

Evaluating Automatic Translators

Emily Christiansen
Computer Science Discipline
University of Minnesota, Morris
Morris, MN 56267
chri1101 AT morris.umn.edu

Abstract

Machine translation systems are notorious for their problems with accurately translating from one language to another, particularly when different registers of language are used, and words have multiple meanings based on the context. In this paper I provide background information on machine translation and analyze three automatic translators on the web to test their accuracy in translating fifty phrases from English to French and back again.

1 Introduction

A problem with machine translation systems is their low accuracy. Any number of college language courses warn their students against using these tools. The obvious reason is to prevent cheating, but the more troublesome reason is that students may translate a phrase with some ambiguity, get an inaccurate translation, and accept the inaccurate new phrase as correct. For example, using an online translator to translate the English phrase "Can you lend me five bucks?" into French will yield "Pouvez-vous me prêter cinq mâles ?". When one reverses this translation they would expect to find the same phrase that they started with. Unfortunately, the word "bucks" was misinterpreted and now the sentence reads "Can you lend five males to me?" This error is fairly simple to trace, the English-French system assumed the user meant male deer. It didn't take into account that "bucks" is a slang word for "money." Hence, the reversed translation referring to males and not money. Imagine the confusion this would cause in a real-world situation!

When translating by hand, a person reads the word in question in the context of the material surrounding it. By putting the word in context, humans can determine the part of speech the word is, the register of language, and many other factors that determine the meaning of a word. Using that knowledge they infer the meaning of the word from the surrounding material. In computer science this is extremely difficult. The computer doesn't have the instinct to reason about the meanings of words like humans. It doesn't automatically know to put the word into context, instead it chooses the corresponding word from a large bilingual dictionary.

What I will be presenting in this paper is an evaluation of three common Internet translation services. I will be testing their accuracy using fifty phrases taken from [6]. Most people already know that the translations gained from machine translators are no substitute for the careful work of a human. Machine translators have a difficult time with slang and figurative speech. What I want to find out through this experiment is exactly where these errors occur. When scientists know the specific problems with a translation system, they can make the systems more robust by correcting the errors. The methods, results, and conclusions of this experiment are all presented in this paper.

2 Overview of Machine Translation

2.1 History

1930's - Petr Smirnov-Troyanskii theorized that a three-step process is needed for machine translation. An editor who is familiar with the source language will analyze the text and convert the words into base forms according to their syntactic functions [8]. Next the machine finds the equivalent base forms in the new language, and re organizes them into sentences. Finally a second editor who is familiar with the target language corrects the rough translation given by the machine. Already we can see that machine translation systems will require a lot of human intervention. Translators can seize the computational power of machines to do the dirty work of matching the words to their equivalents in the target language. In order to guarantee an accurate translation humans still need to edit the results.

1954 - The first trials were done to see if machine translation is feasible. The trials were very limited in scope and deemed a success. This lead to funding for the further projects in the field. As in the second step proposed by Troyanskii, these projects exploited the speed that the newly invented computer provided by making gigantic bilingual dictionaries that listed equivalent words in the target language for each word in the source language. They had attempted to simplify a complex process based on semantics and context into a simple search problem.

In 1966 ALPAC released a report that criticized machine translation for being slow, inefficient, and requiring twice as much effort as human translation. It also stated that it was no longer worth it to invest money into research in the field. Consequently, funding for machine translation projects ceased in the United States for a decade. During that time, SYSTRAN was developed in Europe, while Taum-Météo was developed in Canada.

In the 1980's widespread access to personal computers increased the demand for machine translation services.

In the 1990's research in machine translation began to focus less on translation based on fixed grammatical rules, but rather on the bodies of text themselves. For the first time the researchers began to look at the context of the document. Because of this shift in focus, more vernacular and slang phrases will be able to be translated. One will no longer be limited to sentences with standard grammar.

More detail on the history of machine translation can be found in [8].

2.2 Approaches to Machine Translation

There are two basic types of Machine Translation systems. The first is a bilingual system, in which translation is done only between 2 different languages. An example of this would be a system that goes between French and English. These systems can be unidirectional, where translation only goes from one source language, say English, to the target language French. The phrases are never translated in the opposite direction, so in the previous example we could not translate a French phrase into English. Bilingual systems can also be bidirectional, where the phrases can be translated in both directions. Most bilingual systems are a combination of two unidirectional systems. In our example we would have one system that translates from English to French, and another that translates from French to English.

Machine translation systems can also be multilingual, with the capability to translate between more than languages. There are numerous possibilities for how this can be done. It may be a collection of numerous unidirectional pairs. One example is given in (cite this) where English can be translated into French, German, or Spanish but not the other way around. Another way is to have some bidirectionality but not between all language pairs. An Example of this would be the same example I just gave, only adding the capability to start with French, German, or Spanish translate it to English. There would be no translation between the three other languages given. By far the most ambitious approach would be to take this latest example a step farther, and enable translation not only from English to French, German or Spanish and vice versa, but also allow translation between French, German and Spanish themselves.

There are three basic strategies to designing machine translation systems. The oldest approach is the direct approach. This approach is so named because each word in the source language is matched directly to the corresponding word in the target language using large bilingual dictionaries. Afterward there will be some small amount of syntactical analysis to make the output resemble the sentence structure in the target

language.

