



Universiteit  
Leiden

The Netherlands

## Exploring a two-way street: revisers' and translators' attitudes and expectations about each other in biomedical translation

Santos Ângelo Salgado Valdez, S.; Vandepitte, S.; Koponen, M.; Mossop, B.; Robert, I.S.; Scocchera, G.

### Citation

Santos Ângelo Salgado Valdez, S., & Vandepitte, S. (2020). Exploring a two-way street: revisers' and translators' attitudes and expectations about each other in biomedical translation. In M. Koponen, B. Mossop, I. S. Robert, & G. Scocchera (Eds.), *Translation Revision and Post-Editing: Industry Practices and Cognitive Processes* (pp. 148-164). London: Routledge.  
doi:10.4324/9781003096962-12

Version: Publisher's Version

License: [Licensed under Article 25fa Copyright Act/Law \(Amendment Taverne\)](#)

Downloaded from: <https://hdl.handle.net/1887/3217766>

**Note:** To cite this publication please use the final published version (if applicable).

## 8

## EXPLORING A TWO-WAY STREET

## Revisers' and translators' attitudes and expectations about each other in biomedical translation

*Susana Valdez and Sonia Vandepitte*

What motivates revisers' and translators' decision-making and, hence, their options is a common interest among researchers within process-oriented DTS and translator training.<sup>1</sup> Revisers' and translators' attitudes and expectations are particularly relevant if we wish to describe, understand and explain the motivations of these professionals. Their attitudes and expectations have been the subject of some investigations, in particular those concerned with how professionals do and should perform various translation activities in different domains.<sup>2</sup> However, although much progress has been made in researching translation revision (for example, Mossop 2007a, 2014a; Robert 2014a; Robert et al. 2017a, 2018), to the best of our knowledge, there is no research concerning attitudes and expectations about revision practices in medical or biomedical translation. It is not known what attitudes and expectations revisers have about professional translators and translation in biomedical settings. How translators think they should translate and what they think revisers expect from them are also not fully understood.

At the intersection of Descriptive Translation Studies and social sciences, our interdisciplinary, empirical and descriptive study addresses the question of whether revisers' attitudes and expectations about competences and working practices are similar to or different from those of translators. To do so, we shall look at the results from a questionnaire circulated among professional revisers and translators from June 2017 to April 2018. The questionnaire was originally part of a larger descriptive study about the beliefs, translation behaviours and translation options of 60 agents<sup>3</sup> with different roles and levels of experience, namely novice translators, experienced translators, revisers and health professionals. Different types of beliefs were elicited and then compared with translators' behaviour and with revisers' and health professionals' preferences regarding translation options in biomedical

translation (Valdez 2019). The analysis showed that translators and revisers not only expressed beliefs associated with source and target orientation (which was the focus of the study), but also beliefs about competences and working practices. Consequently, a follow-up study was conducted with a larger group of participants ( $n = 71$ ), to whom the same questionnaire was administered. The findings discussed here concern the attitudes and expectations expressed about competences and working practices in revision and translation.

The next section provides a brief overview of the main guiding concepts of our research, that is, 'attitudes' and 'expectations' and their connection to translation norms. Then we contextualize biomedical translation within medical translation and define what is meant by these terms. The chapter then goes on to describe and discuss the methods used in our study. In the final sections, the results are described and discussed, together with the implications and our conclusions.

## 1. Attitudes, expectations and norms

Attitudes and expectations have been a prolific subject of research in the social sciences, where they are sometimes described as "the primary building stone in the edifice of social psychology" (Allport 1954: 45). One of the main reasons why attitudes, in particular, take centre stage in the study of behaviour is that they are considered "precursors of behavior" (Cohen 1964: 137–8).

Before discussing attitudes and expectations in connection with revision and translation norms, we must first clarify the concepts of 'attitudes' and 'expectations'. To do so, Bicchieri's theoretical framework is adopted and adapted to revision and translation, as it proves to be particularly useful for a distinctive account of social norms as "a behavior-guiding force" (Bicchieri 2000: 153). Her philosophical approach based on game theory and social norms critically includes the role of agents' beliefs (as a more general and encompassing term), and attitudes and expectations as conditions on agents' behaviour.

Against this background, Bicchieri's typology of self-beliefs and beliefs about other agents was adapted to this study (mainly Bicchieri 2006, 2017a, 2017b; Bicchieri et al. 2018). In her view, three main types of beliefs should be considered, namely (1) the beliefs the agent has about her/himself, (2) the beliefs the agent has about other agents' actions, and (3) the beliefs the agent has about other agents' beliefs. The beliefs can be further characterized as empirical or normative.<sup>4</sup>

The study elicited revisers' and translators' belief statements about all these beliefs. This chapter, however, will be limited to normative attitudes, empirical expectations and normative expectations about other agents, because the participating revisers and translators expressed these only when referring to competences and working practices (grey cells in Table 8.1).



