

**Risk taking: trainee translators vs professional translators
A case study¹****Alexander Künzli****Department of French and Italian, Stockholm University****ABSTRACT**

This study investigates risk-taking in translation. Five translation students and 5 professional translators from German-speaking Switzerland were asked to think aloud while translating a user guide from French into German. The focus of the study was the analysis of the participants' reaction to an ambiguous source-text passage through investigating the strategies they used to translate that passage on the one hand; and their uncertainty as revealed by the think-aloud protocols of their translation processes on the other. The results show a higher propensity for risk-taking among the student group. Also, the translators mitigate potential risk by making the client a partner in the translation process. The study has implications for both research and teaching. It reveals the need for more research into whether translations produced by students necessarily are more literal than those of more experienced translators. Secondly, it suggests that students should be made even more aware of the fact that consulting the client is not an admission of failure, but a necessity. Students also need to know how to successfully communicate with the client when uncertainty arises.

KEYWORDS

Risk-taking, ambiguity, user guides, translation strategies, think-aloud protocols, uncertainty, French-German, translation students, professional translators.

1. Conceptual frame of reference

In the text genre of technical texts, user guides are the category most frequently translated (Schmitt 1999). Their main function is to provide instructions. Instructions are characterized by the logical or chronological succession of basic units that describe the different steps of a process (Adam 1990: 88). What happens, then, if a user guide does not follow this principle of sequentiality? What if it is ambiguous and the users are not certain of what they are supposed to do and in what order? And, most interestingly from our point of view, how do translators deal with this type of ambiguity? Translators have to make decisions. An analysis of how they deal with uncertainty in connection with ambiguity lends itself to the study of risk-taking. This is the object of the present contribution.

This study is part of a research project in which 10 participants were asked to translate a user guide from French into German while thinking aloud. Their verbalizations were transcribed into what are termed think-aloud protocols (TAPs) and analysed in parallel with their written translations. TAPs have been used as a method for investigating the cognitive and affective dimensions of translation for 20 years or so (see for example Jääskeläinen 1999; Krings 1986; Künzli 2003; Lörcher 1991). Their use has raised a number of questions and objections. However, Ericsson & Simon (1984/1993) have shown that they yield valid data if certain conditions during data collection and analysis are met.

I will deal here only with the question of how the participants processed an ambiguous passage of the French source text. It reads as follows (see also the Appendix):

Insérez la petite fiche du bloc alimentation dans le connecteur (C) : ouvrez le capot avant et le capot arrière. La petite fiche étant branchée sur le connecteur (C), faites passer le cordon dans le passe-fil (D). Refermez les capots avant et arrière.

'Insert the small pin of the power supply unit into jack (C): open the front panel and the back panel. The small pin being plugged into jack (C), pass the cable through the wire guide (D). Close the front panel and the back panel.'

The focus will be on the colon linking the two clauses of the complex sentence at the beginning of the paragraph. Does it constitute an explanation? In other words, is it necessary to open the panels in order to insert the pin? That is the interpretation that results from an analysis of its semantic value (Le Goffic 1993: 65; Riegel et al. 1999: 92). According to French grammar, a colon either (1) introduces a quotation, (2) announces an enumeration or examples, or (3) expresses a logical relationship between the terms it separates: cause, consequence or explanation. Several of the participants in the study hypothesise that the colon indicates an explanation, the other interpretations offered by the grammar being implausible: (1) it is not a quotation, (2) it announces neither an enumeration nor examples, (3) it does not express a relationship of either consequence or cause, the imperative *ouvrez* 'open!' rendering these interpretations impossible. Thus, the verb mood (the imperatives) and the fact that the colon appears within an instructional sequence characterized, usually, by a logical or chronological succession, indicates that it expresses a relationship of succession. However, according to the grammar, it indicates an explanation. But neither the co-text nor the pictures help the user or translator to understand why this is so.

