reference to FP source texts. It is also assumed that the conceptual system is unvaried across the different target languages. Indeed, the FP scientific community is substantially homogeneous and therefore the concepts identified in the original theory have not been modified when they have been received by other linguistic FP communities and transmitted via different languages. In addition, the FP theory is still too young to have experienced substantial inter-cultural modifications, or internal distinctions into sub-schools which might create significant differentiations among its conceptual and linguistic structures. This does not exclude that adjustments to the FP concepts and, hence, to its TKU system have been made or will be made in the future, either in the mono- or multi-lingual perspective. For the production of the Italian section of the FP Glossary Nardi (2015 and in this volume) provided a thematic organisation of the source entries. This highlights the mutual conceptual relations among TKUs and might open up the present structure of the Glossary to that of a relational resource centred on concepts. The absence of definitions is coherent with a specialised reference work that has domain specialists as its target, and a clear and correct codification of original FP concepts in other languages as its micro-function. But a future extension of the target of the Glossary to students or specialists of other disciplines - especially of neighbouring knowledge fields - and the possible modification of the knowledge domain would require a different and more elaborate structuring of the reference work, as regards both the organisation of its entries and the conceptual and linguistic information made available.

3.2 Observations on secondary TKU formation in FP

Here the focus is on secondary TKU formation mainly as inter-lingual activity, because it is based on the TKUs of FP seen as the product of translation. We will not go into the specific linguistic and conceptual strategies adopted for the identification of equivalent target language designations for the terminology of FP (cf. Nardi 2015, Thielmann in this volume). The aim of this analysis is rather that of considering the peculiarities of the method, the principles which characterise the author/specialist (self-)translation into other languages of FP TKUs, and the effects that this can have in the wider spectrum of the terminology of Linguistics.

The process of secondary TKU formation in FP represents a peculiar case within the translator-specialist model due to the role played in it by expert supervision. In addition to

¹² Cf. Hartmann/James (1998) for the terminology related to Lexicography used here to illustrate the features and structure of the *Glossary*.

¹³ E. g. *innere Abfrage* is nested under *Frage*, but also under *Abfrage*, which is an autonomous entry; *Texttyp* appears under both *Text* and *Typ*.

its optimisation function, expert supervision also favours the constitution of equivalent TKUs with native designations in target languages, in this way programmatically avoiding the practice of secondary TKU formation via direct loans. A systematic study and translation of TKUs means that target language units are also characterised by substantial consistency regarding derivative and conceptually related forms.¹⁴ The regularised linguistic forms of TKUs also take into account their syntagmatic combinations. In the Glossary simple TKUs are listed together with derived and complex ones - formed through adjectival modification of noun TKUs -, and also phrases. This organisation favours a clearer view of the collocational combination of TKUs, leaving little or even no space for intra- and inter-lingual ambiguity when they are contextualised.¹⁵ In fact, the translation of FP TKUs provided in the *Glossary* leaves no place for variants and synonyms in the target languages considered. Instead, as ten Thije (2006) underlines, possible alternative forms can be detected in translations published before the Glossary was compiled. In the panorama of FP terminology the case of Italian is idiosyncratic because the first published TKU translations appeared after their systematic structuring for the Italian version of the *Glossary*. A selection of Italian FP TKUs appeared for the first time in Nardi/Hornung (2015), which contains both a metalinguistic and terminology translation study (Nardi 2015) and the use of single FP TKUs in specialised texts devoted to analyses of academic writing. The approach to the translation of TKUs in Italian texts follows the same optimisation model applied to the other languages, thus providing a consistent set of FP TKUs.

