A comparative evaluation of CAT tools during the localisation of HTML5 files

CASTRO HERNANDEZ, Laura

Abstract
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LAURA CASTRO

MA Thesis

A comparative evaluation of CAT tools during the localisation of HTML5 files

Supervisor: Dr. Lucía Morado Vázquez

Examiner: Marianne Starlander

Department of Translation Technology

Faculty of Translation and Interpreting

University of Geneva

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Madrid, Novembre, 2015

Laura Castro
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1. Abstract

The new version of HTML introduced in 2014 includes ten new structural elements. The aim of this research project is to discover whether CAT tools are prepared to localise HTML5 or not, and to determine which of the two tools studied, MemoQ 2013 and SDL Trados Studio 2014, is the most suitable when localising a HTML5 website with HTML5 new structural elements. With this purpose, an experiment was designed and implemented at the University of Geneva (UNIGE). Fourteen students of the Faculty of Translation and Interpreting at the UNIGE participated. The experiment lasted approximately 1.5 hours and included an introductory activity with MemoQ 2013 (due to the participants' lesser familiarity with this tool), a background questionnaire, a website localisation task, and a task questionnaire. The results obtained show that both tools are able to process HTML5 and that according to the characteristics evaluated, effectiveness, satisfaction, and context coverage, they are both appropriate for localising a HTML5 website.

Keywords: CAT tools, evaluation, MemoQ 2013, SDL Trados Studio 2014, HTML5, structural elements
2. Introduction

Website localisation was the field of study chosen for this master thesis because it is considered to be the type of localisation which made the industry develop the most, being "a market that currently amounts to over $3 billion worldwide" (Jiménez-Crespo 2013, p.8). What is more, at the beginning of the 21st century, website localisation's market share eclipsed software localisation's one (Jiménez-Crespo 2013, p.10). Moreover, nowadays, websites are mostly designed using HTML coding, a tagging language developed in CERN (European Organization for Nuclear Research) in 1989 by Tim Berners-Lee (W3C 2014b). This language, which is currently being developed by the World Wide Consortium (W3C), has recently released its new version called HTML5. It has introduced new features, and among them, there are new structural elements which are the main subject of this research project. From an academic perspective, an empirical study has been carried out in order to monitor how CAT tools support, modify the new version and specifically how they present the previously mentioned structural elements to translators.

This research project is an evaluation of SDL Trados Studio 2014 and MemoQ 2013, and it aims to respond the following research questions: are CAT tools prepared to localise HTML5? And a more specific one: which tool from MemoQ 2013 and SDL Trados 2014 is the most suitable when localising a HTML5 website with HTML5 new structural elements? It is necessary to mention that the tool's suitability has been assessed according to its effectiveness, user's satisfaction and context adequacy.

The recent research available in the field of CAT tool evaluations includes two master thesis recently defended at the University of Geneva: A Comparative Evaluation of Localisation Tools: Reverso Localize and SYSTRANLinks (Gray 2014) and Évaluation d'une plate-forme de localisation: le cas de reverso localize (Peron 2013). Moreover, another thesis defended at the University of Ottawa, Metrics for Evaluating Translation Memory Software (Gow 2003), and an article about showing how to evaluate CAT tools in the programme of a Computer Assisted Translation MA course called Training translation students to evaluate CAT tools using EAGLES: a case study (Starlander and Morado 2013).

In order to carry out a valid evaluation, an experiment with fourteen subjects was carried out at the Faculty of Translation and Interpreting (FTI) at the University of Geneva. The experiment lasted approximately one hour and a half and it took place in the FTI's computer room. The two
aforementioned CAT tools were chosen for the research because they are currently used in the CAT tool related modules at the FTI and they could be accessed directly from the computer room.

The specific context for this research which has guided the evaluation is the following scenario: a translator with localisation skills (at least s/he has completed one university course in Localisation) and who is studying a Master of Arts\(^1\) in Translation at the Faculty of Translation and Interpreting of Geneva wants to localise a HTML5 website which contains several new structural elements. S/he aims to find out firstly if the tools SDL Trados Studio 2014 and MemoQ 2013 can accomplish this task; and secondly, which of the two is the most suitable to accomplish the task.