And indeed, it is not necessary to open the panels in order to insert the pin. You (1) insert the pin, (2) open the front panel, (3) open the back panel, (4) pass the cable through the wire guide, and (5) close everything. In practice, the paragraph describes a strict sequence of actions. In text, however, this sequence is jeopardized by the colon in the first sentence and also the participial clause in the second sentence (*la petite fiche étant branchée sur le connecteur (C)* 'the small pin being plugged into jack (C)'). Judging by the participants' verbalisations, the participial clause constitutes a redundancy that disturbs rather than facilitates the reading and translation processes: the author has just said to insert the pin into jack (C). Stolze (1999: 93) explicitly mentions sequentiality as a general trait of technical style. This further confirms the hypothesis that the processing of this complex sentence may be confusing for both the reader and the translator. Still, the participants in the present study had to make a decision as to the correct interpretation of this passage. Their translation behaviour may therefore have resulted in taking a risk, if their decision was associated with uncertainty.

For the purposes of the present paper, I have decided to tentatively define *risk-taking*, as does Weil-Barais (1999: 558), as the level of subjective uncertainty from which someone is prepared to engage in a specific action. In other words, a participant's behaviour qualifies as risk-taking if he or she displays some sort of uncertainty, while at the same time choosing a certain translation solution.

A combined text and process analysis would seem to be particularly promising for the investigation of risk-taking in translation. I have therefore categorized the solutions used by the participants to render the colon according to Chesterman's (2000: chap. 4) classification of translation strategies. This author views strategies as forms of textual-linguistic manipulation, observable by comparing the result of the translation process, i.e., the target text, with the source text (p. 89). He distinguishes three groups of strategies: (1) syntactical/grammatical strategies, (2) semantic strategies, and (3) pragmatic strategies. The colon indicates that the opening of the panels precedes the insertion of the pin. That is the interpretation according to the grammar and the one that constitutes the starting point for establishing an inventory of the strategies used by the participants. One possibility for rendering the colon is the strategy of literal translation, i.e., transferring it into German, the target language. This would be an example of a syntactical/grammatical strategy. At the other end of the spectrum, is substituting the colon with another punctuation sign, reversing the chronology, which would correspond to a semantic strategy. Finally, there is also the strategy of explicitation. The colon could express an explanation. If it is translated by "*in order to insert the small pin of the power supply unit into jack (C), open the front panel and the back panel*", the participant specifies the logical relationship between the two clauses in the translation. In Chesterman's taxonomy, this type of strategy belongs to the pragmatic group.

The second component of Weil-Barais' (1999: 558) definition of risk-taking is uncertainty. Uncertainty can express itself in the written translations in the form of a translator's footnote, e.g., questions or comments addressed to the client. However, if the written translation contains no trace of such a strategy, we must turn to the TAPs and look for verbal manifestations of linguistic uncertainty. Tirkkonen-Condit (2000) has proposed a number of uncertainty markers that I have recently applied to my work (Künzli 2003: chap. 2.7) and will use here, too. Uncertainty markers may be, for instance, explicit questions ("why do they write a colon here?"), hedging ("probably the colon has the function of describing the next procedure") or admissions of lack of knowledge ("I don't exactly know what the point of it is").

In the following, I will give examples of an observed tendency towards risk-taking, as revealed by the strategies appearing in the written

translations and the uncertainty markers in the TAPs. I will also show that risk-taking is stronger among the student group. Of course, I am aware of the limits of this study. The variables to be taken into account in translation are complex. Also, the number of participants in each group is relatively low. In addition, since this is a case study, it is particularly important to interpret these results with caution.

2. Method

Table 1 gives an overview of the main characteristics of the 10 participants. The five students were recruited from Zurich's School of Translation and Interpreting, studying in their third semester. At the time of the experiment, the five translators had each had at least five years' experience of translation. All participants have been given fictitious names.

Table 1: Characteristics of the participants

Name	Status	Age Group	Language Combinations
Deborah (S)²	Student	20-30	German, French, English
Flavia (S)	Student	20-30	German, English, French
Heidi (S)	Student	20-30	German, English, French
Illana (S)	Student	20-30	German, English, French
Sophia (S)	Student	20-30	German, Italian, French, English
Adina (T)	Translator	31-40	German, French, English, Italian
Fanny (T)	Translator	51+	German, French, English
Laurent (T)	Translator	20-30	German, French, English, Italian
Sonja (T)	Translator	31-40	German, French, English
Tamara (T)	Translator	31-40	German, French, English

The participants were asked to translate a text from French into German while thinking aloud. The text was 278 words long (the Appendix contains only the second part of the source text). It was a user guide for a telephone with fax and answer-machine function from France Télécom. The text has a generally didactic-instructive function. The aim is to give the user the instructions necessary for him or her to install and use the machine properly.

