Does Online Machine Translation Spell the End of Take-Home Translation Assignments?

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Translation and Foreign-Language Teaching in the 21st Century

The ascendancy of communicative approaches over the past 50 years has resulted in a profound and probably permanent shift in the status and nature of translation activities in the foreign-language classroom. Students are no longer required to demonstrate their mastery of the target language by being able to explain the rules of its grammar and to use that knowledge to translate teacher-contrived examples from L1 to L2. The impact on translation activities of these changes in the theories and practices of foreign-language instruction is clearly illustrated in the terminology of the discipline. Fifty years ago, secondary and tertiary students of French were quite familiar with the French terms 'thème' and 'version', and their English equivalents 'prose' and 'unseen'. There were even textbooks with titles such as 'Fifty French Proses' (Goffet and Hartley, 1961) and 'Classified French Unseens' (Evason, 1960) which carried on the traditions of earlier generations, and whose chief purpose was to prepare students for formal examinations. Explanations of this specialised use of the French terms are still found routinely in bilingual dictionaries – e.g. the Collins-Robert lists 'translation (into a foreign language); prose (translation)' as meanings of the word 'thème', and 'translation (into the mother tongue); unseen (translation)' as meanings of the word 'version'. But one searches in vain for these specialised meanings of 'prose' and 'unseen' in the Macquarie Dictionary. They have disappeared both from the Australian classroom and from everyday Australian English.

Yet in 2004, translation is still alive and well in tertiary foreign-language courses. Instead of being the primary teaching tool at all levels of instruction, however, it has become one of many practical applications of bilingual skills that students see as likely to enhance their employment opportunities. And whereas students are still naturally inclined to fall back on translation when all other resources fail them in expressing themselves in the target language, formal instruction in translation is limited almost exclusively to the direction L2-to-L1.

There are many ways of teaching the art and skill of translation to intermediate and advanced foreign-language students. They can be given lectures on principles and types of translation and be shown examples of problems at the level of word, phrase, sentence or larger units of discourse; they can compare an original against its professional translation into another language; they can discuss inaccuracies, inadequacies, and infelicities in the work of others: but it all remains in the domain of the theoretical, and fails to meet the students' requirement of developing a practical skill until they work at producing a translation of their own.

Teachers, and students, of any subject with a strong practical component generally acknowledge that a great many skills and insights are best developed progressively through a sequence of 'hands-on' activities. But one of the less than heartening realities of university teaching is that no matter how well-intentioned they may be at the outset, in the end, students by and large only do assessment tasks that are compulsory and have marks attached to them. Traditionally, for translation, this has meant that, in conjunction with formal lectures and classroom activities, students complete a series of translation assignments over the semester. Completed assignments are graded and returned to students with an indication of points in the text at which their translation is considered inadequate or inaccurate. Where teaching resources make it possible, individual feedback is provided. More often than not, however, this feedback must take the form of a 'fair copy' which students can examine and reflect on in their own time if they are so inclined. Progress made in the semester can then be assessed through a final examination.

The Web as a Resource for Translators

The web has undeniably enhanced the task of translating, and students need to understand its full potential. It allows ready access to an array of online dictionaries and grammars. It provides spelling and grammar checkers for a generation of translators who have become familiar with their operation and limitations by working with them in their first language. And perhaps most importantly, its search engines give instant access to a wealth of information previously available only to the extraordinarily well-read or to those blessed with extensive libraries and the time to locate and consult the relevant documents they house.

It is beyond the scope of this article to provide an inventory of the ways the web can be called into service by the translator, but the following examples drawn from actual translation assignments will serve as illustrations.

