

# Knowledge Transfer and the Translation of Technical Texts

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**Abstract**—This paper contributes to the ongoing debate as to the relevance of translation studies to professional practitioners. It exposes the various misconceptions permeating the links between theory and practice in the translation landscape in the Arab World. It is a thesis of this paper that specialization in translation should be redefined; taking account of the fact, that specialized knowledge alone is neither crucial nor sufficient in technical translation. It should be tested against the readability of the translated text, the appropriateness of its style and the usability of its content by end-users to carry out their intended tasks. The paper also proposes a preliminary model to establish a working link between theory and practice from the perspective of professional trainers and practitioners, calling for the latter to participate in the production of knowledge in a systematic fashion. While this proposal is driven by a rather intuitive conviction, a research line is needed to specify the methodological moves to establish the mediation strategies that would relate the components in the model of knowledge transfer proposed in this paper.

**Keywords**—Knowledge transfer, misconceptions, specialized texts, translation theory, translation practice.

## I. INTRODUCTION

IT is widely assumed that technical documents should be translated by specialized translators, using specialist resources. However, this assumption involves serious misconceptions about “specialization” in translation. This paper argues that adequate technical translation requires not only specialist knowledge, but also adequate translational skills, terminology resources and rhetorical proficiency, for end users to be able to access, understand and use translated technical texts easily, meeting the requirements of technical communication, in the sense of [1]. It is also a thesis of this paper that such misconceptions arise from the inadequate transfer of knowledge permeating the applied translation landscape. Such transfer is neither efficient nor localized enough to reflect the realities of the praxis of technical translation, hence the need for a model of knowledge transfer in applied translation studies.

The structure of this paper can be seen along the following lines. Section I outlines the content of technical translation. Section II deals with the key technical translation requirements that researchers, trainers and other stakeholders in the translation business should be aware of. Section III discloses some misconceptions about specialized technical translators and resources. Section IV tackles the issue of knowledge transfer and its relevance to the practice of

technical translation. This article calls for the need for a better process that would redefine, establish, localize and implement the current “process” of knowledge transfer in applied translation studies. It invites researchers to turn their focus to providing a clear process of knowledge transfer that would significantly contribute to redressing and preventing misconceptions about technical translation, from the standpoint of practitioners and trainers, the gents in charge of the application of knowledge in the translation enterprise.

While the philosophical and artistic dimensions of literary translation are obviously predominant in the translation landscape, a viable model of knowledge transfer in this discipline would corroborate the scientific character of the praxis of translation at the professional level. For one thing, more than 90% of the volume of translation work conducted in the world is non-literary [2]; it would be inappropriate to continue thinking of translation theory exclusively with reference to literary translation. A major concern of translator trainers is to keep raising trainees’ awareness to the realities of the world (market). It follows that the reflections on such realities should find their way into theory itself, which can only get feedback from the real world through practitioners, hence the need for a model of knowledge transfer that relates theory and practice in a more dialectical fashion to close the gap between what we *know* and what we *do* in translation.

## II. TECHNICAL TRANSLATION

Technical translation is concerned with translating content related to a specific field, subject, profession or business. Technical documents include user manuals, technical specifications and specialized brochures. Subjects include fields such as robotics, hydraulics, optics, engineering (civil, marine, mechanical, electrical), medicine (equipment, hardware), and physics, to name but a few. It should be differentiated from specialized translation in that it deals with the application of the knowledge of exact sciences, rather than the scientific knowledge obtained through experimentation. Because of its specialized nature, technical translation needs to be performed by translators specialized in the relevant field. Technical translation requires the skills of a professional who is specialized in the subject of the document to be translated. Many technical translators are or used to be engineers, medical doctors or architects. This is because if a document is intended to be understood only by technical specialists as end-users, it has to be translated by a translator with a professional profile similar, though not identical, to the target audience. Put in simple terms, if a technical text is not understood properly, there is no way it can be translated adequately.