A far more ambitious strategy is the interlingua approach, which is the first of two indirect methods of machine translation. Unlike the direct approach, the indirect approaches contain some sort of intermediate analysis of the phrase being translated. In the interlingua approach, the source text is turned into an abstraction, which contains all of the necessary information to transform it directly into the target text. The abstraction is called interlingual because it is neutral between two or more languages. (cite) One obvious advantage of the neutrality is that it makes adding new languages into the system easier. The only things that need to be added are an analysis grammar, and a generation grammar for each language. The other indirect approach to machine translation is the transfer method. Like the interlingua method there is an intermediate analysis, but this analysis is language dependent. This means that if new languages are going to be added to the system, one needs an analysis grammar, a generation grammar, and also a language-dependent intermediate representation.

The users of machine translation systems can play either an active or inactive role. With an active user the machine may prompt the user to clarify ambiguities. with the user in an inactive role, the machine simply takes the user's input, and then generates output without any help from the user. The three systems I am testing are non-interventionist with the user playing an inactive role.

Both [9] and [10] contain in-depth introductions to machine translation that cover the above topics in more detail.

3 Experimental Methods

My experiment is designed to compare how well three online translators translate the fifty English phrases I chose out of [6]. I chose to use [6] as my corpus because it contains a wide variety of short sentences with a range of different registers of language and figures of speech. Some are entirely slang phrases such as "I got told off!" while others are comparatively straightforward such as "You can go and play as soon as you have finished all of your soup". I picked a diverse range of sentences and phrases to see not only where the problems arise in specific cases of slang, but also to see how well it can handle seemingly normal sentences, which contain a hint of ambiguity.

In phrase 16, "He was obliged to withdraw his candidacy for lack of financial backing" the word "for" is ambiguous. In this case, it means "because of" but for can also be used to indicate the purpose of something as in "a grant for research." This could potentially cause a problem, because the online translators may not take this ambiguity into account and think that the purpose of his candidacy was for a lack of financial backing, and he was obliged to withdraw that. Of course this makes no sense to a human, because one can't be a candidate for "lack of financial backing." However if the target language contains two separate words, one for "because of" and another indicating purpose, the wrong word may be chosen, and the message in the target language may very well be the one that doesn't make sense in context.

I have chosen three online translation tools to evaluate for this project: Alta Vista Babelfish, Google, and Dictionary.com's online translator. All three of them allow the user to input a block of text and with the click of a button, translate that text into another language. They also contain a disclaimer that warns the user that their services are far from perfect, and that in most cases the general meaning will be conveyed, but a completely accurate translation is not guaranteed.

To run the experiment I will be using the English and French languages. English is my native language, and I have spoken French for nine years and I am nearly fluent.

For each phrase, I will translate it into French using one of the three translation services. Then I will take the new French phrases, and translate them back into English. I will then compare the new English phrase with the original and see how the two differ, if at all. If there are differences I will note them, and then look at the French phrase to find out where the errors in translation occurred on a more specific level. The reason why I am doing the two translations is because comparing two English sentences will make the errors easier for me to see at first glance where error analysis will be needed. I will repeat this for every sentence in each of the three translation services.

3.1 Measuring Success

The success of a translation will be considered based on how well the new English sentence, obtained by translating from English to French and back again, conveys the message of the original.

A translation will be considered perfect if the new English sentence matches the original, because the message clearly has not changed in the course of the translation. I am expecting these cases to be extremely rare.

A correct translation will be any new phrase that conveys the same message in the same context as before, with some slight errors such as introduction of ambiguity, dropped gender, and so on.

A translation will be considered completely incorrect if the new sentence completely changes the meaning of the message in the original. I am expecting the cause of this to be because of too much ambiguity being introduced through incorrect word choices, incorrect verb tenses, and incorrect sentence structure. In some cases the resulting sentence will be entirely incomprehensible.

3.2 Classifying Errors

I will count how many of each kind of errors occur and record that data in a table for each system. The types of errors are briefly described below.

Dropped Gender: This error refers to the gender of the subject being dropped, (i.e. him/her becomes "it") or a gender change.

Wrong Word: This one is self-explanatory. The translation system chooses the word to in the phrase.

Literal Colloquialism: This happens when the system translates a figure of speech or colloquialism literally instead of putting it in context.

Wrong Verb Tense: This occurs when a verb is put into the wrong tense over the course of translation.

Nonsense: This is usually a side effect of a figure of speech being literally translated. The resulting sentence is merely a string of words that make no sense together.

Wrong Order: The words are not in the right order in the sentence.

Incomplete Translation: This usually occurred when going from French to English. The new phrases still contained French words that were not translated back into English.

Added Words: This occurs when the translator adds words into the phrase that were not in the original.

Incorrect Articles: All objects have an article attached to them in French, sometimes the translator would not remove these articles when they were not needed in English, or would use "the" instead of "a".

Conjugation Errors: These occurred when a verb was not conjugated correctly.

4 Results

Below are the tables showing how often each kind of error occurred with each translator. I also have listed which sentences contain these errors as well. To see the phrases that the translators generated refer to appendices B, C, and D.