I conducted the sessions with the students in a room at the School of Translation and Interpreting. The sessions with the translators were conducted at their homes, which are their usual places of work. All participants had access to a computer, parallel texts (German manuals for similar products) and other information sources they would normally use in their work. The participants first received general information about the purpose of the study and were then familiarized with the think-aloud instructions. It was only after a short warm-up task that they received the source and parallel texts and the recording was started. When they had finished the task, the recording was stopped and the translations collected. All translations were then revised by two revisers (for a detailed description of the experimental procedure, see Künzli 2003: chap. 2).

3. Results

Tables 2 and 3 show how the participants translated the complex sentence *Insérez la petite fiche du bloc alimentation dans le connecteur (C) : ouvrez le capot avant et le capot arrière* 'Insert the small pin of the power supply unit into jack (C): open the front panel and the back panel'. I have listed only the strategies used to translate the colon.

Two types of strategies used belong to the group of *syntactical/grammatical* strategies: literal translation and unit shift. Unit shifts indicate that the complex sentence has been separated into two units by a full stop or that the colon has been replaced by the coordinating conjunction *und* 'and'. Unit shifts are more prevalent in the students' translations.

At the level of *semantic* strategies, quite a clear difference appears between students and translators. All students eliminate the colon in the target text, which leads to a change in temporal direction in 4 of the translations. Students thus produce translations where the insertion of the pin of the power supply unit precedes the opening of the panels. This change in temporal direction is correct in practice, but contrary to the logical value of the colon. It constitutes risk-taking – on the condition that the ambiguity of the source-text passage has been detected. If the latter is not the case, it may simply be a matter of pragmatic normalisation (Caron 1995: 172). In other words, the participants spontaneously rectify what they consider to be aberrant utterances, relying on the probable relationships between the two clauses without carrying out a complete syntactical analysis. Table 2 also shows that Sophia's (S) translation lacks a punctuation sign between the two clauses. This omission hardly reflects the use of a translation strategy, however. It is rather a translation error, the student having forgotten to put a punctuation sign after the segment *die Buchse (C)* 'jack (C)'. Sophia's (S) protocol shows that she is uncertain concerning the correct interpretation of the colon. Still, her translation behaviour does not fall into the category of risk-taking, since omitting the colon does not constitute a translation solution as such and therefore is not an action in Weil-Barais' (1999: 558) terms.

A further difference between students and translators appears at the level of *pragmatic* strategies, absent in the students' translations. Two translators resort to explicitation and visibility change. Fanny (T) and Laurent (T) explicitate the semantic relationship between the two clauses separated by the colon, either syntactically (by changing the order in which they appear) or lexically (by means of the prepositional adverb *dazu* 'in order to do that'). It is important to bear in mind that even if these translators did not render the colon literally, their solutions are nonetheless faithful renderings of its semantic value, since the colon is present in their translations in the form of explicitation strategies. Fanny (T) and Laurent (T) are also the only participants to check the ambiguity

with the client rather than engage in a potentially hazardous interpretation (see Endnotes 4 and 5). This marker of their uncertainty in the written translations corresponds, in terms of Chesterman's (2000) classification, to a visibility change. Only the translators' written products contain a clear indication of their uncertainty, whereas the students' uncertainty is limited to their verbalisations as revealed by the TAPs.

Table 2: Use of strategies by the student group

Name	Deborah (S)	Flavia (S)	Heidi (S)	Illana (S)	Sophia (S)
Translation	Schliessen Sie den kleinen Stecker des Netzgerätes an die Buchse (C) an. Öffnen Sie dann die vordere und hintere Abdeckhaube und...	Stecken Sie den kleinen Stecker des Netzgerätes in die Buchse C. Öffnen Sie die vordere und hintere Klappe am Gerät und...	Fügen Sie den kleinen Stecker des Netzgerätes an die Telefonanschlussdose (C). Öffnen Sie die vordere und die hintere Klappe.	Verbinden Sie den kleinen Stecker des Netzteils mit der Anschlussdose und öffnen Sie die vordere und die hintere Abdeckklappe.	Stecken Sie den Stecker des Netzgeräts in die Buchse (C) klappen [sic] Sie das Bedienungspanel nach vorne und den Deckel nach hinten.
Strategies used	Unit shift (G4) ³ Change of temporal direction (S10)	Unit shift (G4) Change of temporal direction (S10)	Unit shift (G4) Change of temporal direction (S10)	Unit shift (G4) Change of temporal direction (S10)	-