A word of caution is in order here. Many fields of human inquiry are characterized by specialized terminology, but the texts dealing with such subject areas do not qualify as technical texts. By way of illustration, legal translation and financial translation are specialized rather than technical texts. The texts referred to here as technical deal with the application of the knowledge of exact sciences, such as computer science, chemistry and engineering. The purpose of producing translated technical texts is to enable end users to understand technical information clearly and use it easily, such as how to use a software program in robotics. Though "scientific translation" and "technical translation" are often used interchangeably, they are quite distinct, as indicated above. While scientific texts deal with knowledge obtained through experimentation and observation of various phenomena, technical texts relate to the application of such knowledge [1]. For the sake of argument, we will ignore this distinction and refer to these texts as "technical translation". A corollary of the practical aspect of technical content is that it should convey information that can be understood readily and used effortlessly. However, with reference to our context, the Arab World, doctors, engineers, and chemists do not seem enthusiastic about quitting their jobs to become translators. Not many of these professionals have shown much interest in translation, partly because the translation business may not be attractive to them, and partly because they do not necessarily have the required linguistic and translational skills to translate properly so as to deliver technical target texts. That is, technical knowledge alone is not enough for translating technical documents for end-users. Outstanding language and technical writing skills are needed to enable the translator to convey source language technical content into the target language in an idiomatic fashion, for the target end-users to carry off their technical tasks easily. By the same token, a good proficiency in the source and target languages is not sufficient either. Technical documents require translation by translators who fully understand the content of the relevant documents. In order to guarantee accurate translation of technical documents, the translator needs to be familiar with the subject matter at the same standard as the target audience that will read those documents. Without such knowledge, objects, concepts and processes could easily be confused or mistaken, and ambiguities may very well arise. The consequences here can be detrimental. For example, an industrial accident may occur if the relevant manuals are incorrectly translated. Therefore, while waiting for engineers to quit their jobs to become technical translators and medical doctors to shut down their surgeries to become medical translators, we have to rely on competent professional translators who are prepared to do the required research and seek the necessary assistance to deliver adequately translated technical texts [3]-[6].

### III. MAJOR REQUIREMENTS OF TECHNICAL TRANSLATION

Here are some fundamental skills required for technical translation, from the point of view of practitioners and trainers. First, the translator should transfer the propositional

content of the source text. Translating technical documents is not like translating literary passages, for instance. There are no cultural undertones or subtexts to preserve, and there are no intricate literary techniques to convert. What needs to be preserved is the technical content of the document. However, this does not mean that style is relegated to a secondary position. While the poet, for instance, uses rhetorical devices to leave the reader with a feeling (effect), the technical translator uses the appropriate devices offered by the target language to leave the reader with a clear idea (effect). This leads us to the second requirement.

The technical translator's second task is to make the translation as precise and easy to follow as possible. If the user of the original manual can put a food processor together in a few minutes, the user of the translated text should not have to read and reread the manual for a long time to figure out how to do so. This amounts to saying that the translator should use simple, precise language, appropriate vocabulary and conventional text formatting for the target language to meet the requirement of usability [1].

Thirdly, technical translators devise their own ways to acquire expert knowledge in a given technical field [7]. Some translators would read for a degree in that field and/or professional experience. While this move is ideal, it is not necessary and usually rather impractical. Basic technical knowledge may very well be acquired through intensive reading and consulting professionals. Many ways are open for technical translators to acquire such knowledge, develop appropriate understanding of the propositional content of technical source texts, and transfer it in a fashion clear enough to be used by the target users.

The fourth requirement relates to intertextuality. The text produced by the translator should bear the same features and textual clues that similar text types show in the target language. This amounts to saying that the technical translator is also a technical writer, or even a technical copywriter, who understands the content to be transferred to the target language and strives to deliver the appropriate information in the desired format. The job of the technical translator is now so complex that it requires high levels of creativity in language use, while at the same time maintaining faithful references to both intratextual and extratextual material and concepts [1]. It emerges from this short exposition that producing a good technical translation requires the ability to fully understand the source text. While knowledge of the technical field is important, it must be coupled with a good understanding of the source language in general. People with impeccable technical qualifications may render ugly patches of translation, because they lack the ability to correctly interpret the source document, due to their poor language proficiency [8]. The implication here is that who does what in technical translation should be guided by one major principle: the extent to which end users can easily access, understand and use translated technical texts. While this conclusion is drawn from the standpoint of practitioners and trainers, it does not naturally follow from a clear process of knowledge transfer involving the interaction

of theoreticians and practitioners in applied translation studies (Section IV).