All three translators had one perfect translation, with phrase 12. There were two cases of correct translations which conveyed the same meaning in all three translators. These phrases were 36 and 37. There were slight modifications to these phrases made by the translator, where it picked a more precise verb. For example in 36, "to go around" was replaced by "circulate."

These are the types of errors that the translators made, and the phrases on which they occurred.

4.0.1 Alta Vista Errors

Type of Error	Number of Phrases	Phrases
Dropped Gender	12	5, 7, 11, 16, 24, 25, 28, 30, 38, 39, 48, 49
Wrong Word	33	1, 2, 3, 4, 9, 11, 13, 15, 16, 17, 19, 20, 22, 24, 26, 28, 29, 30, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 46, 47, 48, 50
Literal Colloquialism	13	2, 7, 8, 17, 22, 24, 28, 31, 32, 34, 38, 45, 48, 49
Wrong Verb Tense	2	17, 31
Nonsense	1	8
Wrong Order	7	10, 18, 19, 20, 21, 33, 43
Incomplete Translation	3	19, 35, 40
Added Words	6	21, 27, 31, 44, 47, 49
Incorrect Articles	3	23, 29, 42
Conjugation Errors	2	23, 17

4.0.2 Google Errors

Type of Error	Number of Phrases	Phrases
Dropped Gender	19	5, 7, 8, 11, 14, 16, 18, 22, 24, 25, 27, 28, 30, 34, 39, 45, 48, 49, 50
Word Choice	35	1, 2, 3, 4, 8, 9, 11, 13, 14, 17, 18, 19, 20, 22, 23, 24, 26, 27, 28, 29, 30, 31, 33, 34, 35, 40, 41, 43, 44, 45, 46, 47, 48, 50
Literal Colloquialism	18	2, 3, 7, 8, 13, 17, 22, 23, 28, 31, 32, 33, 34, 42, 43, 46, 48, 49
Wrong Verb Tense	3	6, 31, 50
Nonsense	3	2, 8, 49
Wrong Order	7	10, 18, 19, 20, 33, 45, 48
Incomplete Translation	5	1, 16, 19, 35, 40
Added Words	7	10, 21, 22, 24, 29, 44, 47
Incorrect Articles	6	29, 33, 35, 41, 42, 47
Conjugation Errors	4	4, 17, 23, 31

4.0.3 Dictionary.com Errors

Type of Error	Number of Phrases	Phrases
Dropped Gender	19	5, 7, 8, 11, 145, 16, 22, 24, 25, 27, 28, 30, 31, 38, 39, 45, 48, 49, 50
Word Choice	39	1, 2, 3, 4, 8, 9, 11, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 26, 27, 28, 29, 30, 32, 33, 34, 35, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50
Literal Colloquialism	17	2, 3, 5, 7, 8, 11, 13, 22, 23, 28, 31, 32, 34, 43, 46, 48, 49
Wrong Verb Tense	2	6, 50
Nonsense	3	2, 8, 49
Wrong Order	7	10, 18, 19, 21, 33, 43, 48
Incomplete Translation	6	1, 16, 19, 35, 40, 42
Added Words	11	4, 10, 15, 21, 22, 23, 24, 29, 31, 41, 44
Incorrect Articles	4	15, 29, 42, 47
Conjugation Errors	3	4, 17, 23

5 Conclusions

From the results, I can draw several conclusions about the automatic translators that I evaluated. I was surprised at how similar the results were from translator to translator. What this means is that no automatic translator is necessarily better than the other. They all use a very literal, word for word algorithm to translate phrases. From the results I gathered, the translators appear to use a direct method of translation. Most words were translated literally with no attention paid to context, which is evident from the overwhelming numbers of word choice errors and literally translated figures of speech that occurred in all three translators. It is clear from these results that a large bilingual dictionary is being used to match words with their target language counterparts. There is also a small number of word order changes, and not all of these were done properly, as the results show above.

Overall we can conclude that in order to get a perfect, or even correct translation which occurred in only three cases there can not be any ambiguity. The meaning must be very straightforward. Unfortunately there is no guarantee that the meaning a user has in mind for a word is the one provided in the bilingual dictionary that the translation system uses. These systems are still in a very primitive state, and as they caution on their web sites, are no substitute for a competent human translator.

The next step in my research is to look at algorithms for systems that translate based on context.