Table 3: Use of strategies by the translator group

Name	Adina (T)	Fanny (T)	Laurent (T)	Sonja (T)	Tamara (T)
Translation	Stecken Sie den kleinen Stecker des Netzkabels in die Buchse (C) : öffnen Sie den vorderen und den hinteren Deckel.	Öffnen Sie die vordere und die rückwärtige Abdeckung. ⁴ Stecken Sie den kleinen Stecker des Netzteils in die Anschlussbuchse C und...	Verbinden Sie den kleinen Stecker des Netzgerätes mit der Buchse (C). Öffnen Sie dazu den vorderen und hinteren Deckel. ⁵	Stecken Sie den kleinen Stecker des Netzteils in die Buchse (C): öffnen Sie das Bedienungspanel und die hintere Abdeckung.	Stecken Sie den kleinen Stecker des Netzkabels in die Buchse C, öffnen Sie die vordere und die hintere Abdeckung.
Strategies used	Literal translation (G1)	Unit shift (G4) Explicitness change (Pr2) Visibility change (Pr8)	Unit shift (G4) Explicitness change (Pr2) Visibility change (Pr8)	Literal translation (G1)	Change of temporal direction (S10)

The following participants produced verbalisations about the colon: Deborah (S), Flavia (S), Illana (S), Sophia (S), Fanny (T) and Laurent (T). I will not deal with Sophia's (S) TAP here, as her translation contains an error rather than a strategy. Tables 2 and 3 above show that there are similarities between these students' translations on the one hand, and those of the two translators on the other. Whereas the students change the temporal direction of the French original, as expressed by the colon, the translators retain it. Here are the students' verbalizations⁶:

- [1] [Deborah (S)] colon / I don't exactly know what the point of it is here probably / I probably have to reread the paragraph / I don't know whether it's an explanation / or that's what you're supposed to do afterwards / but probably the colon has the function / of describing the next procedure I suppose / hm because if I look at the picture I don't see why you / in order to insert / in order to insert this pin hm / have to open the panel the panel / I'll put a full stop for now / instead of a colon
- [2] [Deborah (S)] and yes / because I assumed and I think it really is like this that the colon simply describes what comes next / I simply wrote hm next open next the front and the back panel I think that's a bit clearer than simply a colon
- [3] [Flavia (S)] insert / insert / the / the / hm small / pin that's a bit laborious [...] (she consults parallel text) [...] into / jack / C / by / the colon probably stands for by opening / by opening / no that's on the outside
- [4] [Illana (S)] and the colon is not really necessary either / I simply put and / in the next sentence this participial clause that's a bit weird

Excerpts [1] and [2] show that Deborah (S) formulates two hypotheses regarding the logical value of the colon: explanation and succession. She opts for the latter, replacing the colon by a full stop and introducing the temporal connective *dann* 'next'. According to the grammar, a colon cannot express a relationship of succession, even if that is what happens in practice. Deborah's (S) interpretation is correct, but risky. The TAP excerpt contains several linguistic markers of her uncertainty: admissions of lack of knowledge ("I don't exactly know what the point of it is here"), hedging ("probably"; "a bit") and (hedging) expressions of epistemic modality ("I suppose"; "I assumed"; "I think").

Excerpt [3] shows that Flavia (S) first attributes the logical value of an explanation to the colon: she proposes to render it in the form of the subordinating conjunction *indem* 'by ...ing', explaining how something is achieved. However, the pictures suggest to her that it may not be necessary to open the panels in order to insert the pin. Again, this is correct, but the pictures do not allow her to assert this for sure. The rectification of the ambiguity is a risky enterprise. Her uncertainty reveals itself in the form of hedging ("the colon probably stands for by opening").