#### IV. MISCONCEPTIONS

##### *A. Misconceptions about Specialized Translators*

The internet is replete with such advertising content, giving the impression that translation agencies and commissioners have their own engineers to deliver technical translated texts, because they alone understand and compose engineering content. Though such exaggeration is motivated by the genre and function of related texts, this claim is misleading in many key respects. To start with, how can a translator specialize in everything ("all technical documents")? How can this translator be differentiated from another translator (general practitioner) who translates "any technical document"? Expert knowledge in a technical area is good; however, it is neither obligatory nor sufficient. Highly specialized knowledge is not required for technical translators to deliver good translated documents. Suffice it to acquire the basics of scientific and technical knowledge that guarantees full understanding of the concepts, processes and ideas in technical texts. This could be achieved by taking basic technical courses, reading extensively and seeking professional advice. The body of specialized knowledge and terminology resources, now available on the internet and private knowledge resources, are so easily accessible and helpful that translators do not have to read for a postgraduate degree and gain long practical experience to engage in translating technical texts [7]. Such knowledge, if acquired, is not enough, either. On the one hand, many technical documents relate to more than one field. A contract may relate concurrently to civil engineering, finance, chemistry, and law. It is unlikely to find a super translator with highly specialized knowledge in all these areas to deliver the desired translation. Conversely, in the Arab world, very few translators would venture to specialize in translating certain texts rather than others. This is because they would generate little work, since technical translation is needed only in limited areas. The current situation indicates that translators in the Arab world generally do not choose what to translate to make a living. Hence, they would not opt for investing much time and energy on acquiring specialized knowledge. This tendency is well motivated because there is no point in taking up specialized training for a field with very few openings and business opportunities. This is another issue related to the transfer of knowledge in the translation landscape in the Arab world (Section IV). On the other hand, besides the knowledge of the relevant subject matter, the technical translator needs other competencies; namely reading skills, writing skills, research skills and knowledge of genres and text types. Much of the advertising content of translation agencies posted on the web emphasizes the fallacy that their translators are specialized native speakers of the target language. This seems to be misleading on two scores. For one thing, such agencies do not specify whether their translators are native speakers of the source language, target language or both. They neglect the fact that understanding the source text may turn out to be more

important than the capacity of converting it (writing) into the target language. This is because technical translation is conducted into a language that translators know well from a language that they know *very* well. If the source text is poorly understood, it may not be translated properly. Moreover, technical writing does not involve cultural references and idioms, which may necessitate hiring native speakers exclusively to do the job. At any rate, specialized knowledge alone does not guarantee the communicative function of technical texts; that is readability and usability. The communicative function of a technical text is measured against the extent to which it can be read clearly and used easily. After all, translating a technical text is a communicative act, which unlike other text types, should meet the requirement of usability [1]-[9].

To achieve technical communication, the translator needs to specify the consumers (users) of the translation product. A student of physics (fresher) needs a translation quite different from the one delivered for a physicist (researcher). Moreover, the required features of technical 'textness' of the target language should be specified for the text produced to count as part of similar texts produced originally in that language (intertextuality). Finally, for communication to be achieved through a text, translators often find themselves obliged not to observe one theoretical framework, adopting a single strategy (free, literal, word-for-word, sense-for-sense, top-down, bottom-up ...). The translator rather adopts the entire set of strategies available to them, as allowed by the target language, (adding, deleting, paraphrasing, foregrounding, backgrounding, calquing ...) with a view to enabling end users to access, understand and use the translated text easily. It emerges from this exposition that translators manage to acquire the basic knowledge needed to translate technical documents, and they are not required to specialize in any technical field. Experience has shown that translators tend to develop competence when they need it, as part of lifelong learning, provided that they master the communication skills that can be adapted to varied tasks, including technical texts.