This research project has four main chapters without taking into account the introduction and the conclusion sections. In the first chapter, "Literature review", the theory which supports the latter investigation is presented; and the concepts studied are explained and contextualised for the reader to provide an overview of the area of study in which this thesis takes place. Chapter 2, "Research methodology", describes thoroughly how every part of the evaluation was designed and created, and how the experiment was implemented. The third chapter, "Results", shows all the data gathered during the experiment, so to say, the information obtained from the questionnaires and the screen recordings. Consecutively, in the fourth chapter, "Discussion of results", is where the results are interpreted and compared to obtain conclusions.

\(^1\) Or who is in the 3\(^{rd}\) year of the Bachelor of Arts in Multilingual Communication also taught at the FTI
3. Literature review

This section presents a theoretical introduction to the main aspects studied in this research project in order to contextualise the scope of the evaluation carried out. Firstly, Localisation in general and specifically Website localisation, the field in which the research takes place is defined and its most important features are described. Then, an overview about HTML language and the origins of HTML5 is provided. After that, the new HTML5 structural elements considered in the evaluation are presented. In the last section of this chapter, CAT tools are defined, with a particular emphasis on the CAT tools used throughout this research; finally, previous research efforts on CAT tools evaluation will be discussed.

3.1. Website localisation

The Globalisation and Localisation Association (GALA) provides a quite complete definition of the activity carried out in this research project: Localisation (l10n). According to them, localisation "is the process of adapting a product or content to a specific locale or market. Translation is only one of several elements of the localization² process. In addition to translation, the localization process may also include: adapting graphics to target markets, modifying content to suit the tastes and consumption habits of other markets, adapting design and layout to fit translated text, converting to local requirements (such as currencies and units of measure), using proper local formats for dates, addresses, and phone numbers, and addressing local regulations and legal requirements" (GALA 2015). In this research project, the term ‘localisation’ will be used when talking about participants’ translation of the metadata content and the text of the websites altogether during the experiment.

The localisation industry developed mainly in the 1980s and experienced an immense growth since the early 1990s, mostly due to the expansion of the Internet (Esselink 2000, p.5). Localisation companies normally localise their products firstly from English into Japanese and into French, Italian, German and Spanish (FIGS) (Esselink 2000, p.8). Then, they study the possible markets and they localise them into other languages. The localisation industry can only be considered if

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² British English spelling conventions were followed in this research project. However, when quoting, if the author uses the American conventions, these are not modified.
seen as being interlinked with other processes known as GILT (Globalisation, Internationalisation, Localisation and Translation) (Jiménez-Crespo 2013, p.24). This "demands a global and radical adaptation of business structures to prepare for localization from the early stages of product development" (Ibid.). According to Sandrini, internationalisation (i18n) is "the preparation of a product to make it suitable for efficient localization" and globalisation (g11n) is "the global design of a product" (2005, p. 2).

There are different types of localisation such as software localisation, videogames localisation or website localisation. Nevertheless, this research project focuses only on website localisation and this is the reason why it is the only type of localisation which will be described. Since localisation modifies a product to adapt it to a specific locale (Yunker 2003, p.17), website localisation "includes making technical, visual, and textual modifications to [a] website" (Yunker 2003, p.17) because even the most basic website at least contains images, text in different fonts, colours and sizes, and internal and/or external links to other websites among others. A locale "represents a specific combination of language, region, and character encoding" (Esselink 2000, p.1).

As defined by Sandrini, websites make possible to access customers, partners and people from other countries (2005, pp.3-4). In most cases, to localise a website, the following changes need to be done: “rewriting text, translating text, modifying graphics, creating new graphics, changing colours, changing layout, modifying tables, forms, data fields, databases” (Yunker 2003, p.17). In addition, Quah states that it is absolutely necessary to "change the path statements and internal links in the localized HTML files to reflect the new language path" (2006, p.212).

It is said that the best localised website would be one in which the users thought that it was a local company which had created it. However, this may not always be useful for every company since sometimes it is good to keep their individuality as a foreign company. For instance, French winemakers (Yunker 2003, p.18) would let their possible clients know that they are a French company so that they have in mind that their wines attain the French quality standards. In order to accomplish a web localisation process, a group of professionals are needed: "localization engineers, managers, terminologists, QA operators and localizers-translators" (Jiménez-Crespo 2013, p. 29).