Excerpt [4] reveals that Illana (S) considers the colon as superfluous. She opts for a translation solution that involves the coordinating conjunction *und* 'and', which leaves a certain margin of interpretation. It can either mean that you first have to insert the pin and then open the panels, or that the two steps have to be carried out more or less simultaneously. Her protocol contains uncertainty markers in the form of hedging ("the colon is not really necessary"; "that's a bit weird").

All in all, the above protocol excerpts show that the students are uncertain when it comes to knowing what the user is supposed to do and in what order. Even the pictures do not allow them to resolve the ambiguous source-text passage. Still, they all engage in some action in the form of textual-linguistic translation strategies. More specifically, their solutions consist in distancing themselves from the source text and the logical value as expressed by the colon in order to align the translation with what they consider to be plausible in practice. Even if their decisions turn out to be correct, they may have overestimated their success, dismissing the source-text author's decision too rapidly. In this, they differ markedly from the translators. Here are Fanny's (T) verbalizations:

- [5] [Fanny (T)] oh and now comes a colon why actually? / why does he put a colon here? is he going to explain how to proceed? / it seems so / open the front panel and the back panel / (she consults source text) it's not easy to see what that is [...] but it seems that this really is the explanation of how to proceed maybe you can't get at it so easily / do I understand correctly? open the front panel and the back panel / open the front panel and the back panel [...] / but then I'd have to write in order to
- [6] [Fanny (T)] that colon is weird / because it's not the explanation of how to proceed but the consequence the next step to be precise / because now he suddenly says the small pin being inserted in other words it is already inserted so / so it's not correct to write in order to / insert the pin of the power supply unit into jack C hm open / yes it's simply a question of different steps within a specific action [...] that's really different steps in other words he inserts it here / then he opens the front and the other the other panel
- [7] [Fanny (T)] somehow I find that strange again with this colon / do I first have to open the front panel and the back panel and only then can I access this jack C / has he deliberately put a colon? [...] I don't understand what he wants to say here because by magical forces this small pin is suddenly inserted into jack C / and then you have to pass the cable through that wire guide hm / (she sighs) / insert the pin of the power supply unit into jack C and then he puts colon / do I have to what before / (she sighs) I come back to my original idea I trust the author that he knows why he has put a colon / maybe after all that's how you have to do it / he says okay let's talk about how you get that small pin of the power supply unit into the jack but in order to do that you first have to open the panels / then you put that inside and then you put it into the wire- into the wire guide D / because otherwise the colon really doesn't make sense / and since I can't try it myself on the machine [...] now I'm really courageous / I'll write it the way I believe it should be in other words I will reverse the sequence of the steps / I write open now wait a second I have to pull the sentence to

the beginning I write first that thing with open the panel [...] open the front and the back panel / insert the pin of the power supply unit into jack C [...] I think I've built a new phone hm but this colon drives me crazy [...] I'm being very courageous maybe the producer is going to slap this thing in my face

- [8] [Fanny (T)] I'm going to tell my client in a footnote / why I did it the way I did that's how I usually proceed / it happens time and again that I hand in texts with footnotes and questions / and then he has to hm either answer me please do like this or he changes it directly in the text because then he has the text at his disposal [...] the reason why I changed / brutally / the sequence here is because I think that the reason for this colon after the first clause in step four / is because he describes once again calmly the steps and therefore I think that you first have to open the panel then you insert C and then you insert D / and I don't think that you have to proceed as you could also think as I first thought for a moment / that he first inserts it into C that he then opens the panels and then into D / because if that was right then why / does he repeat that little pin being inserted into jack C / something's mysterious there

Excerpt [5] shows that Fanny (T) identifies the difficulty right away: the colon placed in the middle of the complex sentence raises a problem. Her uncertainty regarding its interpretation expresses itself in the form of explicit questions. This type of uncertainty marker is absent in the students' TAPs. In excerpt [6], Fanny (T) queries her initial hypothesis. By taking into account the participial clause *la petite fiche étant branchée sur le connecteur (C)* 'the small pin being plugged into jack (C)', she sets up the hypothesis that the colon does not indicate an explanation, but simply the next step.