To the extent that these insights are valid, two major points hold in this regard. First, engineers, lawyers and medical doctors do not necessarily have the linguistic and translational caliber to hit a home run. Secondly, applied translation studies researchers should shift their focus to the issue of knowledge transfer in this connection. That is, the specifics of who should translate what and how constitute questions that should be posed by practitioners and researched by scholars of applied translation studies to undermine the hand-waving endeavor of self-styled theoreticians (web-advertisers) who make the misleading claim that only scientists and technical professionals should translate technical texts. Assuming that a major mission of translation theory is to solve translation issues for trainers and practitioners, the transfer of knowledge in this discipline is a serious issue that should be addressed in the translation arena (Section IV).

### *B. Misconceptions about Specialized Dictionaries*

Given that more technical and scientific texts are now translated from foreign languages into Arabic rather than vice versa, Arab translators have to use specialized dictionaries to carry off their assignments. While there is a growing number of internet-based and paper based resources, they pose serious problems to translators, due to the lack of homogeneity characterizing them [10]. The production and publication of technical dictionaries are conducted by institutions (such as the Academy of Cairo), institutes (Institute for the Coordination of Arabization in Rabat), universities (departments of linguistics, departments of translation, research groups and laboratories), translation agencies, international organizations (United Nations), coordination agencies (Bureau for the Coordination of Arabization, ALESCO) and individual researchers. This situation generates technical terminology diversity which is confusing to translation practitioners and trainers, due to the fact that the terms are not unified. All the producers above call their terminology production “specialized” and “technical”. As for practitioners, they are confused as to which one to adopt in their tasks. This lack of unification (standardization) of technical terminology is caused by many factors, chief of which can be seen along the following lines. Arabic is rich in terms of both lexis and derivational patterns. Different terminologists prefer different technical terms, couched in different derivational patterns, partly because the background of terminologists in various institutions differs, and partly because there is no permanent standardization body that can establish an official bank of technical terms, at least at the national or regional level. The disagreement of Arab terminologists, within and across countries, is reflected in the heterogeneous technical dictionaries and glossaries available to translators, which leads to various technical terms being used for the same technical concept or process. A corollary of this situation is that parallel texts cannot be used properly by the translator, nor can they be exploited in translation memory (TM) or machine translation (MT) systems. Elaboration on this point would take us too far afield. Suffice it to note that the exactitude required in technical translation is impeded by the heterogeneous technical dictionaries available to Arab translators.

It should be noted that, surprisingly enough, even the term “arabization” itself is affected by this negative diversity. It is used to refer to (1) the influence of Arabic in countries whose cultures have been influenced by Islam. It also denotes (2) the borrowing of a foreign lexical item, assigned morpho-phonological aspects of Arabic. It stands for (3) the process of finding Arabic equivalent lexical items for technical terms in the existing repertoire of Arabic. It means (4) the use of Arabic instead of foreign languages in public administration, the media and as the language of instruction in education. It stands for (5) the ability to express and transfer knowledge into Arabic, mainly through translation [11]. Another snag hindering the adequacy of technical dictionaries is the slow pace of their production. Scientific knowledge is subject to constant revision and refinement as new data, or new ways of

interpreting existing data, are discovered and new terms are constantly emerging. Therefore, existing concepts are refined, revised or modified, while new others are created. Hence, technical dictionaries in the Arab world seem to lag behind so much that the gap becomes too wide to bridge. A corollary of this is that translators may very well fail to find the appropriate technical terms they seek to deliver their assignments. Again, a specialized dictionary is called so when it contains at least a sizeable portion of the technical terms translators need [12]. These two facts increasingly drive practitioners to believe that the content of technical dictionaries is at same time too much and too little.