The *Glossary* is proposed as an optimisation instrument for FP TKUs which, coherently with Sager's consideration on secondary terminological formation, might appear almost "designed and engineered" (Sager 1990: 80). As a matter of fact, the translation process follows an established pattern of TKU formation, and is guided by a renowned expert. Nevertheless, target language TKUs are not created on the basis of an abstract predetermined terminological scheme, but rather through retracing their conceptual and linguistic construction in the original language. In the *Glossary* the translation approach is mainly oriented towards reproducing in secondary TKU formation the cognitive and linguistic procedures which were carried out in primary formation.¹⁶ In this process of secondary TKU formation the possible cultural and linguistic differences between source and target languages are taken into account as are interdisciplinary interactions.¹⁷

The starting point for TKU translation is the concept, the designation being identified on the basis of a philological, linguistic, and cultural analysis aimed at detecting a target language unit which can be equated within the target specialised linguistic system with that of the source unit (cf. Nardi 2015: 29, 69–70). Since TKUs are complex means of knowledge

¹⁴ Cf. e. g. the translation choice regarding *azionale* and *di azione* as Italian equivalents of the German *Handlung* – which is part of a great number of compound TKUs in FP (Nardi in this volume).

¹⁵ E. g. the binomial *illokutiv/illokutionär* is listed in different possible combinations with modified noun TKUs (*Akt, Anforderung, Kraft, Punkt,* and also in the phrase *Zusammenschließen* [*n*] von zwei illokutiven *Akten*) (cf. *Glossary* s.vv. *Illokution,* and the entries listed above).

¹⁶ Cf. e. g. the description of the genesis of the TKU *Textart* and its Italian equivalent *specie testuale* (Nardi 2015: 65–68; and above n. 5).

¹⁷ E. g. *begründen* is translated into Italian with the phrase *chiarire le ragioni* rather than *motivare*, which would be its direct equivalent in the target general language. This choice is due to the necessity of high-lighting and transferring into Italian the conceptual specificity of the German TKU that might be missed in a direct translation and consequent terminologisation of the verb *motivare* (Nardi 2015: 41–42).

representation and transmission (Ehlich 2007) their creation in intra- and inter-linguistic perspectives requires a thorough consideration of both their representative and communicative knowledge value. This includes the implications deriving from the internal structuring of the TKU system and its external interaction with the referential, communicative, cognitive, and experiential dimensions (cf. § 2). This view of specialised languages and their TKUs as dynamic systems of knowledge representation and transmission is coherent with the FP interpretation of the functions of language in its intermediary role in speech actions, namely the gnoseological, teleological, and communitary functions (Ehlich 2007: 158).

FP terminology also provides an example of the dynamics which characterise the representative and transmission functions of TKUs, relating both to their internal construction and external relations with general language units and other TKUs in the wider panorama of Linguistics. In fact, in the formation of TKUs special attention is given, on the one hand, to taking advantage and preserving the richness and dynamicity of general language lexemes and, on the other, to the optimisation of possible irregularities which might hinder the knowledge value of translated FP TKUs. In the compilation of the *Glossary* the optimisation strategy is adopted especially in the inter-lingual perspective; it provides users with a definite model without totally limiting potential innovative contributions by translator-specialists. Indeed, the continuous dynamics of the speculation in this area of knowledge guarantees the possibility that modifications can occur in the different facets of TKUs, both in source and target languages. The intervention of the author/specialist restricts, within the domain of FP, the irregularity and variability that often characterise TKU usage and translation practices. Nevertheless, the optimised multilingual TKU system of FP is externally integrated in the wider knowledge domain of Linguistics. FP shares with Linguistics a part of its TKUs, but also becomes a source of terminological variation and irregularity within this domain (cf. e. g. n. 5 above).

The introduction into a (multilingual) knowledge domain of a new set of TKUs corresponding to novel concepts represents a legitimate intervention on the plane of the dynamics of specialised knowledge. This is coherent with the conceptual contributions that authors bring into their disciplines. However, the development of a new knowledge sub-domain also causes terminological variation in the all-encompassing scenery of a comprehensive disciplinary TKU system (Freixa 2006: 64–68). Hence, a different view comes to light by broadening the focus of observation from the micro- to the macro-dimension of linguistic theories, i. e. by contextualising the FP sub-domain within the more general knowledge domain of Linguistics. In this perspective, even the use of an optimisation strategy which regulates internally the representative and transmission functions of FP TKUs cannot prevent the instantiation of variation and irregularity within the overall terminological system.