TABLE 8.1 Overview of beliefs about other agents

What the agent believes about → Type of belief	Beliefs about other agents' actions	Beliefs about other agents' beliefs
<b>EMPIRICAL</b>	what other agents do = <b>empirical expectations</b>	what others believe s/he does = second-order empirical expectations
<b>NORMATIVE</b>	what other agents should do = <b>normative attitudes</b>	what others believe s/he should do = <b>normative expectations</b>

Source: Adapted from Bicchieri 2017a: Kindle location 1153.

More concretely, the beliefs that translators and revisers expressed about competences and working practices were:

- the agent's beliefs about what 'other agents should do' in a situation, henceforth *normative attitudes* (for example, how revisers think translators should translate, and how translators think revisers should revise);
- the agent's beliefs about what other agents 'do' in a particular context, which will be referred to as *empirical expectations* (for example, how revisers think translators translate, and how translators think revisers revise);
- the agent's beliefs about what 'others believe s/he should do', called *normative expectations* (for example, what revisers believe translators think revisers should do, and vice versa).

The distinctions between different types of beliefs are often overlooked within social sciences in general and Translation Studies in particular. Within the former, Bicchieri clarifies that "important distinctions . . . are often missed in surveys, because questions about attitudes are often too vague to capture these distinctions" (2017a: Kindle location 346).

In addition, research has suggested that even though the attitude-behaviour relationship has motivated a considerable body of literature in the social sciences, the relationship between attitudes and behaviour is at least arguable. In his much-cited literature review, Wicker concluded that there is "little evidence to support the postulated existence of stable, underlying attitudes within the individual which influence both his verbal expressions and his actions" (Wicker 1969: 75), and he added that "it is considerably more likely that attitudes will be unrelated or only slightly related to overt behaviors than that attitudes will be closely related to actions" (Wicker 1969: 65), a view that the authors of this chapter share.

In other words, what people say they 'believe' may or may not coincide with what they actually 'do'. In translation, too, "there may . . . be gaps, even contradictions", Toury (2012: 88) explains, "between explicit arguments and demands, on the one hand, and actual behaviour, on the other". This lack of convergence

between what people say they believe and what they do may have multiple causes: they may lack awareness of their own behaviour, their statements may be deliberately or unintentionally misleading and they may model their behaviour on what they believe others expect of them, because people are "social animals embedded in thick networks of relations" (Bicchieri 2017a: Kindle location 311).

What agents believe they should do in a particular situation is largely based on the shared beliefs, attitudes and expectations within a particular group about what is considered appropriate and inappropriate behaviour in a specific situation within a certain target culture, language and system (Valdez 2019: 46). That is precisely the topic of this study.

Within this perspective, behaviour is conditioned by the belief that most agents in one's network conform to the norm and believe they ought to conform to the norm. These beliefs are assumed to inform the conditional preference to act in a certain way in a specific situation.

An agent's interpretation of what should be done, given their community's shared beliefs about appropriate and inappropriate courses of action, is actually already present in Toury's definition of translation norms "as the translation of general values or ideas shared by a community—as to what is right and wrong, adequate and inadequate—into performance instructions appropriate for and applicable to particular situations" (Toury 2012: 63). Here revision and translation norms can be interpreted as non-binding *orientations* of behaviour: revisers and translators always have a choice. It is their expectations of what they consider appropriate and what they think the community expects of them that tends to constrain their options and hence their decision-making.

Revisers' and translators' behaviour is not only influenced by what they believe most other agents believe they *should* do, but also by what they (revisers and translators) think most agents in their community *actually* do. It is all these beliefs that inform an agent's preference to act in a certain way in a specific situation and what the agent believes others should do. As Hermans (1999: 74) formulates it, translators' decisions result from "certain demands which they [translators] derive from their reading of the source text, and certain preferences and expectations which they know exist in the audience they are addressing". In this study, it is assumed that this also applies to revisers.

Since individual choices depend on what agents believe others in their community do and what they believe is appropriate and inappropriate behaviour (Bicchieri 2017a: Kindle location 232), revision and translation can be considered interdependent actions. In other words, it is not sufficient only to elicit what revisers and translators think they should do, since what they believe should be done in a specific situation may be constrained by what they believe others expect of them and what they believe others do.

Revisers' and translators' statements about attitudes and expectations can thus be seen as extratextual data and an essential source for the "reconstruction" of translation norms referred to in the literature as "semi-theoretical or critical formulations, such as . . . statements made by translators, editors, publishers and other persons



involved in or connected with the activity" (Toury 1995: 65). Such statements also respond to Chesterman's (2016: 83) call for more evidence of norm-governed behaviour:

We also need text-external indicators of normative force, such as belief statements by the translator ("I think I should do this"), criticism of breaches of the assumed norm, perhaps even norm statements by relevant authorities ("Translators of such texts must do this").