Finally, because the producers of technical dictionaries work independently, with little or no coordination, any of them may decide to compile a specialized dictionary in, say, dentistry, electricity or civil engineering. For the sake of argument, suppose that such dictionaries were produced and published in Morocco. A worrisome issue in this connection is that few users would resort to them. Neither dentists, nor engineers in Morocco need them, because these professionals’ entire communication is conducted in French and do not need a communication facilitator. Furthermore, rarely do translators need them, either, since the potential commissioners of technical translation into Arabic in this area usually do without them. Experience has shown that translators need to translate technical documents into Arabic mostly when a related document is required in the courts of justice. Therefore, we end up with published technical dictionaries that are hardly used and destined to remain non-consulted. It seems that this weird situation partly explains why it is that there is no pressing need for the standardization of technical dictionaries. The underlying reason seems to relate to the language policy adopted in North-African countries, especially Morocco, Algeria and Tunisia. Again, the inadequacy of technical dictionaries stems partly from the absence of a working knowledge transfer model that specifies who should do what and how in terminology building, since terminologists compile technical glossaries and dictionaries with little or no coordination and without consulting practitioners on their professional needs.

It should be noted that the compilation of terms and their translation in a technical dictionary usually involve the translator as a starting point. Technical entries are often provided by translators with current practical experience in a specific subject area, and show an interest in collecting and disseminating technical terms. Such terms are then vetted by subject specialists working on the technological field in question so as to ensure their currency, accuracy and adequacy. The technical dictionary/glossary is then edited by lexicographers at the local, regional and global levels, in order to address duplication and inconsistency, and deal with the terms that are excessively general or too specialized for a technical dictionary. Hence the shortcomings described above can be attributed, at least partly, to the lack a clearly defined model of knowledge transfer in this connection that would ensure that these theoretical constructs are put into practice and lead to delivering the desired results (Section IV).

## V. MISCONCEPTIONS ABOUT KNOWLEDGE TRANSFER IN TRANSLATION

The issue of the identity of a “specialized” or “technical” text and who is supposed to translate it should normally be addressed by researchers rather than commissioners, and the relevant findings should be transferred to practitioners, who in turn produce new research questions to be explored by researchers. This knowledge transfer cycle, however, is not adequately conducted as a clear process in the applied translation arena. This is because the relationship between theory and practice in translation is not lucid enough. The various views in this regard are either ambiguous or contradictory to practitioners (as well as trainers and trainees). By way of illustration, [13] assumes that translation scholars should not try to show practitioner translators what they should do. Reference [14] believes that the discipline of translation studies is concerned more with understanding the phenomenon of translation than its applicability to professional practice. Reference [15] takes it that translation studies are relevant to practitioners, but her explanation is rather vague. Reference [16] holds the extreme view that applicability, rather than pure theory, is the main concern of translation studies. He claims that this discipline should specify the problems and procedures to solve problems (“no problem – no translation theory [17]). Reference [18] believes that in translation studies, we do not need a language pair, one language would do, as if he seems to suggest that theory is not concerned with translating (two languages). He also points out that it is difficult to claim that academic research has exerted much influence on the translation profession. In spite of this seemingly muddled situation, most translation textbooks represent the translation business along the lines shown in Fig. 1. This sketch gives the impression that the components of theory and practice are related, but in reality they are not very much so. As long as the relations are not clear, each camp (researchers, translators, revisers, trainers) would concentrate on the way things would seem to them correct and continue doing business. The main reason behind this fuzzy situation in applied translation studies is that there is no unified model of knowledge transfer in the translation enterprise [18]. Knowledge producers, mainly university researchers, constitute the central actor in the knowledge production and dissemination process. They do research in translation studies and share it with academics and (supposedly) practitioners through articles and presentations in conferences. They do not seem to observe any clearly defined system of transfer mechanism; they do not check whether it has been used in the applied part of the figure above; nor do they invite practitioners to react to their findings in any systematic fashion. This constitutes a serious flaw in the process of translation knowledge transfer and contributes to translation studies growing into being perceived as a catch-all discipline. This does not mean that all research in translation studies should be geared to solving problems for practitioners and trainers. Rather, the research camp primarily concerned here is applied translation studies, the field which is supposed to provide the theoretical input required for the development of

the skills necessary to perform communication tasks professionally in diverse settings of the translation landscape. In fact, both theoreticians and practitioners are responsible for moving research from applied translation research journals and academic conferences into the hands of professional translators and trainers to put it to practical use, in the form of a clearly defined process that includes synthesis, dissemination, exchange and application of knowledge to improve the translation work delivered in the translation arena.