Tracing a speaker's actual words

Students were asked to translate a French newspaper report on the mysterious death of Australia's first cloned sheep (Matilda). Included in that report, in quotation marks, was a remark made by the director of the Research Centre where the death had occurred: 'Lors de son dernier examen samedi elle était remarquablement tonique'. The reporter putting the Australian scientist's words into French had only a responsibility to convey the meaning of the original completely and accurately in the other language (it should be noted, however, that by surrounding something expressed in French that was said in English, the quotation marks are being made to fulfil a modified function). The person translating the words contained in those quotation marks back into English, however, is in a predicament. If they follow the same policy as the person who put them into French, they could come up with a number of 'satisfactory' alternatives (e.g. At the time of her last check on Saturday, she was remarkably healthy; She was remarkably fit on Saturday when we last examined her; At the time of her last examination on Saturday, she was in remarkably good shape). Unless the scientist's original words can be ascertained, the ethical translator will have a bad conscience about using the quotation marks, as they can have no certainty that the words they are ascribing to the original speaker were said, and if they omit the quotation marks and present the segment as indirect speech, they have not been faithful to the way it was presented in the French they are working from. A web

search in English solved the dilemma by determining that the actual words were: 'On Saturday when she was last inspected, she was remarkably healthy.'

Choice of the most apt synonym

The original French of an encyclopedia entry on the Louisiana Purchase said 'la région fut visitée en 1682 par Cavelier de La Salle qui descendait le Mississippi'. It was largely thanks to the web that the teacher was able to supply the following feedback to the student who translated 'qui descendait le Mississippi' as 'who was sailing down the Mississippi': (i) Except when applied to large (usually ocean-going) vessels, the verb 'to sail' usually implies that the boat has sails. In the case of De La Salle travelling down the Mississippi, the vessels were canoes. See, for example, the site on a re-enactment of La Salle's expedition at http://www.personal.psu.edu/faculty/g/a/gal4/LaSalleExpedition2.html (ii) The use of the 'was ...ing' form is a little unusual here, as it leaves readers with a sense of incompleteness (i.e. anticipating the construction 'he was sailing down the Mississippi', 'as he travelled down the Mississippi'.

Syntax

A web search can be used as something of a universal concordancer and thus serve as a guide to syntax. An article on France's involvement in Vietnam in the 1950s contained the line: 'Le général de Lattre de Tassigny, nommé haut-commissaire en Indochine le 7 décembre 1950...' The expression 'haut-commissaire en Indochine' was translated by the majority of students as 'High Commissioner in Indochina', or 'High Commissioner of Indochina'. This demonstrates the fact that even students whose L1 is English are influenced by L2 constructions, or else are unfamiliar with the jargon of particular circles. Moreover, without a clear demonstration to the contrary, they are likely, once they have committed themselves to a form, to be reluctant to accept that their version is not an acceptable variant – after all, they are native speakers! By conducting a Google search with the words 'High Commissioner' + [any of the numerous countries in which Australia has a High Commission, e.g. Kenya, Canada], it was possible to demonstrate convincingly that the accepted expression is 'High Commissioner to...' It can be very difficult, if not impossible to gather such information even from the best of dictionaries.

The web can be used to determine whether acronyms or sets of initials in one language have an accepted equivalent in another; to find the official name of an institution in one or more languages; to work back from an approximate equivalent in the foreign language to the exact term in the first language; to gain an accurate picture of historical or geographical context which in turn can have a bearing on word choice, or to locate parallel documents which can be of assistance to the lay translator forced to deal with specialist jargon.

There is one type of web-based resource, however, that justifiably causes mixed reactions amongst teachers of translation, and that is online machine translation such as AltaVista's Babelfish which offers free of charge a version of the Systran system capable of translating between a large number of language pairs. The system, which has been modified and refined over almost 30 years of service in the European Union, is extremely sophisticated and continues to improve. It is used in numerous intergovernmental

institutions such as NATO and the International Atomic Energy Authority (Hutchins 2003, p. 9).

Instructional Advantages of Systran

It is possible to use Systran in a variety of ways to enhance a course in foreign-language translation. Whatever the activity, students are almost invariably brought back to thinking about the differences between the ways machines and humans process language. And, rather than seeing machine translation as a magic wand, they gain from first-hand experience insights such as those expressed by Schultz (1994 p. 2), that...

'natural language (written or spoken) is highly complex and ambiguous. Any possibility of designing a system in terms of large scale engineering rather than in terms of runnable specifications, i.e. computational solutions to pre-selected language problem areas, which could cope with most complexities of language, must remain remote for the foreseeable future.'

and by Ramm (1994 p. 7), that...