The present study of attitudes and expectations about biomedical translation answers Chesterman's call for more evidence of norm-governed behaviour.

## 2. Biomedical translation

Medical translation is generally considered a type of scientific-technical translation concerning medicine and a range of subject areas related not only to health (including pharmacology, surgery, psychology) but also to other fields (such as law) (Karwacka 2015: 271; Montalt 2011: para. 4). The importance of medical translation in the dissemination of knowledge and new discoveries is unquestionable (Karwacka 2015: 271). The facilitation of specialized and non-specialized communication (expert-to-expert, and different combinations and variations of expert to layperson and layperson to expert) through medical interpreting has also been attracting the attention of translation scholars (for example, Lesch and Saulse 2014; Li et al. 2017; Major and Napier 2012).

Within the healthcare environment, the medical devices industry has been playing an increasingly important role in the European economy (European Commission 2018b, under "The importance of the medical devices sector"). On the one hand, "medical devices are crucial in diagnosing, preventing, monitoring and treating illness, and overcoming disabilities" (European Commission 2019b). Medical devices are even considered by the World Health Organization as "ever more indispensable" in healthcare provision (World Health Organization 2018). The medical devices industry also represents a growing sector of 27,000 companies and 675,000 employees in the European Union and hence "an influencer of expenditure" (European Commission 2018b).

Biomedical translation is defined here as the translation of content from biomedicine, the science and profession responsible for medical devices, from "innovation, research and development, design, selection, management [to their] safe use" (World Health Organization 2017: 20). It includes mainly texts related to medical devices. A medical device is considered "any product intended by its manufacturer to be used specifically for diagnostic and/or therapeutic purposes and necessary for its proper application, intended by the manufacturer to be used for human beings" (European Parliament 2007: 23–4). In accordance with European legislation (Council of the European Union 1993: 30), each medical device is accompanied by an instructional text. These texts are written or commissioned by

the manufacturer and are thus written by experts to be read by experts (health professionals) or laypeople. The aim is to instruct the health professional or layperson on how to correctly and safely use the device.

## 3. Methodology

Within the field of biomedical translation, this chapter describes how revisers think translators translate, how translators think other translators translate and how revisers revise (empirical expectations); how revisers think translators 'should' translate and how translators think revisers 'should' revise (normative attitudes); and what revisers believe are the essential characteristics of a good translation, what translators think about other translators' expectations of their work and what translators think about revisers' expectations of translators' work (normative expectations) (Table 8.1).

Questionnaires were the method selected for data collection since they are seen as the optimal instrument to elicit beliefs not only in social sciences (for example, Bicchieri 2017a: Kindle location 1134) but also in Translation Studies (Kuo 2014: 106; Robert and Remael 2016: 586). The well-documented problems associated with the elicitation of beliefs in general and the use of questionnaires in particular were taken into account in the data collection and the design of the questionnaires (for example, see Callegaro 2008 on social desirability bias). This was done mainly by (1) adopting a self-administered method of data collection, (2) assuring participants that their personal information would be treated confidentially, (3) pilot testing the questionnaires, and (4) acknowledging that the respondents' answers may not be truthful (Gile 2006).

### Data collection

The links of the online questionnaires<sup>5</sup> were sent by e-mail, together with the informed consent form, to the pre-contacted participants recruited (1) from a call for participants posted on dedicated Facebook pages for Portuguese translators and associations; (2) on the basis of a pre-selection of profiles of translators and revisers who self-identify as specialized in medical or biomedical translation on Proz.com and on the websites of Portuguese translation associations (APTRAD and APT); (3) through a request sent to Portuguese universities with the intent of recruiting novice translators that might fit the profile; and (4) from personal acquaintances. Each participant received a questionnaire tailored to their experience and/or profession, namely reviser, novice translator or experienced translator. No financial compensation was offered to the participants.

### Questionnaire design and data analysis

The questionnaires were in English and included both open questions and closed questions (multiple choice, check-all-that-apply, rating scale (Likert scale and star scale) and yes/no). Each of the three questionnaires had 21 questions divided into



different sections. The revisers' questionnaire was divided into five sections: (1) professional profile (five questions), (2) assessment of the quality of a translation (two multiple choice questions), (3) reviser's beliefs about revisers (self-beliefs and beliefs about others) (three open questions and two Likert scale questions), (4) reviser's beliefs about translators (two open questions and two Likert scale questions), and (5) reviser's beliefs about the readers of the translation (three open questions and two Likert scale questions). The translators' questionnaire was divided into four sections: (1) professional profile (five questions), (2) translator's beliefs about translators (self-beliefs and beliefs about others) (two open questions, two Likert scale questions, one star scale question and one yes/no question), (3) translator's beliefs about revisers (three open questions and two Likert scale questions), (4) translator's beliefs about the readers of the translation (three open questions, two Likert scale questions and one star scale question).