4 Conclusions

In this paper the contrasting and complementary facets of TKUs are considered in the framework of author/specialist (self)translation, highlighting the necessity of terminological variation and, at the same time, the opportunity of setting a limit to it through optimisation strategies. In fact, TKUs need to satisfy the requirements of representing and communicating specialised knowledge in its diverse aspects, including the conceptual and linguistic specificity of single authors and different schools. However, TKUs should provide univocal and clear-cut units that can prevent conceptual and communicative confusion and misunderstanding, in both mono- and multi-lingual perspective. The ongoing work on the translation into several languages of FP TKUs represents a concrete example of the coexistence of these aspects within disciplinary terminologies. In particular, it plainly shows that scientific TKUs are the outcome of authoritative sources, and mostly result from a deliberate intention to represent and express precise concepts. The specificity of FP TKUs is programmatically maintained through regularising interventions even when they are translated into other languages. Optimisation strategies can be applied systematically because the process of secondary TKU formation for the compilation of the *Glossary* is supervised by one of the fathers of the theory. FP TKU translation clearly shows the intention to draw on the specific resources of target languages, contributing in this way also to the development of their specialised vocabulary and communicative function.

Even though the *Glossary* is not a fully-fledged terminological resource, its elaboration provides the opportunity to consider directly the approach of domain specialists to TKU translation. It emerges that priority is given to the reproduction of the strategies and features of TKU primary formation in the process of secondary TKU constitution, while taking into account also the characteristics of target languages and cultures. This supports the argument that the deliberate creation of specific TKUs and their introduction into disciplinary domains has central importance for authors, as TKUs allow them to represent and communicate the particular concepts of their own disciplinary knowledge. TKU creation often results from the methodological intention of authors to single out and differentiate their thoughts from those pre-existing within their knowledge domain. The same process is instantiated also when authors/specialists have the opportunity to translate TKUs of which they have a thorough knowledge; and optimisation strategies are likewise functional to this aim. This proves the importance of author terminology – both in mono- and multi-lingual perspective – and the necessity to take it into account in Terminology and Translation studies. While causing apparent variation and irregularity author terminology can bring in fact significant knowledge contributions to specialised domains.

References

- Antia, Bassey E./Budin, Gerhard/Picht, Heribert/Rogers, Margaret/Schmitz, Klaus-Dirk/Wright, Sue Ellen (2005): "Shaping Translation: A View from Terminology Research." *META: Translators journal* 50.4: 1–16. 13.01.2016 http://www.erudit.org/revue/meta/2005/v50/n4/019907ar.pdf>.
- Bessé, Bruno de/Nkwenti-Azeh, Blaise/Sager, Juan C. (1997): "Glossary of terms used in terminology." *Terminology* 4.1: 117–156. 13.01.2016 https://benjamins.com/#catalog/journals/term.4.1.08bes/fulltext.
- Bourigault, Didier/Slodzian, Monique (1999): « Pour une terminologie textuelle. » *Terminologies Nouvelles* 19: 29–32.
- Bowker, Lynn (1997): "You say 'flatbed colour scanner', I say 'colour flatbed scanner': A descriptive study of the influence of multidimensionality on term formation and use with special reference to the subject field of optical scanning technology." *Terminology* 4.2: 275–302.
- Bowker, Lynn (1998): "Variant Terminology: Frivolity or Necessity?" Euralex '98 Proceedings. Liège: University of Liège, English and Dutch Departments: 487–496.
- Cabré, Maria Teresa (1997): "Standardization and Interference in Terminology." *The Changing Scene in World Languages. Issues and Challenges.* Ed. Marian B. Labrum. (American Translators Association Scholarly Monograph Series IX). Amsterdam/Philadelphia: Benjamins. 49–74.
- Cabré, Maria Teresa (1999): Terminology. Theory, methods and applications. Amsterdam/Philadelphia: Benjamins.