'One of the things that is still significantly different between human and machine translation is the kind of linguistic unit on which the translation processes operate: A human translator hardly ever translates a single sentence in isolation. Instead, sentences and expressions to be translated are interpreted in the context of other sentences and expressions and against the background of some situational and cultural environment. ... what is natural for human language processing, i.e. the interpretation of natural language expressions with respect to the textual and situational context in which they occur, poses very hard problems for a computational modelling and processing.'

AltaVista's caveat reads as follows:

'Remember that a computer -- not an actual human translator -- translates the text. Computerized translations often miss subtle meanings of words and don't accurately present many common sayings. AltaVista Translation Assistant provides you with a tool to translate a grammatically correct document into something comprehensible, but not perfect.' (<u>http://babelfish.altavista.digital.com/translate.dyn</u>)

The author regularly uses three demonstrations in the early stages of his translation course. The first relates to what is often termed 'gisting', the second to classic 'translation traps', and the third to 'ping-pong translation'.

"Gisting"

Quite clearly, machine translation has revolutionised international communication, and systems such as Systran are incredibly sophisticated and constantly improving. It would

be a parochial teacher indeed who did not encourage students to view this as a positive step! It is therefore important to give them a sense of the power of a service such as Babelfish from the early stages. A simple but effective exercise consists of having students translate a short, grammatically accurate article from L2 to L1, and to compare their translation with a machine-generated one. The usual reaction is one of surprise – both at what the machine is capable of doing, and at what it fails to recognise. From this, they can develop an appreciation of the Systran system's capacity to perform what Lockwood (1999 p. 10) terms 'gisting translation' (i.e. 'translation purely for understanding, rather than for publication') and Leclercq (1999 p. 27) calls 'draft translation'.

"Translation Traps"

Students in the author's class quickly become aware of what he has dubbed 'Translation Traps', as mastering and maintaining them is an integral part of each semester's language work in their second and third year of study.

The handout distributed to students provides the following explanation:

"In the attempt to communicate in French many ideas that are expressed by simple and commonplace expressions in English, intermediate foreign-language students, quite reasonably, have recourse to word-for-word translation, only to discover that the basic grammar and vocabulary they have already mastered let them down ...expressions like the first ten pages; I am hungry; she is well; we are enjoying it; Come and see; a German lesson; She is ten minutes early; He approached me; They ran faster and faster; Can you do without money?; whatever we think...

Such expressions, an integral component of most of the old-fashioned grammartranslation textbooks, are by and large overlooked in more recent course materials. Yet they continue to pose problems for genuine foreign-language learners who have insufficient contact with the written and spoken norms outside of the classroom to pick them up through natural exposure or authentic communication.

'Translation Traps' groups the most common problematic expressions to provide an opportunity for concentrated study and drilling. It is hoped that this process will alert learners to occasions on which they cannot rely on a mechanical application of their basic language skills to get them through, and help them come to terms with linguistic obstacles which might otherwise elude their notice for many years and unnecessarily impede the expression of the simplest ideas."

Each semester students are given a series of some 300 expressions broken down into 10 sets. The 10 sets of expressions are discussed in lectures over the semester. The computer laboratory offers software allowing students to quiz themselves on the material, and it is tested in detail in the final examination.

In their translation class, students are shown the mixed success of Systran in handling even these basic problems (Fig. 1) and are encouraged to discuss the source of the various problems.

Enalish	a = a + a + b + b + a + a + b + b + a + b + b	Dahalfish tuanalation
English	acceptable translation(s)	Babelfish translation
thirty francs a kilo	trente francs le kilo	trente francs par kilo
They are writing letters.	Ils écrivent des lettres.•Elles écrivent des letters.	ils sont des lettres d'écriture
the house I like	la maison que j'aime	la maison I comme
They have many ideas.	Ils ont beaucoup d'idées.•Elles ont beaucoup d'idées.	ils ont beaucoup d'idées.
He doesn't talk very much.	Il ne parle pas beaucoup.	Il ne parle pas beaucoup.
They read a lot.	Ils lisent beaucoup.•Elles lisent beaucoup.•Ils ont beaucoup lu.•Elles ont beaucoup lu.	Ils ont lu beaucoup
They run fast.	Ilscourentvite.•Ilscourentrapidement.•Ellescourentvite.•Ellescourent rapidement.	Ils fonctionnent rapidement.
a fast train	un train rapide	un train rapide
I am tired.	Je suis fatigué.	je suis fatigué.
I am hungry.	J'ai faim.	J'ai faim.
I am well.	Je vais bien.	Je vais bien
I am happy.	Je suis content.•Je suis heureux.	Je suis heureux.
I am afraid.	J'ai peur.	J'ai peur.
We are hot.	Nous avons chaud.	nous sommes chauds.
This coffee is hot.	Ce café est chaud.	Ce café est chaud.
She is speaking to them.	Elle leur parle.	Elle leur parle
the first of June	le premier juin•le 1er juin	le premier juin
the ninth of September	le neuf septembre•le 9 septembre	le neuvième septembre
after the start	après le début	après que le début
After reading the book, I went out.	Après avoir lu le livre, je suis sorti.	après lecture du livre, je sois sorti.
Fig. 1: Babelfish management of some classic 'Translation Traps'		