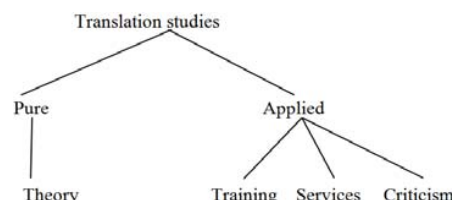


Fig. 1 Disciplines of translation studies

Assuming, from a practitioner’s point of view, that theory should serve and guide practice and vice versa, in line with all models of knowledge management in virtually all disciplines of human inquiry, users (practitioners) rather than researchers are supposed to serve as major initiators of research questions in applied translation studies, since they are in charge of identifying and formulating the needs required by the profession [19], [20]. Practitioners’ contributions are significant because their interests lie primarily not in what should but in what does in fact happen when they are translating, what shape their product takes and what challenges they face. The researcher is regarded as a “technician” who is solicited to respond to the users’ needs [20]. To the extent that this view is valid, the controversy about *who* is supposed to translate technical or specialized texts and *how* should be raised and formulated by the practitioners, who are in direct contact with clients and deal with their reactions on a daily basis. As things stand now, this is not feasible because there are no formal linkages between knowledge producers in the realm of translation studies and potential users. There is overwhelming evidence that knowledge utilization is a result of repeated interactions between researchers and users [21]. Translation practitioners (translators, revisers, trainers...) are supposed to play the role of co-producers of knowledge alongside with researchers. However, what happens in the translation landscape looks like the following:

1. Researchers formulate questions in translation studies;
2. Researchers conduct research in translation studies;
3. Researchers disseminate research findings.

Therefore, knowledge in translation is simply *shared* rather than systematically *transferred*. Consequently, many practitioners tend to (explicitly or implicitly) ignore the knowledge produced by scholars, while the latter tend to disregard the concerns of the former. For knowledge to be translated into practice, it should not only be shared but transferred to users in a clearly systematic fashion. Three more

steps are needed for translation knowledge to be transferred and implemented:

4. Practitioners generate new context-specific knowledge, by applying findings in different settings of translation practice;
5. New knowledge feeds future translation research questions;
6. The cycle continues, by researchers formulating questions based on the issues raised by translation practitioners.

Hence, while the transfer of new knowledge into practice proceeds through three stages, from awareness through acceptance to adoption, applied translation research focuses almost exclusively on the first two stages. Reference [22] claims that the process of knowledge transfer is not a mere transfer of knowledge per se; it rather requires an additional type of knowledge, namely 'the knowledge about how to transfer knowledge'. Translation practitioners are hardly interested in researchers telling them simply "this is what I think", but they would like to hear them say "this is what my knowledge means for you, and this is how it applies to your daily business". Further, the purpose of knowledge transfer may very well be lost if knowledge is transferred from the source (theoretician) to the receiver (practitioner) without contextualizing the way it will be utilized by the latter. In the absence of a clearly defined cycle of knowledge transfer in translation, the misconceptions above on technical translation would be hard to shake off. A schematic representation of the suggested model of knowledge transfer in applied translation in general and technical translation in particular is given below [18]-[23]:



Fig. 2 Preliminary knowledge transfer model in applied translation

For this model to be established and applied in the translation enterprise, two crucial requirements should be satisfied. Firstly, researchers in translation studies should ensure that the knowledge to be transferred to practitioners is intellectually accessible to them [19]. This knowledge has to be applicable and easily adaptable to the practitioners' specific local context. To achieve this objective, they should strive to adapt, contextualize and disseminate their research results, maintaining sustainable interactions with professional translators. In order to improve the knowledge transfer process, they should also use a language that is simple and common to practitioners when adapting research results. Their