Normative attitudes about competences and working practices were elicited by asking revisers the open question "In general, how do you think translators 'should' translate?" and novice and experienced translators the open question "In general, what criteria do you think reviewers 'should' use to judge the quality of a translation?" In order to elicit empirical expectations, revisers were asked the open question "In general, how do you think translators 'actually' translate?" while translators (both novice and experienced) were asked "How do other translators with the same experience as you translate?" and "In general, how do you think reviewers assess a translation?" Finally, to elicit normative expectations, revisers were asked the open question "In general, which are the essential characteristics of a good translation?" while translators (both novice and experienced) were asked "In general, how do other translators with the same experience as you think you 'should' translate?" and "In general, what expectations do you think reviewers 'have' of your work?"

The questionnaires were designed using the online SurveyMonkey tool,<sup>7</sup> which allows for the collection of responses and their export for external codification and analysis in the NVivo quality analysis software. NVivo 12 Mac allows for the processing of qualitative unstructured data resulting from the open questions to which a participant "gives the response in his or her own words" (Ballou 2008: 547), which is especially useful when conducting an exploratory study regarding an unexplored topic like attitudes and expectations in biomedical translation. The rich raw data provided by the participants were systematically coded and organized by emergent themes (following Saldanha and O'Brien 2013: iBook location 564). Thematic analysis has been defined as "the process of working with raw data to identify and interpret key ideas or themes" (Matthews and Ross 2010: 373).

### Participants

In total 71 participants answered the questionnaires, all native speakers of European Portuguese, with experience in biomedical translation and/or revision. There were 23 revisers, 32 novice translators and 16 experienced translators. The different

levels of experience (novice vs. experienced translators) and the distinct professions of the participants (translators vs. revisers) allowed for a comparison and contrast of their belief statements.

## 4. Results

### Revisers' profiles

The 23 revisers (7 men) had experience in the revision of biomedical translation ranging from 1 to 20 years (average of 7 years). All revisers had a degree in translation at the BA or post-graduate level and/or a degree in medical sciences. All revisers worked with the language pair English to European Portuguese (95.65%), with the exception of one that revised Spanish-Portuguese translations. Some of the revisers worked in several language pairs besides the main English-Portuguese pair and also revised from Spanish (43.48%), French (26.09%) and German (8.70%).

Revisers were asked to select, from a list of text types in the (bio)medical domain, all the types they had worked with.<sup>8</sup> From that list, the most frequently revised were patient information leaflets (56.52%), user manuals for devices (56.52%) and software (43.48%), summaries of product characteristics (52.17%), (material) safety data sheets (47.83%) and training material (47.83%).

### Novice translators' profiles

The 32 novice translators (8 men), with up to two years of full-time experience, held a higher education degree from a Portuguese university, and the majority (all but 2) had completed at least the first year of a master's programme in translation. All translators worked from English to Portuguese, but some also worked from other languages, such as from French (18.75%), Spanish (12.50%), German (6.25%), Russian (3.13%), Italian (3.13%) and Chinese (3.13%).

The most frequently reported text types among the novice translators were: patient information leaflets (46.88%), user manuals for medical devices (21.88%), patient consent forms (28.13%), clinical guidelines (18.75%), case reports (18.75%) and news releases (18.75%).

### Experienced translators' profiles

The 16 experienced translators (3 men), with experience in translation ranging from 10 to 29 years, including experience in (bio)medical translation, translated from English to Portuguese (as in the case of the novice translators), and also from French (37.50%), German (31.25%), Spanish (25%), Italian (6.25%) and Dutch (6.25%).

The most frequently reported text types among the experienced translators were: patient information leaflets (53.33%), fact sheets for patients (33.33%), user



manuals for medical devices (26.67%) and software (20.00%), training material (26.67%) and labels (20.00%).

### Revisers' attitudes and expectations

As mentioned in section 3, in order to elicit normative attitudes, revisers were asked "In general, how do you think translators 'should' translate?" while in order to elicit empirical expectations, revisers were asked "In general, how do you think translators 'actually' translate?" and finally, to elicit normative expectations, revisers were asked "In general, which are the essential characteristics of a good translation?"

Two broad themes emerged from the analysis of the answers in NVivo: revisers directly or indirectly referred to quality parameters, and they referred to the process itself.

Regarding the quality parameters, revisers reported that they mainly expected a translation to follow 'terminological norms' (31 mentions), 'accuracy' (18 mentions), and 'language norms' (17 mentions) (Figure 8.1). In other words, what was considered important for biomedical translation by the majority of revisers was the use of industry terminology—the target language terminology used by medical experts. Next, revisers expected the translation to be accurate, which was described by some as "Check[ing] if the target text is faithful to the source's message" and by others as "Check[ing] if the translation conveys the meaning of the original text". Finally, revisers expected translations to follow the language norms of the target language, including grammar, spelling and syntax.