Fig. 1: Babelfish management of some classic 'Translation Traps'

"Ping-Pong Translation"

No matter how sophisticated machine translation has become, the system does not think and does not respond to the broader environment. This can be demonstrated with absolute clarity by repeating the process of what Richmond (1994 p. 73) terms 'backward translation' – i.e. translating back into L1 a document that has been translated into L2 – and comparing the back-translated version with the original. Thanks to the speed of online machine translation, this activity can be repeated ad infinitum in a process that might be dubbed 'ping-pong translation'.

The author uses a number of illustrations of English-to-French-to-English-to-French-to English machine translation with his students, including a 'gone out' message retrieved from a door, instructions for jacking up a car, and the words of the Australian national anthem. However, it is the example reproduced in Fig. 2 that gives the students the clearest demonstration of the machine's limitations. It presents the 'ping-ponged' sequence of an excerpt from a letter found discarded in a Sydney suburban street. It is from an irate adolescent girl who feels she has been betrayed by one of her close girlfriends and is determined to let that friend know just how she feels and why. Students very quickly understand that a culturally sterile, contextually restricted, socially, and gender-neutral, the formula-driven machine is capable of delivering ludicrous absurdities with the same speed, authority, and equanimity as it generates intelligible draft translations. They see that they can beat the machine hands down when it comes to intuitive recognition and accurate interpretation of semantic units and cultural context despite, or because of, unconventional grammar, punctuation, and spelling.

ORIGINAL

How am I leaving you out I treat you and rebekah the same and why say that I always stay at rebekahs house thats none of your business cause I cant stay over your house (remember) You might think where splitting up Because where in different classes. I dont want to start a fight But all I can say is I cant trust you anymore and dont try and make up some Bull Shit cause you told Clare and thats it you cant do nothing about it now.

1: 1st English-to-French Translation

Comment AM I vous me laissant dehors vous traitent et rebekah les mêmes et pourquoi la parole que je n'en reste toujours aux thats de maison de rebekahs aucune de votre cause d'affaires je biseautent le séjour au-dessus de votre maison (rappelez-vous que) vous pourriez penser où fractionnant puisqu'où dans différentes classes. Le dont I veulent commencer un combat mais tout que je puis dire est moi biseaute désormais la confiance vous et essai de dont et compose une certaine cause de shit de Bull vous avez dit Clare et thats il vous biseauté ne faites rien à son sujet maintenant.

2: 1st French-to-English Translation

How AM I you leaving me outside treat you and rebekah the same ones and why word that I always remain about it with the thats of house of rebekahs none of your cause of businesses I bevel the stay above your house (point out you that) you could think where splitting since where in various classes. Whose I want to begin a combat but very that I then to say is me bevels from now on confidence you and test of which and composes a certain cause of shit of Bull you said Clare and thats it you bevelled do not do anything about it now.

3: 2nd English-to-French Translation

Comment AM I vous me laissant le festin d'extérieur vous et rebekah les mêmes ceux et pourquoi le mot que je n'en reste toujours à son sujet avec les thats de la maison des rebekahs aucune de votre cause des entreprises I taillent le séjour au-dessus de votre maison (vous précisent que) vous pourriez penser où se dédoublant depuis où dans diverses classes. À qui je veux pour commencer un combat mais très c'I puis à dire est moi confiance de biseaux dorénavant vous et l'essai dont et compose une certaine cause de shit de Bull que vous avez dit que Clare et thats il vous avez taillé ne faites rien à son sujet maintenant.