adaptation efforts should lead to information presented in a synthesized, attractive and comprehensible way. This can only come to fruition if interactions between practitioners and theoreticians are promoted. Secondly, practitioners should not continue sitting on the fence. They should adopt and encourage a culture of critical thinking, questioning and debating within the practice sphere. More specifically, for practitioners (professional translators) to be partners in the production of knowledge, they should be endowed with such qualities. It is also important to use multiple mechanisms when communicating and transferring knowledge with researchers and practitioners. However, any loss of efficiency that arises from supporting practitioners as they adopt new theoretical guidelines will be offset by the gains in efficiency from their evidence-based practice. More importantly theory itself is in dire need for feedback from practitioners so as to assess its validity and consolidate its insights. It is the accumulated evidence that provides the strongest criterion for the success of both translation theory and practice. Therefore, to achieve the best outcomes for commissioners and the profession, it is critical to build in new ways to support translators as they adopt changes in practice, involving them as co-producers of knowledge.

The adoption of a model along these lines would serve as a catalyst that helps trigger practitioners' interest in academic research. It is quite clear that relatively few translators are interested in translation theory. This could be because they believe that theory has nothing relevant to add to their daily work, because they have negative memories of theory courses at a translation school, or because they do not have time. While these claims may constitute relevant factors, it seems that a more pertinent reason is that they are aware there is no model of knowledge transfer they can resort to in a systematic fashion. However, the easy access to information on the internet exposes them to misguided and misleading content ("knowledge") which they may end up adopting, consciously or unconsciously. Translation agencies not only advertise their services on the internet, but they tend to "theorize" about translation as well, so as to look professional and knowledgeable. A simple look at their webpages would reveal that they outline the entire set of dos and don'ts of translation that potential clients may think of. Since they tend to mix business with "academic knowledge" in their advertising content, they disseminate misguided information that may influence practitioners themselves, who may turn out to consider such content as a reliable source of knowledge.

Assuming that solving problems for translators should constitute a major concern of applied translation studies, more research is needed to motivate the need for a working model of knowledge transfer in the translation industry, and specify the interactions between researchers in translation studies and practitioners. Working towards providing such model would serve three major objectives: it will downplay the misguided theorizing role of internet advertisers, it will encourage a much needed synergy between translation scholars and practitioners, and it will induce practitioners to serve as co-producers of knowledge.

## VI. CONCLUDING REMARKS

Specialization in translation should be redefined, taking account of the fact that specialized knowledge alone is neither crucial nor sufficient in technical translation. It should be tested against the readability of the translated text, the appropriateness of its style and the usability of its content by end-users to carry out their intended tasks. While technical translators need only background rather than highly specialized knowledge, they compensate their limited knowledge with reliable sources such as technical dictionaries and consulting professionals. For translators in the Arab World to have access to adequate unified dictionaries, official agencies that can enforce standardization are needed at the local, regional and pan-Arab levels to ensure coordination and unification, based on a clearly defined process of knowledge transfer. Also, unless such standardization agencies are endowed with the necessary army and navy, unification of technical terminology will be difficult to achieve. This can only come to fruition if Arab decision-makers review their linguistic policy and language planning.

More importantly, the misconceptions permeating technical translation have gained ground due to the absence of an adequate model of knowledge transfer. On the face of it, translation theories do not seem to be of direct use to practitioners and trainers. This is because they cannot replace experimentation. However, the professional knowledge accumulated by practitioners would significantly contribute to developing better theories, if a knowledge transfer model is adopted to specify the interaction between scholars and practitioners. Hence, a clear process of knowledge transfer should be defined along the lines proposed above, to cater for these issues. Practitioners and trainers should be involved in formulating the relevant research questions as co-producers of knowledge for theoreticians to conduct research and assist them in delivering their mission, without the practitioners branding themselves as “specialized” or “generalist” translators, at least in the Arab World, and without scholars making assumptions and drawing conclusions on translation issues in the absence of input from practitioners. This article by no means promotes prescriptivism; rather, it proposes finding ways to provide practitioners with a chance to ask fresh questions based on their daily encounters of problems and to lay bridges to work with other disciplines such as knowledge management. To bring the relevant applied translation issues to the surface, practitioners should not be sitting on the fence. While this proposal is driven by a rather intuitive conviction, a research line is needed to specify the methodological moves to establish the mediation strategies that would relate the components in the model of knowledge transfer proposed in this paper.

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