References

- [1] Barbara Grosz, Norman Haas, Gary Hendrix, Jerry Hobbs, Paul Martin, Robert Moore, Jane Robinson, Stanley Rosenchein *DIALOGIC: A Core Natural-Language Processing System* In *COLING 82*, 1982.
- [2] Jerry Hobbs *Overview of the Tacitus Project* Artificial Intelligence Center, SRI International.
- [3] Joel R. Tetreault *A Corpus-Based Evaluation of Centering and Pronoun Resolution* University of Rochester, 2001.
- [4] John Bear and Jerry R. Hobbs *Localizing Expression of Ambiguity* Artificial Intelligence Center, SRI International.
- [5] James Allen *Natural Language Understanding*. The Benjamin/Cummings Publishing Company, Inc. 1995.
- [6] Valentine Watson Rodger *Apprendre à Traduire Troisième Édition Revue* Canadian Scholar's Press Inc. Toronto 2004.
- [7] Harrap *Harrap's Shorter Dictionnaire Anglais-Français/Français 6th Edition* Chambers Harrap Publishers Ltd. Edinburgh, UK. 2000.
- [8] Olivia Craciunescu, Constanza Gerding-Salas, Susan Stringer-O'Keeffe. *Machine Translation and Computer-Assisted Translation: a New Way of Translating?* in *Translation Journal*, 2004.
- [9] John Hutchins *Machine Translation: General Overview* in *The Oxford Handbook of Computational Linguistics*. Edited by Ruslan Mitkov (Oxford: University Press, 2003), pp. 501-511.
- [10] W. John Hutchins and Harold L. Somers *An Introduction to Machine Translation* London: Academic Press, 1992.

Appendix A: The Phrases

1. Filmmakers have to bear in mind what their audience wants.
2. I got told off!
3. My father can't stand the heat.

4. I'm glad you went to the exhibition of photography that I told you about.
5. In a year's time he will have forgotten all about it.
6. You can go and play as soon as you have eaten all of your soup.
7. He's the black sheep of the family.
8. Above all: Don't let her drive, she's blind as a bat without her glasses.
9. The merchandise will be packed and shipped at the buyer's expense.
10. My secretary has gone to the nearest bank to exchange some foreign currency.
11. "Anne!" he exclaimed, blushing. "That's not an idea you should take seriously."
12. I would never have believed it if I hadn't seen it with my own eyes.
13. With the noise of the vacuum cleaner, I never even heard the phone.
14. Despite her fatigue the hostage managed to tell the police the whole story.
15. The three teenagers were sentenced to five years in jail for armed robbery.
16. He was obliged to withdraw his candidacy for lack of financial backing.
17. It is expected that the standard of living in Canada will fall sharply in the next decade.
18. "That only confirms what we already knew: that global warming leads to climate change," he said.
19. I hear tissue paper rustling! What pretty thing have you bought this time?
20. As it opened, the door of the wine-cellar creaked ominously.
21. After they looked at easily a dozen fabrics, they asked to see some others of better quality.
22. In his speech last night, the foreign minister stated he had the situation well in hand.
23. If it's Madame Tessier who is looking after you you are in good hands.
24. He's rarely on time because he can never find a place to park his car.
25. The first time I met him he was travelling on an Italian passport.
26. They were going to rent an apartment in Cannes with a view of the sea.
27. She was wearing a pale grey cashmere sweater over a yellow silk skirt.
28. As soon as he realized he had dropped his ticket, he retraced his steps.
29. That year, an American teenager won the gold medal for figure skating at the Winter Olympics.
30. When I saw that she was still in her dressing-gown, I realized I had come too early.
31. Offer them one of the kittens if you want to; but it's ten to one they won't accept.
32. Businessmen often say that time is money.
33. At the time of Louis XIV the court was the focal point of French Life.
34. My secretary loves his new calculator: it's a great time-saver.
35. In the automobile industry, workers are often laid off for weeks at a time.
36. What you said is very interesting; please go on.

37. I hope there'll be enough coffee to go around.
38. What ever came over her? She should never have said such a thing.
39. A stranger came up to her while she was waiting for her daughter.
40. Numerous trees were cut down to make room for that high-rise.
41. Many students had to work their way through university.
42. It was obvious that the burglary was not the work of professionals.
43. To make this orange cake, first work the butter and sugar together.
44. I had been told it was very difficult for foreigners to get work-permits in France.
45. Her nephew's company makes big profits, but he works his staff too hard.
46. I've a good mind to tell your mother what you did to me!
47. For the crew, it was a matter of life and death.
48. In a way, I think he was right to refuse to explain to the press.
49. I didn't understand what he was driving at.
50. He stood aside to let us pass.

Appendix B: AltaVista Phrases

The French phrase is given first, and the new english phrase follows.

1. Les réalisateurs de film doivent considérer ce que leur assistance veut.
The film realizers must consider what them assistance wants.
2. J'ai obtenu dit au loin !
I obtained said to far!
3. Mon père ne peut pas tenir la chaleur.
My father cannot hold heat.
4. Je suis heureux vous suis allé à l'exposition de la photographie au sujet de la laquelle je vous ai dit.
I am happy suited you to the exposure of the photography about which I said to you.
5. Dans un an il aura oublié tous à son sujet.
In one year it will have forgotten all about it.
6. Vous pouvez aller et jouer dès que vous mangerez tout votre potage.
You can go and play as soon as you eat all your soup.
7. Il est le mouton noir de la famille.
It is the black sheep of the family.
8. Surtout : Ne laissez pas sa commande, elle est abat-jour comme batte sans ses verres.
Especially: Do not leave its order, it is lamp-shade like beats without its glasses.
9. Les marchandises seront emballées et embarquées aux frais de l'acheteur.
The goods will be packed and embarked with the expenses of the purchaser.
10. Mon secrétaire est allé à la banque la plus proche échanger une certaine devise étrangère.
My secretary went to the bank to exchange a certain foreign currency nearest.