- Condamines, Anne (2010): "Variations in terminology. Application to the management of risks related to language use in the workplace." *Terminology* 16.1: 30–50.
- Ehlich, Konrad (1972): "Thesen zur Sprechakttheorie." *Linguistische Pragmatik*. Hrsg. Dieter Wunderlich. Frankfurt a. M.: Athenäum. 122–126.
- Ehlich, Konrad (1990): "Textsorten Überlegungen zur Praxis der Kategorienbildung in der Textlinguistik." Textsorten/Textmuster in der Sprech- und Schrift-Kommunikation. Festschrift zum 65. Geburtstag von Wolfgang Heinemann. Hrsg. Roger Mackeldey. Leipzig: Universität Leipzig. 17–30.
- Ehlich, Konrad (2006): "Mehrsprachigkeit in der Wissenschaftskommunikation Illusion oder Notwendigkeit?" Die Wissenschaft und ihre Sprachen. Hrsg. Konrad Ehlich/Dorothee Heller. Bern et al.: Lang. 17–38.
- Ehlich, Konrad (2007): "Medium Sprache." Sprache und sprachliches Handeln. Vol. 1: Pragmatik und Sprachtheorie. Konrad Ehlich. Berlin/New York: de Gruyter. 151–165.
- Ehlich, Konrad/Rehbein, Jochen (1976): "Sprache im Unterricht. Linguistische Verfahren und schulische Wirklichkeit." Studium Linguistik 1: 47–69.
- Ehlich, Konrad/Rehbein, Jochen (1979): "Sprache in Institutionen." *Lexikon der Germanistischen Linguistik*. Hrsg. Hans-Peter Althaus/Helmut Henne/Herbert Ernst Wiegand. Tübingen: Niemeyer. 338–345.
- Ehlich, Konrad/Rehbein, Jochen (1990): "Textsorten' Überlegungen zur Praxis der Kategorienbildung in der Textlinguistik." *Textsorten/Textmuster in der Sprech- und Schriftkommunikation. Festschrift zum 65. Geburtstag von Wolfgang Heinemann.* Hrsg. Roger Mackeldey. Leipzig: Universität Leipzig. 17–30.
- Ehlich, Konrad/Mackenzie, Lachlan/Rehbein, Jochen/ten Thije, Jan D. (2006): *A German-English-Dutch Glossa*ry for Functional Pragmatics. Ed. Jan D. ten Thije. Chemnitz: Technische Universität Chemnitz. 13.1.2016 http://www.jantenthije.eu/wp-content/uploads/2010/09/FP-Glossar-90506.pdf>.
- Faber, Pamela, ed. (2012): A Cognitive Linguistics View of Terminology and Specialized Language. Berlin/Boston: de Gruyter/Mouton.
- Fernández-Silva, Sabela/Freixa, Judit/Cabré, M. Teresa (2011): "A proposed method for analysing the dynamics of cognition through term variation." *Terminology* 17.1: 49–73.
- Fischer, Márta (2010): "Language (policy), translation and terminology in the European Union." *Terminology in Everyday Life*. Eds. Marcel Thelen/Frieda Steurs. Amsterdam/Philadelphia: Benjamins. 21–34.
- Freixa, Judit (2006): "Causes of denominative variation in terminology: A typology proposal." *Terminology* 12.1:51–77.
- Gaudin, François (1993): *Pour une socioterminologie: Des problèmes pratiques aux pratiques institutionnelles.* Rouen: Publications de l'Université de Rouen.
- Gaudin, François (2003): Socioterminologie. Une approche sociolinguistique de la terminologie. Bruxelles: De Boeck/Duculot.
- Gerzymisch-Arbogast, Heidrun (2005/2007): "Introducing multidimensional translation." Proceedings of the Marie Curie Euroconferences Mutra: Challenges of Multidimensional Translation. Saarbrücken 2–6 May 2005.
 Eds. Heidrun Gerzymisch-Arbogast/Sandra Nauert: 1–15. 13.1.2016 http://www.euroconferences.info/ proceedings/2005_Proceedings/2005_GerzymischArbogast_Heidrun.pdf>.
- Gerzymisch-Arbogast, Heidrun (2008): "Fundamentals of LSP Translation." Gerzymisch-Arbogast/Budin/Hofer (2008): 7–64.
- Gerzymisch-Arbogast, Heidrun/Budin, Gerhard/Hofer, Gertrud, eds. (2008): LSP Translation Scenarios. Selected Contributions to the EU Marie Curie Conference Vienna 2007. Mutra Journal 2.2.
- Hartmann, Reinhard R.K/James, Gregory (1998): Dictionary of lexicography. London/New York: Routledge.
- ISO 704:2009 *Terminology work*. *Principles and methods*. International Organization for Standardization. Berlin: Beuth.
- Kageura, Kyo (2002): The dynamics of terminology: a descriptive theory of term formation and terminological growth. Amsterdam/Philadelphia: Benjamins.