To a lesser extent, revisers referred to the need to adapt the text to the target audience (11 mentions), readability, natural sounding text and fluency (5 times each), detail-orientation and consistency (3 times each), conciseness and reduction of source text nuances in the target text (1 time each).

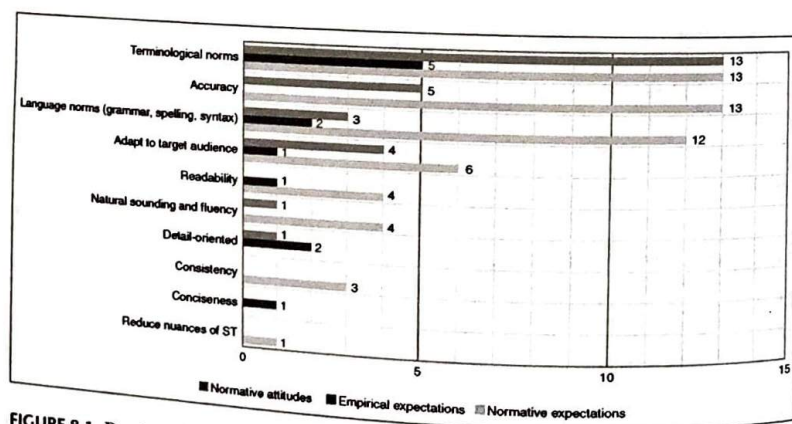


FIGURE 8.1 Revisers' normative attitudes, empirical expectations and normative expectations about translators and translations

Regarding the process, revisers described their expectations about translators and their beliefs about the way in which translators actually did translate (normative attitudes and empirical expectations).<sup>9</sup> As far as normative attitudes are concerned, two revisers explained that, first and foremost, the translator needed to understand the source text and only then translate. During that first reading, one of the revisers commented, the translator should identify the translation problems and "specific terminology which needs research". The first translation should be a draft, two revisers mentioned, one of them suggesting that the translator should "mentally formulate and develop a tentative target sentence with the same information". The next step according to this reviser was to "rewrite from scratch in the target language, for the target language reader—as if it had not been translated at all" and only then should a comparative self-revision be performed in order to assess "if information is correctly conveyed and matches target language's specificities". Another reviser expressed a similar idea: "Revise the target text against the source to identify possible inaccuracies." The next and final step for these revisers was a unilingual self-revision. Establishing realistic deadlines in order to avoid mistakes that arise from rushed translations, and communicating with the client to clarify questions, also emerged as common and important aspects of the process.

When asked how translators actually translated, that is, their empirical expectations, revisers mainly expressed negative expectations, agreeing that most translators translated on "automatic pilot", as one reviser put it. Other revisers called this strategy "direct correspondence" between segments, "too close to the original" or "literal translation". On literal translation, a reviser took the opportunity to explain:

A lot of the times, we get literal translations that immediately give away it is a translation and not the original text. This makes it hard to read and means that, most of the time, we need to read the text several times to understand. As well as this, it provides leeway for errors (false friends, etc.).

Revisers also referred to potential causes of this "automatic pilot" translation procedure, namely lack of self-revision and tight deadlines. Self-revision, identified as a must for translators, was also identified as a root cause of lack of quality, which together with the "automatic pilot" procedure is attributed by some revisers to lack of time. As explained by some revisers, "[s]ometimes 'shortcuts' are taken in order to comply with deadlines, perhaps, resulting in translations of inferior quality" and "[t]hey actually work for the deadline, which is extremely short and sometimes non-realistic. Considering the demands of the client in quality and sometimes the load and complexity of instructions and workflows, this has consequences for the translation quality."

### Translators' attitudes and expectations

In order to elicit normative attitudes, both novice and experienced translators were asked "In general, what criteria do you think reviewers 'should' use to judge the quality of a translation?"; to elicit empirical expectations, translators were asked



"How do other translators with the same experience as you translate?" and "In general, how do you think reviewers assess a translation?"; and to elicit normative expectations, translators were asked "In general, how do other translators with the same experience as you think you 'should' translate?" and "In general, what expectations do you think reviewers 'have' of your work?"

In their responses to these open questions, the majority of novice and experienced translators referred to the high expectations held by other professionals and, more concretely, by revisers (that is, normative expectations). Some novice and experienced translators believed that revisers expected perfection. Two of the novice translators, for instance, clearly stated that they believed revisers did not accept any types of error. "In a professional environment", one of the novice translators wrote, "all jobs are expected to be perfect in terms of achieving the goals companies give you. If you work on your own, then you should be hard on yourself." However, the majority expressed the belief that revisers expected and accepted a translation that shows some small or minor "slips". Two of the experienced translators believed revisers expect them to deliver a good translation "that will not take too long to revise", as one translator noted, and three other translators believed that revisers held high expectations: "I think their expectations are high", "I strive to deliver excellent quality translations", "they expect high-quality work".