11. "Anne!" il a hurlé, rougissant. Ce n'est pas une idée que vous devriez prendre sérieusement.
"Anne!" it howled, reddening. It is not an idea that you should take seriously.
12. Je ne l'aurais jamais cru si je ne l'avais pas vu avec mes propres yeux.
I would never have believed it if I had not seen it with my own eyes.
13. Avec le bruit du décapant de vaccuum, j'ai jamais même entendu le téléphone.
With the noise of the pickling solution of vaccuum, I never even heard the telephone.
14. En dépit de sa fatigue l'otage est parvenu à dire à la police l'histoire entière.
In spite of his tiredness the hostage managed to say to the police force the whole history.
15. Les trois adolescents ont été condamnés à cinq ans en prison pour le vol armé
The three teenagers were condemned to five years in prison for the armed flight.
16. Il a été obligé de retirer sa candidature par manque d'aide financière.
It was obliged to withdraw its candidature for lack of financial assistance.
17. On s'attend à ce que le niveau habiter au Canada tombe brusquement dans la décennie suivante.
One expects that the level to live in Canada falls abruptly into the following decade.
18. Cela confirme seulement ce que nous avons déjà su : que le chauffage global mène au changement de climat, il a indiqué.
That confirms only what we already knew: that the total heating carries out to the change of climate, it indicated.
19. J'entends le papier de soie de soie bruir quelle jolie chose vous ont acheté cette fois ?
I intend the tissue paper silk to bruir which pretty thing bought this time to you?
20. Pendant qu'il s'ouvrait, la porte de la vin-cave a grincé sinistre.
While it opened, the door of the wine-cellar squeaked sinister.
21. Après qu'ils aient regardé facilement les tissus une douzaine, ils ont demandé à en voir d'autres d'une meilleure qualité.
After they easily looked at fabrics a dozen, they asked to see of them others of a better quality.
22. Dans son discours la nuit passée, le ministre des affaires étrangères a énoncé qu'il a eu le puits de situation à disposition.
In his speech the night spent, the Foreign Minister stated that it had the well of situation at disposal.
23. Si c'est la Madame tessier qui s'occupe de vous vous sont dans de bonnes mains.
If it is the Madam tessier who occupies herself of you are in good hands.
24. Il est rarement à l'heure parce qu'il peut ne jamais trouver un endroit pour garer sa voiture.
It is seldom per hour because it can never not find a place to park its car.
25. La première fois que je l'ai rencontré il voyageait sur un passeport italien.
The first time that I met it it travelled on an Italian passport.
26. Ils allaient louer un appartement à Cannes avec une vue de la mer.
They were going to rent an apartment in Cannes with a sight of the sea.
27. Elle portait un chandail gris pâle de cachemire au-dessus d'une jupe en soie jaune.
She was wearing has blade grey cashmere sweater over has yellow silk skirt.
28. Dès qu'il a réalisé il avait laissé tomber son billet, il a retracé ses étapes.
As soon as it realized it had dropped its ticket, it recalled its stages.

29. Cette année, un adolescent américain a gagné la médaille d'or pour la figure patinage aux Jeux Olympiques d'hiver.
This year, an American teenager gained the gold medal for the figure ice-skating with the Winter Olympics.
30. Quand j'ai vu qu'elle était toujours dans sa robe de chambre, j'ai réalisé que j'étais venu trop tôt.
When I saw that it was always in its dressing gown, I realized that I had come too early.
31. Offrez-leur un des chatons si vous voulez à ; mais il est de dix à un qu'ils n'accepteront pas.
Offer to them one of the kittens if you want with; but it is ten with one which they will not accept.
32. D'hommes d'affaires parole souvent que le temps est argent.
Businessmen word often that time is money.
33. À l'heure de Louis XIV la cour était le point focal de la vie française.
With the Louis XIV time the court was the focal point of the French life.
34. Mon secrétaire aime sa nouvelle calculatrice : c'est un grand temps-épargnant.
My secretary likes his new computer: it is a large time-saver.
35. Dans l'industrie d'automobile, des ouvriers sont souvent congédiés pendant des semaines à la fois.
In the industry of car, workmen are often congédiés during weeks at the same time.
36. Ce que vous avez dit est très intéressant ; veuillez continuer.
What you said is very interesting; please continue.
37. J'espère qu'il y aura assez de café à circuler.
I hope that there will be enough coffee to circulate.
38. Qu'est jamais venu elle ? Elle devrait jamais avoir dit une telle chose.
What ever came it? It should never have said such a thing.
39. Un étranger a monté à elle tandis qu'elle attendait sa fille.
A foreigner went up to it while it awaited her daughter.
40. Des arbres nombreux ont été réduits pour faire de la place pour cela élevé.
Many trees were reduced to make place for that high.
41. Beaucoup d'étudiants ont dû travailler leur voie par l'université.
Many students had to work their way by the university.
42. Il était évident que le cambriolage n'ait pas été le travail des professionnels.
It was obvious that burglary was not the work of the professionals.
43. Pour faire ce gâteau orange, travaillez d'abord le beurre et le sucre ensemble.
To make this orange cake, work initially butter and sugar together.
44. On me l'avait dit qu'était très difficile pour que les trangers obtiennent travailler-permet en France.
It had been said to me that was very difficult so that the Foreigners obtain work-allows in France.
45. La compagnie de son neveu fait de grands bénéfices, mais il travaille son personnel trop dur.
The company of its made nephew of great benefit, but it works its too hard personnel.
46. J'ai un bon esprit pour dire à votre mère ce que vous avez fait à moi !
I have a good spirit for saying to your mother what you did with me!
47. Pour le servir d'équipier, c'était une question de la vie et de la mort.
To be used it as team-member, it was a question of the life and death.
48. D'une certaine manière, je pense qu'il avait raison le refuser pour expliquer à la pression.
In a certain manner, I think that it was right to refuse it to explain to the pressure.