In excerpt [7], Fanny (T) reverses this decision, too. Her uncertainty expresses itself again in the form of explicit questions ("has he deliberately put a colon?"), but also in admissions of lack of knowledge ("I don't understand"). The redundancy created by the participial clause *la petite fiche étant branchée sur le connecteur (C)* 'the small pin being plugged into jack (C)' adds to her feeling of uncertainty. She finally attributes the logical value of an explanation to the colon, deciding to trust the source-text author ("I trust the author that he knows why he has put a colon"). At the same time, she expresses her intention of contacting the client in order to verify whether this is really what he or she wanted to say. She comments on her decision to reverse the order of the clauses by saying that she is being courageous. Strictly speaking, her decision implies, however, a smaller risk than that taken by the students: (1) her solution is semantically faithful to the source text, even if she distances herself from it syntactically, and (2), she makes sure that she checks the correctness of her decision in a footnote to the client.

Excerpt [8] also contains verbalisations that can be interpreted as revealing a translation principle (for the notion of translation principle, see Jääskeläinen 1999: 178-183 and 233-236). They reveal Fanny's (T) usual way of proceeding. She declares that she is in the habit of justifying

certain translation solutions in the form of footnotes. In this she differs again from the students, whose TAPs did not contain any verbalisations that could be interpreted as reflecting an adopted principle for the processing of ambiguities in translation. Translation principles are present in Laurent's (T) TAP, too:

- [9] [Laurent (T)] and then the colon it doesn't make sense either / open the front panel and the back panel / that means you have to do that in order to be able to insert the pin / the small pin being inserted into the jack pass the cable through the wire guide and only then you close the panel again / the stupid thing about it is that you can't see it on the picture
- [10] [Laurent (T)] in order to do that open that's the obscure thing the front panel and the back panel / well the picture isn't very good because / on the picture there's nothing that is open / but of course it could be / that you have to insert that / and that you in order to be able to do that have to / no that doesn't make sense at all / that you have to open the machine in order to be able to do that that doesn't make sense at all I'd have to ask because that would really be too risky if I simply wrote / to do that open the / open the front and the back panel that's what's written but it doesn't make sense at all / okay / I have to ask questions anyway so I can just as well ask that one too that's two short questions / then the client can say that's right or not and that's it / because otherwise it's too risky / at least then he can say that the picture isn't correct because if it's really true that you have to open both panels then they also have to change the pictures

Excerpt [9] shows that Laurent (T) considers the colon as not making any sense. He also verbalises the explicitation strategy he will finally resort to ("you have to do that in order to be able to insert the pin"). Excerpt [10] contains several uncertainty markers, mainly as explicit references to uncertainty ("that's the obscure thing") and hypothetical statements ("it could be"; "that would really be too risky if I simply wrote"). Moreover, it reveals the presence of a translation principle in the form of a procedural comment. He says twice that it would be too risky to explicitate the colon in the German translation without consulting the client. Bédard (1986: 179-180) argues that a translator's conscience forbids him or her to dodge his or her obligation to detect and rectify ambiguities. Also, he recommends that the translator contacts the client, as such rectifications are risky. This is exactly what Laurent (T) proposes to do. He may be uncertain regarding the correct interpretation of the colon. But there is no uncertainty when it comes to knowing what to do in situations that, according to him, imply too big a risk: check with the client. The wavy lines under the ambiguous source-text passage in his translation (see Table 3) testify to this. They allow him to mitigate the potential risk.

All in all, the verbalisations of the two translators demonstrate the conflict that can exist between the criteria that the participants take into account when evaluating appropriate strategies in view of making a decision (see also Weil-Barais 1999: 556-557). In the present case, there is a conflict between the textual information and the translators' linguistic knowledge on the one hand (they know that the colon does not make any sense if it

does not express an explanation); and reality and their extralinguistic knowledge on the other (they both have many years of experience in translating technical texts, Fanny [T] within the telecommunications industry, and know that it may not be necessary to open the panel in order to insert the pin). Whereas the students seem to attach a higher value to what they consider to be plausible in practice, and consequently decide to disregard the colon, the translators settle for a compromise, which allows them to mitigate the risk: they render the colon in the form of an explicitation, but decide at the same time to consult the client.