Other novice and experienced translators believed that revisers expected a less-than-perfect product: "that it is good, even if it is not perfect", as one wrote, and "if I have translated a text related to a field I do not usually work with, the reviser might need to check/change some of my terminological choices", another clarified.

Two more broad themes emerged from the answers of the biomedical translators: they directly or indirectly referred to translators' competences and, like the revisers, they referred to the translation process itself.

Regarding the competences, novice and experienced translators alike reported normative expectations and attitudes. They are expected by other translators and revisers, and they expected other translators and revisers, to be proficient in 'information mining'. They referred specifically to the documentation and terminological process (52 mentions), followed by 'planning and management', mainly time management (16 mentions) and 'language' competence (11 mentions)—professionals are expected to know and comply with writing and linguistic norms (including grammar, spelling and punctuation) (Figure 8.2). Less frequently, translators also referred to detail orientation (five times), which is described by the translators as "being thorough" and "with attention to detail". Surprisingly, subject-matter and technological competences were mentioned only three times each, suggesting that these translators believed that they are expected to prioritize 'information mining' and 'planning and management' over their knowledge of the subject and the effective use of software. From an industry perspective, the fact that 'information mining' outweighs 'subject-matter knowledge' may suggest that knowing how to conduct research and documentation is more desirable than knowledge of a specialist field. Finally, among the least mentioned themes were 'defining and

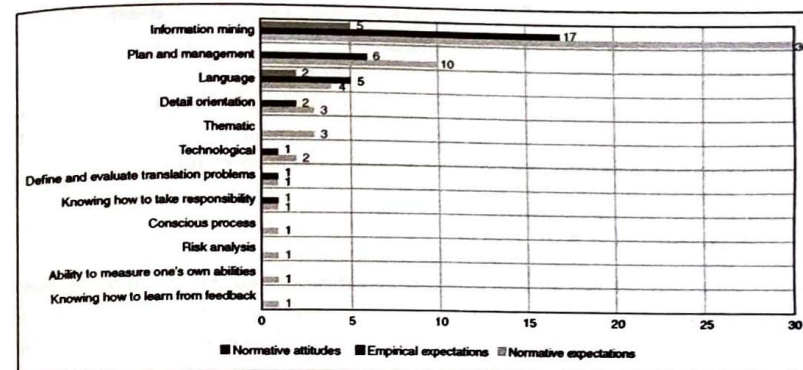


FIGURE 8.2 Translators' normative attitudes, empirical expectations and normative expectations about other translators and revisers

evaluating translation problems' and 'knowing how to take responsibility' as well as knowing how and when to perform a 'risk analysis' and prioritize tasks, 'measure one's own abilities' and 'learn from feedback'.

When asked about the expectations of revisers and how they thought revisers assessed a translation, novice and experienced translators reported clear expectations about biomedical revisers (that is, normative expectations). The majority of translators expected revisers to perform a unilingual revision and not a comparative one, mainly based on checking the correct use of the linguistic norms of the target language (grammar, spelling and syntax). One of the experienced translators, in a critical tone, commented that revisers "just read the target text and consider the translation to be good if it sounds good".

A large majority of the experienced translators in fact expressed a more negative view of revisers' work. They claimed that revisers are not objective and "mark errors that are not errors at all", as one translator wrote. Revisers are "too focused on assessment", wrote another. Another commented: "Some revisers assess a translation negatively . . . because they feel their obligation is to amend the translation". And,

I think revisers should not act as judges, but as part of the value chain. So, their purpose should be to create a better product than what they get from the previous stage. If the product has the adequate level of quality, the reviser should not change the product received.

When translators were asked about how revisers should assess a translation (that is, their normative attitudes), experienced translators indicated that they should focus on objective criteria such as grammar and style, which "in fact correct and improve a text and not criteria of 'changing just for the sake of changing,' only to



justify their own revisers' salary and, sometimes, even to humiliate the translator". Another experienced translator commented:

more often than not I find myself refuting marked errors that are not errors at all. Either the error severity is not correct, or there's no error at all. I believe revisers work in good faith, but sometimes I begin to wonder.

## 5. Discussion and conclusion

This chapter has offered an overview of the attitudes and expectations of biomedical revisers and translators (novice and experienced) regarding each other and regarding best practices in the translation and revision of biomedical content in the Portuguese context.

Given that statements of beliefs can be consciously or unconsciously biased, the findings should be interpreted "conservatively" (Gile 2006). Nevertheless, when compared to other studies, the number of participants can be considered significant since they all come from a single specialized subdomain and work into one target language and in one relatively small language market (EU Portuguese).