There are different types of websites: static, semi-dynamic and dynamic websites. The websites which have been created to carry out the experiment are static. This kind of websites are considered
the most traditional ones and they consist of two or more HTML files linked together which are also interrelated with other files such as images, sound, stylesheets, scripts, etc. (Torres del Rey and Rodríguez V. de Aldana 2014). Semi-dynamic websites include complements to HTML such as Java or Flash which "provide dynamism to the user's experience when browsing the Web" (Morado and Rodríguez 2014). Finally, dynamic websites are "container/template files that are updated by taking content from different databases. [...] They separate design from content" (Morado and Rodríguez 2014)\(^3\).

3.2. **Introduction to HTML and HTML5**

This section introduces the language used to create the websites of the experiment: HTML language and specifically, the latest version of it; ‘HTML5’. HTML stands for Hyper Text Markup Language and it is "the standard file format for displaying pages on the World Wide Web" (Esselink 2000, p.205).

This markup language was created in CERN in 1989 by Tim Berners-Lee (W3C 2014b). It uses tags to generate the content of the website. For instance, "one set of HTML tags may specify the text for a paragraph, another may provide specifics about a photo that is to appear on the page, and still others may control formatting, such as the use of bold or italic fonts" (Jamsa 2014, p.1).

In order to create a HTML file, a text editor is required (Jamsa 2014, p.8). I used Notepad ++\(^4\), a free and open source advanced text editor, to develop the websites used in the experiment, but there are many others. Moreover, web browsers such as Google Chrome, Mozilla Firefox or Safari are the ones which display the websites generated with HTML by interpreting the HTML tags they contain (W3Schools 2015).

HTML5 is a W3C Recommendation which was launched on October the 28\(^{th}\) 2014\(^5\) (W3C 2014b). It introduces new elements and attributes, and also modifies the meanings of some elements "to better reflect how they are used on the Web or to make them more useful" (W3C 2014a).

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\(^3\) The quotes used to define semi-dynamic and dynamic websites have been taken from a presentation showed in 2014 during the Localisation course at the Faculty of Translation and Interpreting in Geneva.

\(^4\) https://notepad-plus-plus.org/

\(^5\) On the 9\(^{th}\) of July 2015, during the process of writing this dissertation, a Working Draft of version 5.1 was published. Our research focuses only in version 5.0 which at the time of writing was the latest approved version by the W3C.
Each HTML element belongs to one category, several categories or none. In most cases, the element is bound to include a specific kind of content. There are seven kinds of content which are defined in the table below: metadata content, flow content, sectioning content, heading content, phrasing content, embedded content and interactive content (W3C 2014b). Moreover, the figure below, adapted from "HTML5: A vocabulary and associated APIs for HTML and XHTML" (W3C 2014b) shows the relationship among these categories.

Figure 1. Relationship among categories

**Metadata content** "is content that sets up the presentation or behavior of the rest of the content, or that sets up the relationship of the document with other documents, or that conveys ‘out of band’ information" (W3C 2014b).

**Flow content** is composed by the majority of the elements that are part of the body of the document (W3C 2014b).

**Sectioning content** represents "content that defines the scope of headings and footers" (W3C 2014b).
**Heading content** "defines the header of a section (whether explicitly marked up using sectioning content elements, or implied by the heading content itself)" (W3C 2014b).

**Phrasing content** "is the text of the document, as well as the elements that mark up that text at the intra-paragraph level. Runs of phrasing content form paragraphs" (W3C 2014b).

**Embedded content** "is content that imports another resource into the document, or content from another vocabulary that is inserted into the document" (W3C 2014b).

**Interactive content** "is content that is specifically intended for user interaction" (W3C 2014b).

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Table 1. Kinds of content

The basic structure of a HTML5 file has slightly changed from previous HTML versions. Now, the first tag of a HTML document has been simplified: `<!DOCTYPE html>` (Jamsa 2014, p.10). This tag "tells the browser the type of content that the file contains" (Jamsa 2014, p.10). Then, there is the root element `<html>`, and the `<head>` element where all the metadata content is included, for instance the `<title>` element, where the name of the web page is introduced (W3C 2015). The `<body>` element incorporates the content of the html document organised in paragraphs `<p>` (W3C 2015). The source code below shows an example of the most basic structure of a HTML5 file:

```html
<!DOCTYPE html>
<html>
    <head>
        <title> Laura Castro's first web page </title>
    </head>
    <body>
        I am a photographer and this web page has been created to display the photographs I have taken when I was in London
    </body>
</html>
```