- Kerremans, Koen/Temmerman, Rita (2008): "Terminology, situatedness and variation." Kunnskap og fagkommunikasjon. Rapport fra Nordterm 2007. Bergen, Norge, 13.–16. juni 2007. Ed. Jan Hoel. Oslo: Språkrådet. 13–22. 13.1.2016 < http://www.sprakrad.no/upload/Nordterm15.pdf>.
- Leonardi, Natascia (2009): "Terminology as a system of knowledge representation." *La ricerca nella comunicazione interlinguistica: modelli teorici e metodologici*. Eds. Stefania Cavagnoli/Elena Di Giovanni/Raffaela Merlini. Milano: FrancoAngeli. 37–52.
- Leonardi, Natascia (2011): "I termini della linguistica cognitiva nei testi italiani." I luoghi della traduzione. Le interfacce. Atti del XLIII Congresso internazionale di studi della Società di Linguistica Italiana (SLI), Verona 24.–26.9.2009. Eds. Giovanna Massariello Merzagora/Serena Dal Maso. Roma: Bulzoni. 267–277.
- Nardi, Antonella (2015): "Premessa terminologica alla traduzione dei concetti della Pragmatica Funzionale e proposta di traduzione." Nardi/Hornung (2015): 17–89.
- Nardi, Antonella/Hornung, Antonie, eds. (2015): Scrivere il tedesco. Varietà culturali, linguistiche, metodologiche nella scrittura accademica. Roma: Aracne.
- Redder, Angelika (2008): "Functional Pragmatics." *Handbook of Interpersonal Communication*. Eds. Gerd Antos/ Eija Ventola. In cooperation with Tilo Weber. (Handbook of Applied Linguistics 2). Berlin/New York: de Gruyter. 133–178.
- Rogers, Margaret (1999): "Translating Terms in Text: Holding on to Some Slippery Customers." Word, Text, Translation. Eds. Gunilla Anderman/Margaret Rogers. Clevedon: Multilingual Matters. 104–116.
- Rogers, Margaret (2004): "Multidimensionality in concepts systems: A bilingual textual perspective." *Terminology* 10.2: 215–240.
- Rogers, Margaret (2008): "Terminological equivalence: probability and consistency in technical translation." Gerzymisch-Arbogast/Budin/Hofer (2008): 101–108.
- Sager, Juan C. (1990): A Practical Course in Terminology Processing. Amsterdam/Philadelphia: Benjamins.
- Schubert, Klaus (2011): "Specialized Communication Studies: An Expanding Discipline." *Current trends in LSP research: aims and methods*. Eds. Margrethe Petersen/Jan Engberg. Bern et al.: Lang. 19–23.
- Temmerman, Rita (2000): *Towards new ways of terminology description: the sociocognitive-approach*. Amsterdam/Philadelphia: Benjamins.
- Thelen, Marcel (2015): "The interaction between terminology and translation. Or where terminology and translation meet." *trans-kom* 8.2: 347–381.
- ten Thije, Jan D. (2006): "Preface." Ehlich/Mackenzie/Rehbein/ten Thije (2006): 3.
- Titscher, Stefan/Wodak, Ruth/Meyer, Michael/Vetter, Eva (2000): *Methods of Text and Discourse Analysis: In Search of Meaning.* (annotated edition). London: Sage.

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