The following five aspects are worth some discussion: source language, text type, norms and competences, self-revision and deadlines, and subjective preferential changes. With regard to the most common source language among the participants, the predominance of English comes as no surprise when the target language is European Portuguese, given that English is widely accepted as the most common source language in the European Union (House 2013). The findings suggest that this is also true for biomedical translation.

User manuals for medical devices and software, patient information leaflets, training material and summaries of product characteristics are the most common text types handled by the 71 participants. The figures suggest that user manuals are the most translated text type, at least for the surveyed participants. However, very little research has been done about this text type within medical translation.<sup>10</sup> More research is therefore needed. Both the World Health Organization (2018) and the European Commission (2018b) recognize the key role of medical devices in healthcare provision.

As far as norms and competences are concerned, both groups of professionals agreed that 'terminology' is key in the translation and revision of biomedical content.<sup>11</sup> A qualitative examination of the ways in which revisers and translators communicated their most common beliefs about each other and about translation showed that they described 'terminological norms' and 'information mining' competence as encompassing:

- documentary and terminological research in reliable sources (mention was made of online glossaries and medical documents originally written in the target language by medical experts);
- network-building, so that reliable experts can be consulted;

- terminology management (the use of terminology management software to process the terminological information that was highlighted);
- compliance with the client's reference materials (mention was made of the importance of following guidelines, glossaries and any reference material provided by the client).

These expectations are not surprising, as the ISO 17100: 2015 standard makes reference to "competence in research, information acquisition, and processing" as one of the professional competences of translators, and also indicates that during the translation process the translator is expected to comply with industry terminology (both the terminology specific to the domain and to the client) and with the reference material provided (including style guides) (ISO 2015a: 6; 10). Even though compliance with reference material was one of the aspects most referred to by both revisers and translators, one of the experienced translators clarified that, in his experience, "we normally don't have access to reference material nor contact with specialists on the client side". This is an important point for revisers to consider when checking and assessing a translation.

Although reliance on a network of translators and domain experts is not included in ISO 17100: 2015, it was frequently mentioned by novice and experienced translators as part of their needed competences. For instance, one of the novice translators welcomed the opportunity to focus on the increasing importance of collaborative work:

Though translating is, in some ways, a solitary task, particularly for freelancers, at the same time, teamwork is important as it ensures the quality of the provided translation services and allows for additional viewpoints of a single item or topic. Sharing knowledge means gaining knowledge and expanding experience. Translators are not infallible machines. Therefore, seeking help and advice from fellow translators should be encouraged as a means of growth.

Regarding self-revision, it is remarkable that it was only seldom referred to by the biomedical translators surveyed (11 mentions). Furthermore, none of the translators explained how one should go about self-revising, as if the procedure is so well known among translators that there is no need for further explanation or detail. The relatively low percentage of references to self-revision could thus be interpreted as a sign that the procedure is so common that there is no need to make reference to it. However, when expressing their beliefs about how other translators should translate, two experienced translators pointed out that "several translators do not perform self-revision" or that "revision is very superficial". These beliefs were also shared by revisers. Lack of comparative self-revision together with lack of time due to tight deadlines contribute to quality problems, revisers reported. Even though ISO 17100: 2015 considers self-revision as part of the translation process, the data suggest that translators may not consider it so important, at least in comparison to revisers' expectations.



Most striking about the data was translators' strong negative attitudes towards revisers' preferential changes. Subjective preferential changes refer to those corrections made by a reviser that are based not on objective parameters of quality but rather on subjective ones. These changes, also referred to in the literature by the terms 'hyper-revision' and 'over-revision' (Mossop 1992: 85), are considered "suggestions for improvement" rather than errors since "nothing is technically wrong" (Densmer 2014). More often than not, these changes create problems in the quality control process and particularly in the relationship between the reviser and the translator. That is probably why the surveyed experienced translators expressed clear opinions about preferential changes. For them, the work of revisers is subjective, and it generates a sense of injustice. Their changes introduce insecurity and doubt about the revision process, such that one of the experienced translators wrote, "I already know that the reviser is going to change the text a lot, which is rather unpleasant from an emotional point of view, but tough luck."

Belief statements such as this suggest a power struggle between revisers and translators with potential consequences for the translation process. The frictions between these two groups of professionals indicate that the authorship of the translation is being put into question. Even though scientific-technical translation is increasingly seen (and accepted) as the product of a collaborative endeavour, as was expressed by some of the participants, the translators' belief statements may signal the challenging of the role of the reviser and translators' diminishing decision-making power over the last version of their translations.