4: 2nd French-to-English Translation

How AM I you leaving to the feast of outside you to me and rebekah same those and why the word that I always remain about it about it with the thats of the house of the rebekahs none of your cause of companies I cut the stay above your house (specify you that) you could think where duplicating itself since where in various classes. With which I want to begin a combat but very it I then with saying is me confidence of bevels henceforth you and the test whose and composes a certain cause of shit of Bull which you said that Clare and thats it you cut do not do anything about it now.

Fig. 2: Babelfish 'ping-pong' translation of the vernacular.

Instructional Drawbacks of Systran

With regard to the AltaVista translation service, the student of translation is in an entirely different position from office personnel using it in an attempt to communicate with clients or colleagues across a language barrier, or monolingual web surfers trying to understand information on a page they have recognised as potentially useful but which, being expressed in a foreign language, is unintelligible.

Systran impacts negatively on the teaching of translation when students simply feed the French passage they have been given as an assignment through the translation service and submit the English output for assessment. The motivation for this course of action can vary. For the English-speaking student in an Australian class, it can usually be attributed to lack of time, lack of energy, or lack of imagination, coupled with a lack of scruples or a lack of linguistic insight. In the case of the student whose native language is neither English nor French, it may be the result of sheer desperation. They may be prepared to back the machine against themselves. And, scruples aside, they may be right to do so, given that, as Anderson (1995, p. 68)points out 'The current major Machine Translation (MT) evaluation effort, funded by the Advanced Research Projects Agency (ARPA), shows that when compared to expert human translators, MT systems perform only about 65% as well on the average.'

Regrettably for the unmotivated, disorganised, or desperate student, however, there are compelling reasons why submission of Babelfish's work as their own is unacceptable.

To begin with, the University's Code of Practice for Students specifies that they must submit original work for assessment, without plagiarising or cheating, abiding by the University's policies on plagiarism. For them to be awarded marks for Babelfish's work is also unfair to those students who have invested the intellectual effort and time into producing an original translation. From the lecturer's point of view, a translation produced with no intellectual input from the student has no instructional value. It is a waste of time to correct it. It also defeats the main objective of continuous assessment, which is to have students improve their knowledge and skills bases by building on the experience of successive translation exercises across the semester.

Strategies for Accommodating Babelfish

Given that students are the ones inclined to use Babelfish, and that it is other students whose work is devalued when their fellows take the easy way out, it seemed natural to solicit input from them when looking for ways of addressing the problem. Discussion with a third-year class yielded a number of suggested solutions. Students in this class have had a gradual initiation to translation in the course of their second year when they translate 6 short authentic French passages into English as part of larger language assignments, as well as 12 online 'Translator Choice' cognitive development activities (McCarthy 2003). The solutions they proposed are reviewed below, with a discussion of the perceived merits and drawbacks of each.

Solution 1: Grade Babelfish translations like any other.

Two assumptions underlie this suggestion. The first is that, even with the limited experience in translation gained in the course of their second-year activities, students can produce a better translation than Babelfish. The second is that the range of styles and registers covered in the passages set for third-year translation assignments will almost certainly at some point make Babelfish produce something whose accuracy, under the scrutiny of the lecturer, will be valued at considerably less than Anderson's already quoted 65% 'average'.

Merit: The solution creates a rule that is easy to apply.

Drawback: It overlooks, and perhaps even encourages, plagiarism, and awards 'Babelfish students' with marks they have not earned. It means that the only penalty the 'Babelfish students' incur is the loss of the number of marks separating the Babelfish version from an 'honest' translation – and in some instances, this might be quite small. It requires the lecturer to spend time marking a machine's work, and the exercise has taught the 'Babelfish student' little or nothing about translating.

Solution 2: Treat the use of Babelfish like any other form of cheating, award no marks for it, and impose the full weight of the Faculty's plagiarism policy on the offending student.

Merit: This would no doubt act as a strong deterrent to the use of Babelfish in translation assignments, penalise plagiarism, and eliminate the injustices of Solution 1.