4. Discussion

The results show that there are differences between translators and students in the translation of the complex sentence *Insérez la petite fiche du bloc alimentation dans le connecteur (C) : ouvrez le capot avant et le capot arrière* 'Insert the small pin of the power supply unit into jack (C): open the front panel and the back panel', and more specifically of the colon. Four students, but only one translator, change the temporal direction expressed by the colon, which leads to a semantic change in the target texts. Also, there are differences in pragmatic strategies. Apart from the two translators who render the colon literally, two further translators opt for explicitations and visibility changes, which allow them to remain faithful to the logical value of the colon and to check the ambiguity with the client. Taken together, these phenomena point towards a higher propensity for risk-taking among the students, with at least 4 out of 5 having detected the ambiguity, judging by their TAPs. These figures indicate indeed that the students may have been just as good at detecting the ambiguity of this source-text passage as the translators. There is, however, a difference regarding the responses to the detection of this ambiguity: risk-taking in students, caution in translators.

There are several possible explanations as to why the students were more inclined to take a risk: (1) they fear less a possible loss of credibility, should their interpretation turn out to be wrong; (2) they are not yet aware of the potential help they can get from colleagues or clients (see also Künzli 2001); (3) they fear appearing to be undecided, thinking a translator has to know everything; and (4) they do not yet know how to distinguish between cases where risk-taking is inevitable and where it may or even should be avoided. One may indeed suppose that clients expect translators to solve as many translation problems as possible on their own. However, instructional sequences call for caution. Wrong or simply ambiguous instructions may lead to the company being liable for damages and thus have serious consequences not only for the company, but also for the translator, who may lose his or her credibility and thus clients and income (see Reichert [1993: 190]). Since it is actually possible that the user has to open the panels in order to insert the pin, the translators turn out to be more realistic. Weil-Barais (1999: 558) has shown that good performance is associated with maximal realism, whereas in poor performance, estimation of success is often exaggerated.

In the present case, the students were right, but they could have been wrong. They could have overestimated their success. More research is needed to investigate whether this is a more general feature of students' translation behaviour.

Hypothesis (2), according to which the students may not yet be aware of the potential help they can get from colleagues or the client, gains some credence from the fact that among the participants who have produced verbalisations on the colon, only the two translators explicitly base their decision-making on the implications for other parties, such as the client. Judging by the TAPs at least, the students seem to proceed as if they were working in isolation when solving the problem of how to interpret the colon. It is also consideration for the possible consequences of their decision on their relations with the client that contributes to making Fanny's (T) and Laurent's (T) decision-making processes more complex, and to them mitigating the potential risk. Weil-Barais (1999: 556-556) also mentions dependency on the environment as a variable to be taken into consideration when studying decision-making and risk-taking. Hypothesis (3), stating that students fear appearing to be undecided, may be strengthened by the fact that in the students' TAPs, uncertainty often expresses itself in the form of hedging; whereas the translators' TAPs contain explicit questions, references to uncertainty or admissions of lack of knowledge. Hedging may, after all, reflect the participant's desire not to admit his or her uncertainty too openly. Finally, it must also be mentioned that the training the students received may have influenced the way in which they processed the instructional sequences of the user guide they volunteered to translate.

Differences between the students and the translators also appear at the level of translation principles. Only the TAPs of the two translators contain procedural comments. This is not really surprising: in contrast to the students, the translators have had the chance to develop principles to guide their translation processes when ambiguities occur in the source text. However one might have expected to find examples in the data where a participant detects the ambiguity and explicitly states that he or she will render it intact into the target language in the form of the strategy of literal translation, letting the readers make the decision rather than them doing so. Maybe some participants did reason along these lines, but preferred not to verbalise such thoughts for fear of appearing unprofessional. Nevertheless, this possibility may come in handy in situations where the translator cannot get hold of the client.