To conclude, the potential lack of communication and trust between revisers and translators can hinder the quality of the translation and ultimately damage the image of the translator. The findings suggest that translators are questioning what is expected of them. If translators do not understand the reasons motivating revisers' corrections, they are not able to follow revisers' feedback and their competence can be put into question, as expressed in the revisers' belief statements. This may lead to the perception that the quality of translators' work is below the expected standard. As a consequence, translators receive negative feedback from revisers, which jeopardizes their professional reputation. Thus, working relationships between revisers and translators can be contentious even though both groups agree on the quality parameters that should govern biomedical translation, in line with ISO 17100: 2015.

Though exploratory in nature, our study has aimed to lay the foundations for further research. Future lines of research should include studies of scientific-technical translation, which increasingly seems to be considered a collaborative effort demanding that revisers and translators work together. This raises the question of how the industry will cope with these challenging power relations. For instance, even if the Codes of Ethics of Portuguese translators' associations do not yet contemplate potential limits to revisers' work, the codes should be monitored in order to assess how the industry is dealing with these challenges. Likewise, given that university training is based mainly on developing individuals' competences in translation/revision, starting with an assessment of individual student performance, there is a pressing need to inquire into how training can adapt to the increasing

need for collaborative translation processes. It would therefore be interesting to consider how to develop interpersonal communication in translation/revision trainees, focusing on potential problems of communication between translators and revisers and on any preconceived ideas the two types of professionals may have, including lack of trust with regard to the nature of revisers' changes.

## Acknowledgements

Special thanks are due to Alexandra Assis Rosa for her comments on an earlier version of the chapter, as well as to the anonymous peer reviewers and Isabelle S. Robert for insightful feedback.

## Notes

- 1 For example, Schwieter and Ferreira (2017); Ehrensberger-Dow et al. (2015).
- 2 For example, Sosoni (2017) reported on translators' attitudes about translation crowdsourcing; Corrius et al. (2016) examined students' and professionals' attitudes to gender in advertising translation; Feinauer and Lesch (2013) discussed the "idealistic" expectations of healthcare professionals about interpreters.
- 3 While a variety of definitions of the term "agent" has been put forward, this chapter adopts the definition suggested by Simeoni, who saw it as a sociological concept for "the 'subject,' but *socialized*. To speak of a translating agent, therefore, suggests that the reference is a 'voice,' . . . inextricably linked to networks of other social agents" (1995: 452). For an overview on agents and agency in TS, see Buzelin (2011).
- 4 Concerning the nomenclature of attitudes and expectations, attitudes can be defined as a relatively stable system of beliefs concerning an object or person which results in the evaluation of that object or person (Lawson and Garrod 2001: iBook location 91; Marshall 2003: Kindle location 1156; Abercrombie et al. 2006: 21; Bruce and Yearley 2006: 13; Darity 2008: 200; Fleck 2015: 175). Normative attitudes can be expressed by statements like "I believe that others should/shouldn't do X" and should not be confused with preferences (Bicchieri 2017a: Kindle location 293–5). In turn, expectations are defined, according to Bicchieri (2017b), as "just beliefs" that can be empirical or normative about what happens or should happen in a given situation. Empirical expectations are typically expressed in sentences such as "I believe that most people do X", "I have seen that most people do X" and "I am told by a trusted source that most people do X" (Bicchieri 2017b). Normative expectations are expressed by statements such as "I believe that most people think we ought to do X", "I believe that most people think the right thing to do is X", "I think that others think I should X" (Bicchieri 2017b).
- 5 For the questionnaire aimed at revisers, visit [www.surveymonkey.com/t/95VVFQJ](http://www.surveymonkey.com/t/95VVFQJ); for novice translators, visit [www.surveymonkey.com/t/9BJDXBR](http://www.surveymonkey.com/t/9BJDXBR); for experienced translators, visit [www.surveymonkey.com/t/9PZMND5](http://www.surveymonkey.com/t/9PZMND5).
- 6 On the questionnaires, the term 'reviewer' was used instead of 'reviser' to refer to the same professional, since, according to our research, this was the most common term in biomedical revision.
- 7 For more information on this tool, visit [www.surveymonkey.com](http://www.surveymonkey.com).
- 8 Since these answers respond to an 'all that apply question', a translator could choose more than one text type and, therefore, the percentages do not add up to 100%. The same applies to the questions aimed at novice translators and revisers.
- 9 Concerning the translation and self-revision process of translators, revisers' normative expectations are not applicable because revisers' normative expectations would refer to the *revisers' own process*, that is, revisers' beliefs about what others believe the reviser should



do in the course of their work. In this section we are concerned with revisers' beliefs about the process of translators.

- 10 A systematic search conducted in September 2018 in the Translation Studies Bibliography by keyword and abstract was not able to identify studies of user manuals for medical devices and software within medical translation.
- 11 It should be noted that 'accuracy' and 'plan and management' also emerged as common themes in the topic analysis, but given that they were not expressed when eliciting all three types of beliefs, they are not considered, for the purposes of this study, to be beliefs as strong as 'terminology' and 'language'.