Drawbacks: There are many points in a translation where honest students and Babelfish come up with the same wording. In the great majority of cases, it would be very difficult to 'prove' that the wording was produced by Babelfish.

Babelfish is not the only translation system available to students, and it would be time-consuming to generate a full set of machine versions and forensically difficult to prove a great deal from them.

Solution 3: Give students only 'tricky' texts (i.e. texts whose context, vocabulary, figurative language, or unconventional constructions would make it impossible for Babelfish to earn a passing grade).

Merit: It stops Babelfish from passing the course. Drawbacks:

It ignores the plagiarism issue and other injustices.

It is intellectually restrictive and defeats one of the principal objectives of the translation course which is to give students an experience of the problems involved in translating a wide range of styles and registers.

It requires the lecturer to second-guess Babelfish or to run all proposed passages through Babelfish and evaluate its performance before setting them as assignments. Solution 4: Eliminate assignments and either require all translations to be done under exam conditions or have only one exam translation at the end of the session.

Merit: This successfully neutralises the Babelfish factor.

Drawbacks:

It deprives students of the benefits of sequential learning.

It penalises students who are susceptible to stress and do not perform well under exam conditions, or whose individual approach to translating is incompatible with the exam situation.

It reduces to a few hours the amount of time in the semester that students devote to developing their practical translation skills.

It deprives students of the opportunity to use a wide range of resources, including those offered by the Web, in the production of their translation. It discourages students from using others as sounding boards in assessing whether their translations are idiomatic. It deprives them of the opportunity of revisiting and amending their translation a day or two after completing it, once they have created sufficient distance from it to be able to view their work with some measure of objectivity.

Solution 5: Have regular lessons based on the deficiencies of machine translation. Merit: Students would learn to reflect on the principles of the machine and human translation.

Drawbacks:

It does not stop students from submitting a Babelfish translation.

If done too regularly, it would have to be at the expense of other equally important facets of the course.

Solution 6: Point out to students that using Babelfish deprives them of opportunities for academic development.

Merit: Students may come to appreciate that they are handicapping their academic development.

Drawback: There is no guarantee that in-principle knowledge of the likely negative consequences of their behaviour will be translated into practice.

Solution 7: Focus the grading of student translations on the gap between Babelfish and a publishable professional human translation.

Merit: It neutralises the Babelfish factor. Drawbacks:

It avoids dealing with plagiarism and associated issues.

It provides no recognition for students who have invested effort into getting the same things right that the team of professional linguists designing the Systran system has managed to get it to do correctly.

Solution 8: Impose severe penalties on mistakes that are patently machine-generated. (e.g. when Babelfish translates the French 'lors du déchargement des cartons de cigarettes' (= while the boxes of cigarettes were being unloaded) as 'at the time of the unloading of the paperboards of cigarettes')

Merit: This has the potential to 'catch out' students who submit Babelfish's work. Drawbacks:

It avoids dealing with plagiarism and associated issues.

It focuses on a very limited number of items in each translation at the expense of others which may be of equal linguistic significance.

It has the undesirable consequence of making the task of the lecturer in grading, and the focus of students in evaluating their mistakes, Babelfish driven.

Solution 9: Require students to submit a draft of their translation prior to submitting the final version.

Merits: This would involve little or no extra work for the honest student. At the same time, it would make things very hard for the Babelfish student who would have to learn how to mimic the drafting stage and to convince the teacher that they had gone through a process they have in fact side-stepped. It may be easier for them to do the translation. Drawbacks:

As the drafting process is no doubt different for different students (and for the lecturer), it may take some time for the lecturer to develop the skill of distinguishing the real from the phoney, or to be sufficiently confident to pronounce a student's work bogus.

Because many students may perform the entire process of translation electronically, constantly amending and improving their work in the same document, it may be difficult to know at what point they should consider their work a draft or to remember to create a separate version of it at that point.

Solution 10: Have students complete and submit a set of compulsory translations during the semester, but do not count the score towards their final grade for the semester. The award marks only based on the final examination.

Merits: It neutralises the Babelfish factor in the sense that students submitting a Babelfish version would not be gaining marks for it. And it allows serious students to build up expertise in translating throughout the semester.

Drawbacks:

Students could still submit a Babelfish translation simply as a way of fulfilling the submission requirement.