49. Je n'ai pas compris à ce qu'il conduisait.
I did not understand so that it led.
50. Il s'est tenu de côté nous a laissés passer.
He stood aside to let custom pass.

Appendix C: Google Translator Phrases

1. Les réalisateurs de film doivent considérer ce que leur assistance veut.
The film realizers must consider what them assistance wants.
2. J'ai obtenu dit au loin !
I obtained said to far.
3. Mon père ne peut pas tenir la chaleur.
My father cannot hold heat.
4. Je suis heureux vous suis allé à l'exposition de la photographie au sujet de la laquelle je vous ai dit.
I am happy suited you to the exposure of the photography about which I said to you.
5. Dans un an il aura oublié tous à son sujet.
In one year it will have forgotten all about it.
6. Vous pouvez aller et jouer dès que vous mangerez tout votre potage.
You can go and play as soon as you eat all your soup.
7. Il est le mouton noir de la famille.
It is the black sheep of the family.
8. Surtout : Ne pas laisser sa commande, elle est abat-jour comme batte sans ses verres.
Especially: Not to leave its order, it is lamp-shade like beats without its glasses.
9. Les marchandises seront emballées et embarquées aux frais de l'acheteur.
The goods will be packed and embarked with the expenses of the purchaser.
10. Mon secrétaire est allé au plus proche de nouveau à l'échange une certaine devise étrangère.
My secretary went to nearest again to the exchange a certain foreign currency.
11. Anne ! il a hurlé, rougissant. Ce n'est pas une idée que vous devriez prendre sérieusement.
Anne! it howled, reddening. It is not an idea that you should take seriously.
12. Je ne l'aurais jamais cru si je ne l'avais pas vu avec mes propres yeux.
I would never have believed it if I had not seen it with my own eyes.
13. Avec le bruit du décapant de vaccuum, j'ai jamais même entendu le téléphone.
With the noise of the pickling solution of vaccuum, I never even heard the telephone.
14. En dépit de sa fatigue l'otage est parvenu à dire à la police l'histoire entière.
In spite of his tiredness the hostage managed to say to the police force the whole history.
15. Les trois adolescents ont été condamnés à cinq ans en prison pour le vol armé.
The three teenagers were condemned to five years in prison for the armed flight.
16. Il a été obligé de retirer sa candidature par manque d'aide financière.
It was obliged to withdraw its candidature for lack of financial assistance.
17. On s'attend à ce que le niveau habiter au Canada tombe brusquement dans la décennie suivante.
One expects that the level to live in Canada falls abruptly into the following decade.

18. Cela confirme seulement ce que nous avons déjà su : que le chauffage global mène au changement de climat, il a indiqué.
That confirms only what we already knew: that the total heating leads to the change of climate, it indicated.
19. J'entends le papier de soie de soie bruir quelle jolie chose vous ont achetée cette fois ?
I intend the tissue paper silk to bruir which pretty thing bought this time to you?
20. Pendant qu'il s'ouvrait, la porte de la vin-cave a grincé sinistre.
While it opened, the door of the wine-cellar squeaked sinister.
21. Après qu'ils aient regardé facilement les tissus une douzaine, ils ont demandé à en voir d'autres d'une meilleure qualité.
After they easily looked at fabrics a dozen, they asked to see of them others of a better quality.
22. Dans son discours la nuit passée, le ministre des affaires étrangères a énoncé qu'il a eu le puits de situation à disposition.
In his speech the night spent, the Foreign Minister stated that it had the well of situation at disposal.
23. Si c'est Madame Tessier qui s'occupe de toi vous sont dans de bonnes mains.
If it is Mrs Tessier who deals with you you are in good hands.
24. Il est rarement à l'heure parce qu'il peut ne jamais trouver un endroit pour garer sa voiture.
It is seldom per hour because it can never not find a place to park its car.
25. La première fois que je l'ai rencontré il voyageait sur un passeport italien.
The first time that I met it it travelled on an Italian passport.
26. Ils allaient louer un appartement à Cannes avec une vue de la mer.
They were going to rent an apartment in Cannes with a sight of the sea.
27. Elle portait un chandail gris pâle de cachemire au-dessus d'une jupe en soie jaune.
It carried a pale gray cashmere pullover above a yellow silk skirt.
28. Dès qu'il a réalisé il avait laissé tomber son billet, il a retracé ses étapes.
As soon as it realized it had dropped its ticket, it recalled its stages.
29. Cette année, un adolescent américain a gagné la médaille d'or pour la figure patinage aux Jeux Olympiques d'hiver.
This year, an American teenager gained the gold medal for the figure ice-skating with the Winter Olympics.
30. Quand j'ai vu qu'elle était toujours dans sa robe de chambre, j'ai réalisé que j'étais venu trop tôt.
When I saw that it was always in its dressing gown, I realized that I had come too early.
31. Leur offrir un des chatons si vous voulez à ; mais il est de dix à un qu'ils n'accepteront pas.
Their to offer one of the kittens if you want with; but it is ten with one which they will not accept.
32. D'hommes d'affaires parole souvent que le temps est argent.
Businessmen word often that time is money.
33. À l'heure de Louis XIV la cour était le point focal de la vie française.
With the Louis XIV time the court was the focal point of the French life.
34. Mon secrétaire aime sa nouvelle calculatrice : c'est un grand temps-épargnant.
My secretary likes his new computer: it is a large time-saver.
35. Dans l'industrie d'automobile, des ouvriers sont souvent congédiés pendant des semaines à la fois.
In the industry of car, workmen are often congédiés during weeks at the same time.