What are the implications of the study? The results show once more (see Künzli forthcoming) that it is not always translation students who stick closely to the source text: this was indeed one of the first conclusions drawn by translation process studies (e.g., Lörscher, 1991: 276). The students participating in the present study took more risks when processing an ambiguous source-text passage. The higher propensity for

risk-taking is associated with translation solutions that can be considered as semantically freer versions of the source text than those produced by the translators. This difference seems to be linked to the way in which participants construct their relationship with the source text. The present data as well as data I reported elsewhere (Künzli 2003) show that the translators who volunteered for my research are rather scrupulous concerning the content of the source text. They distance themselves from it only when they deem it necessary. The students, on the other hand, seem at times to construct what I would call a random relationship with the source text. They are more ready to distance themselves from its structure if it does not correspond to their personal preferences or expectations. More research efforts are needed therefore to pinpoint the specific instances in which students and translators show a preference for a more literal, or a freer approach to translation.

Finally, the results also have interesting implications for teaching. It may be necessary to make students even more aware of the fact that the client is a partner the translator needs to count on in the translation process. The TAPs of the translators show this particularly well. They also reveal the importance of knowing how to successfully communicate with the client when uncertainty arises. A prerequisite for asking clients for help clearly is that the translator shows that he or she has done a thorough analysis of the source text and its context. This may seem obvious, but it is not always fully understood by students, as some results of the French to Swedish part of the study show (Künzli 2003: chap. 4.2.2). Once translators have made the decision to contact the client, they seem to prefer to define the problem and use straightforward wording, for example in the form of questions, rather than expose the linguistic reasoning that has given rise to their uncertainty. They also say that they prefer getting explanations rather than translations, even in cases where the client is fluent in both the source and the target languages. The strategies and principles applied in the present study by the two translators in their communications with the fictitious client indicate that they have internalized Bédard's (1986: 88-89) advice to technical translators. They spend substantially more time trying to disambiguate the source text than do the students. Thus, the explicit questions and references to uncertainty in their TAPs on the one hand, and the footnotes in their written translations on the other, strengthen rather than weaken their credibility. This may be well worth bearing in mind for translation teachers, too. Indeed, it is to be hoped that the times are definitely gone when they feared losing face if they admitted uncertainty on a particular matter while standing in front of the class.

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Appendix

The French source text

Galeo 4710 doit être placé à l'écart de toute zone de chaleur excessive et d'installation d'air conditionné. Il doit être protégé contre les vibrations, la poussière, l'humidité, les projections d'eau ou de produits, le rayonnement électromagnétique, et son accès doit être aisé.

La prise téléphone doit se trouver à 1,50 m maximum, la prise électrique standard monophasée 220-240 V, 50-60 Hz à 2 m maximum.

1. Tournez votre appareil de façon à voir sa face gauche.
2. Branchez le cordon du combiné téléphonique au connecteur (A).
3. Branchez le cordon de ligne téléphonique au connecteur (B), d'un côté, et dans la prise téléphonique murale, de l'autre.
4. Insérez la petite fiche du bloc alimentation dans le connecteur (C) : ouvrez le capot avant et le capot arrière. La petite fiche étant branchée sur le connecteur (C), faites passer le cordon dans le passe-fil (D). Refermez les capots arrière et avant.
5. Branchez la fiche du cordon secteur du bloc alimentation dans une prise de courant murale aisément accessible.

Votre appareil est maintenant sous tension.

Alexander Künzli studied translation and psychology at the University of Geneva. His doctoral dissertation focused on the strategies and principles used in French-German and French-Swedish technical translation. He is presently affiliated with the Department of French and Italian at the University of Stockholm. Current academic interests include process-oriented translation research and the revising of translations.
alexander.kunzli@fraitu.su.se

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² Henceforth, I will use the abbreviation "S" for student and "T" for translator.

³ The abbreviations in brackets correspond to Chesterman's classification (2000: chap. 4). For example, *G4* refers to strategy type n° 4 of the group of syntactical/grammatical strategies (= group G), *S10* to the strategy type n° 10 of the group of semantic strategies (= group S) and *Pr8* to the strategy type n° 8 of the group of pragmatic strategies (= group Pr).

⁴ Fanny (T) adds the following footnote to her translation: "Have I correctly understood the sequence of the steps to be executed? Panel up, insert into C, insert into D, panel down."

⁵ The wavy line in Laurent's (T) translation has the function of a translator's footnote.

⁶ The verbalizations were made in German. I have translated them into English. The original German versions can be found in Künzli (2003: chap. 5.2.1)