There is no tangible reward for the diligent and honest student.

All the disadvantages of assessing only based on a final examination still apply.

Solution 11: Have students complete translation tasks for assessment in regular class time over the semester.

Merit: It avoids cheating and provides all students with the opportunity to develop practical translation skills.

Drawbacks: Supervision of such activities is a very poor use of teaching resources. It deprives students of a corresponding number of lecture hours in which they could be learning a great many useful things about translation from the lecturer. By having to do all assessable translations in the classroom, students could be deprived of the use of many legitimate resources that would be available to them at home, in the library, or online. It does not accommodate different translation styles and it disadvantages students who work slowly.

Solution 12: Use a Babelfish translation as the starting point for all translation assignments and only award marks for improvements made to it.

Merit: This provides a level playing field for all students.

Drawbacks: This solution stifles creativity. Students never begin their act of translating with a 'blank page' or 'clean slate', and they will be deprived of the opportunity to develop their style of translating. The activity is built on a principle of correcting rather than creating. It may encourage students to become Babelfish dependent when the teacher's objective is in fact for them to become so skilled, professional, and confident in their linguistic ability that they simply do not need the help of a machine.

Conclusion

Online machine translation exists, and students have ready access to it. It is not possible to ignore it, and it is not going to go away. Neither is it realistic to hope to eliminate its use as an easy option for take-home translation assignments simply by issuing a stern decree against it. It is a new parameter in translation teaching, and instructors and students must learn to work with it.

The positive contributions to translator training to be made by systems such as Systran (outlined above) are in no way negated by the fact that the ready availability of

online translation poses problems for formal assessment or may prevent students who become machine-dependent from developing their full potential.

None of the students' suggestions provides a simple, comprehensive solution to the problem. Collectively, however, they stimulate enough thought and provide enough insight for teachers to effectively neutralise the threat of plagiarism impacting on the academic development of the student who may be inclined to allow Babelfish to do the work, on the integrity of the assessment process, and on the teacher's capacity to manage the instructional processes and outcomes of the translation course.

It is probably neither prudent nor helpful to conclude by distilling a single 'best practice' from the 12 suggested 'Solutions'. If there was a single perfect solution, the students would likely have thought of it, in their interest. The starting point for the teacher is to have a clear idea of the overall instructional objectives of the course. These would include:

- enabling students to grasp the key theoretical issues and master the practical skills of translation over the semester;
- requiring students to translate a range of styles and registers;
- neutralising or eliminating cheating via Babelfish;
- using lecture time for teaching students, not examining them;
- avoiding Babelfish versions of translations becoming the basis and focal point of instruction in translation;
- retaining a principle of rewarding students who have submitted original translation work and penalising those who plagiarise;
- focusing on the whole translation and not just individual words or expressions;
- encouraging students to come up with creative solutions and an individual approach to translating.

A second step is to raise students' awareness of their position about machine translation. They should be encouraged to recognise that:

- they can produce a more accurate, idiomatic and polished translation than Babelfish;
- the accuracy of Babelfish translations is variable;
- plagiarism is a very serious matter and that submitting as their work that has been generated by a machine is plagiarism;
- they need to have practice in translating a wide range of styles and registers;
- mastering the art and skill of translation requires the investment of time and effort;
- in order to translate effectively they need to know how to use a wide range of resources;
- use of machine translation systems stifles their creativity, prevents them from acquiring their style, and deprives them of opportunities for academic development;
- contextualisation (textual and cultural) is an important component of accurate translation.

Practical strategies for achieving fair assessment would include:

• having lessons which draw students attention to the deficiencies of machine translation;

- imposing severe penalties on mistakes that are demonstrably machine-generated;
- submitting the first draft of the translation a requirement for at least some of the assignments (preferably those most likely to be 'Babelfish-friendly');
- ensuring that the selection of passages to be translated in assignments included some whose context, vocabulary, figurative language, idiom or unconventional constructions would make it difficult if not impossible for Babelfish to handle satisfactorily;
- attaching a significant proportion of students' marks to end of session exams where teachers and students alike can be sure that each student is being assessed on their work, and where students have an opportunity to demonstrate the progress they have made over the semester.

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