36. Ce que vous avez dit est très intéressant ; veuillez continuer.
What you said is very interesting; please continue.
37. J'espère qu'il y aura assez de café à circuler.
I hope that there will be enough coffee to circulate.
38. Qu'est jamais venu elle ? Elle devrait ne jamais avoir dit une telle chose.
What ever came it? It should never not have said such a thing.
39. Un étranger a monté à elle tandis qu'elle attendait sa fille.
A foreigner went up to it while it awaited her daughter.
40. Des arbres nombreux ont été réduits pour faire de la place pour cela élevé.
Many trees were reduced to make place for that high.
41. Beaucoup d'étudiants ont dû travailler leur voie par l'université.
Many students had to work their way by the university.
42. Il était évident que le cambriolage n'ait pas été le travail des professionnels.
It was obvious that burgling was not the work of the professionals.
43. Pour faire ce gâteau orange, travailler d'abord le beurre et le sucre ensemble.
To make this orange cake, to initially work butter and sugar together.
44. On me l'avait dit qu'était très difficile pour que les étrangers obtiennent travailler-permet en France.
It had been said to me that was very difficult so that the foreigners obtain work-allows in France.
45. La compagnie de son neveu fait de grands bénéfices, mais il travaille son personnel trop dur.
The company of its made nephew of great benefit, but it works its too hard personnel
46. J'ai un bon esprit pour dire à votre mère ce que vous avez fait à moi.
I have a good spirit for saying to your mother what you did with me.
47. Pour le servir d'équipier, c'était une question de la vie et de la mort.
To be used it as team-member, it was a question of the life and death.
48. D'une certaine manière, je pense qu'il avait raison le refuser pour expliquer à la pression.
In a certain manner, I think that it was right to refuse it to explain to the pressure.
49. Je n'ai pas compris à ce qu'il conduisait.
I did not understand so that it led.
50. Il s'est tenu de côté nous a laissés passer.
It was held on side let to us pass.

Appendix D: Dictionary.com Phrases

1. Les réalisateurs de film doivent considérer ce que leur assistance veut.
The film realizers must consider what them assistance wants.
2. J'ai obtenu dit au loin
I obtained said to far
3. Mon père ne peut pas tenir la chaleur.
My father cannot hold heat.
4. Je suis heureux vous suis allé à l'exposition de la photographie au sujet de la laquelle je vous ai dit.
I am happy suited you to the exposure of the photography about which I said to you.

5. Dans un an il aura oublié tous à son sujet.
In one year it will have forgotten all about it.
6. Vous pouvez aller et jouer dès que vous mangerez tout votre potage.
You can go and play as soon as you eat all your soup.
7. Il est le mouton noir de la famille.
It is the black sheep of the family.
8. Surtout : Ne laissez pas sa commande, elle est abat-jour comme batte sans ses verres.
Especially: Do not leave its order, it is lamp-shade like beats without its glasses.
9. Les marchandises seront emballées et embarquées aux frais de l'acheteur.
The goods will be packed and embarked with the expenses of the purchaser.
10. Mon secrétaire est allé au plus proche de nouveau à l'échange une certaine devise étrangère.
My secretary went to nearest again to the exchange a certain foreign currency.
11. "Anne!" il a hurlé, rougissant. Ce n'est pas une idée que vous devriez prendre sérieusement.
"Anne!" it howled, reddening. It is not an idea that you should take seriously.
12. Je ne l'aurais jamais cru si je ne l'avais pas vu avec mes propres yeux.
I would never have believed it if I had not seen it with my own eyes.
13. Avec le bruit du décapant de vaccuum, j'ai jamais même entendu le téléphone.
With the noise of the pickling solution of vaccuum, I never even heard the telephone.
14. En dépit de sa fatigue l'otage est parvenu à dire à la police l'histoire entière.
In spite of his tiredness the hostage managed to say to the police force the whole history.
15. Les trois adolescents ont été condamnés à cinq ans en prison pour le vol armé.
The three teenagers were condemned to five years in prison for the armed flight.
16. Il a été obligé de retirer sa candidature par manque d'aide financière.
It was obliged to withdraw its candidature for lack of financial assistance.
17. On s'attend à ce que le niveau habiter au Canada tombe brusquement dans la décennie suivante.
One expects that the level to live in Canada falls abruptly into the following decade.
18. "qui confirme seulement ce que nous avons déjà su : que le chauffage global mène au changement de climat," il a dit.
"which confirms only what we already knew: that the total heating carries out to the change of climate," he said.
19. J'entends le papier de soie de soie bruir! Quelle jolie chose vous ont acheté cette fois ?
I intend the tissue paper silk to bruir which pretty thing bought this time to you?
20. Pendant qu'il s'ouvrait, la porte de la vin-cave a grincé sinistre.
While it opened, the door of the wine-cellar squeaked sinister.
21. Après qu'ils aient regardé facilement les tissus une douzaine, ils ont demandé à en voir d'autres d'une meilleure qualité.
After they easily looked at fabrics a dozen, they asked to see of them others of a better quality.
22. Dans son discours la nuit passée, le ministre des affaires étrangères a énoncé qu'il a eu le puits de situation à disposition.
In his speech the night spent, the Foreign Minister stated that it had the well of situation at disposal.
23. Si c'est la Madame tessier qui s'occupe de vous vous sont dans de bonnes mains.
If it is the Madam Tessier who occupies herself of you are in good hands.

24. Il est rarement à l'heure parce qu'il peut ne jamais trouver un endroit pour garer sa voiture.
It is seldom per hour because it can never not find a place to park its car.
25. La première fois que je l'ai rencontré il voyageait sur un passeport italien.
The first time that I met it it travelled on an Italian passport.
26. Ils allaient louer un appartement à Cannes avec une vue de la mer.
They were going to rent an apartment in Cannes with a sight of the sea.
27. Elle portait un chandail gris pâle de cachemire au-dessus d'une jupe en soie jaune.
It carried a pale gray cashmere pullover above a yellow silk skirt.
28. Dès qu'il a réalisé il avait laissé tomber son billet, il retraced ses étapes.
As soon as it realized it had dropped its ticket, it retraced its stages.
29. Cette année, un adolescent américain a gagné la médaille d'or pour la figure patinage aux Jeux Olympiques d'hiver.
This year, an American teenager gained the gold medal for the figure ice-skating with the Winter Olympics.
30. Quand j'ai vu qu'elle était toujours dans sa robe de chambre, j'ai réalisé que j'étais venu trop tôt.
When I saw that it was always in its dressing gown, I realized that I had come too early.
31. Offrez-leur un des chatons si vous voulez à ; mais il est de dix à un qu'ils n'accepteront pas.
Offer to them one of the kittens if you want with; but it is ten with one which they will not accept.
32. D'hommes d'affaires parole souvent que le temps est argent.
Businessmen word often that time is money.
33. À l'heure de Louis XIV la cour était le point focal de la vie française.
With the Louis XIV time the court was the focal point of the French life.
34. Mon secrétaire aime sa nouvelle calculatrice : c'est un grand temps-épargnant
My secretary likes his new computer: it is a large time-saver
35. Dans l'industrie d'automobile, des ouvriers sont souvent congédiés pendant des semaines à la fois.
In the industry of car, workmen are often congédiés during weeks at the same time.
36. Ce que vous avez dit est très intéressant ; veuillez continuer.
What you said is very interesting; please continue.
37. J'espère qu'il y aura assez de café à circuler.
I hope that there will be enough coffee to circulate.
38. Qu'est jamais venu elle ? Elle devrait jamais avoir dit une telle chose.
What ever came it? It should never have said such a thing.
39. Un étranger a monté à elle tandis qu'elle attendait sa fille.
A foreigner went up to it while it awaited her daughter.
40. Des arbres nombreux ont été réduits pour faire de la place pour cela élevé.
Many trees were reduced to make place for that high.
41. Beaucoup d'étudiants ont dû travailler leur voie par l'université.
Many students had to work their way by the university.
42. Il était évident que le cambriolage n'ait pas été le travail des professionnels.
It was obvious that burgling was not the work of the professionals.
43. Pour faire ce gâteau orange, travaillez d'abord le beurre et le sucre ensemble.
To make this orange cake, work initially butter and sugar together.

44. On me l'avait dit qu'était très difficile pour que les trangers obtiennent travailler-permet en France.
It had been said to me that was very difficult so that the Foreigners obtain work-allows in France.
45. La compagnie de son neveu fait de grands bénéfices, mais il travaille son personnel trop dur.
The company of its made nephew of great benefit, but it works its too hard personnel.
46. J'ai un bon esprit pour dire à votre mère ce que vous avez fait à moi!
I have a good spirit for saying to your mother what you did with me!
47. Pour l'équipage, c'était une question de la vie et de la mort.
For the crew, it was a question of the life and death.
48. D'une certaine manière, je pense qu'il avait raison le refuser pour expliquer à la pression.
In a certain manner, I think that it was right to refuse it to explain to the pressure.
49. Je n'ai pas compris à ce qu'il conduisait.
I did not understand so that it led.
50. Il s'est tenu de côté nous a laissés passer.
It was held on side let to us pass.