Figure 2. Basic structure
3.3. **HTML5 structural elements**

HTML5 introduces 28 new elements that did not exist in HTML4 (W3C 2014a). Among these new elements, the ones studied in this research project are the “elements which have been introduced for better structure” (W3C 2014a). These elements are tags which divide the content of a web page or website and organise it in different parts. They are used by web developers to display the information in the web pages (Jamsa 2014, p.382). There are ten new elements for better structure. However, only nine of them have been studied in this research project. The element `<template>` which "can be used to declare fragments of HTML that can be cloned and inserted in the document by script"(W3C 2014a), did not fit with the scenario chosen for our study and therefore was not included. The final nine elements used in the experiment, are presented and explained in table 2. Examples of these elements taken from the websites created for the experiment can also be found below.

<table>
<thead>
<tr>
<th>Structural element</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;section&gt;</code></td>
<td>This element &quot;[identifies] sections of content within a page&quot; (Jamsa 2014, p.386). The best way to use it is alongside with headings from h1 to h6 &quot;to indicate the document structure&quot; (W3C 2014a). See the example below.</td>
</tr>
<tr>
<td><code>&lt;article&gt;</code></td>
<td>This element &quot;represents an independent piece of content of a document, such as a blog entry or newspaper article&quot; (W3C 2014a). See the example below.</td>
</tr>
<tr>
<td><code>&lt;main&gt;</code></td>
<td>This element &quot;represents the main content of the body of a document or application&quot; (W3C 2014a). See the example below.</td>
</tr>
<tr>
<td><code>&lt;aside&gt;</code></td>
<td>This element &quot;represents a section of a page that consists of content that is tangentially related to the content around the aside element, and which could be considered separate from that content. Such sections are often represented as sidebars in printed typography&quot; (W3C 2014a). See the example below.</td>
</tr>
</tbody>
</table>
The header element "represents a group of introductory or navigational aids" (W3C 2014a). See the example below.

This element "represents a footer for a section and can contain information about the author, copyright information, etc." (W3C 2014a). See the example below.

This element "represents a section of the document intended for navigation" (W3C 2014a). It groups the document's internal links (Jamsa 2014, p.390). See the example below.

The figure element "represents a piece of self-contained flow content, typically referenced as a single unit from the main flow of the document" (W3C 2014a).

Thefigcaption is optional and "represents a caption or legend for the rest of the contents of thefigcaption element's parent figure element, if any" (W3C 2014a). The last two elements are normally used together to organise visuals. See the example below.

| Table 2. New structural elements |

The nine structural elements studied in this research project belong to the following categories: <section>, <article>, <aside>, <nav> and <figure> belong to flow content and sectioning content (W3C 2014b). The elements: <main>, <header> and <footer> are considered only flow content, and <figcaption> does not belong to any category (W3C 2014b), since it is a complement of the <figure> element.
The Faculty of Translation and Interpreting (FTI, formerly ETI) is located in Geneva, Switzerland, an international crossroads at the heart of Europe, and boasts approximately 500 students from all over the world and 100 teachers and researchers. Students in this exceptional setting benefit from optimal conditions, numerous computer and audiovisual resources, and one of the best-stocked and equipped specialised libraries in Europe.

The Faculty of Translation and Interpreting (FTI) is one of the oldest centres for translation and interpreting education and research in the world. Students can choose their language combination from Arabic, English, French, German, Italian, Spanish and Russian.
Figure 3. Index web page (website 1)
3.4. CAT tools

A CAT tool or a Computer-Aided Translation tool is a software created for translating which has functions that help professional translators (and localisers) accomplish their daily job. CAT tools were fully integrated in the localisation industry in the early 1990s, providing a great service to
companies who worked with big translation projects (Esselink 2000, p.361). Among the first CAT tools accessible for translators there were basic terminology-management systems (Bowker 2002, p.78). However, CAT tools evolved quickly and started to "include translation memory, terminology, and software localisation tools" (Esselink 2000, p.361), because CAT tools' objective is to assist the translator "by eliminating repetitive work, automating terminology lookup activities, and recycling previously translated texts" (Esselink 2000, p.361).

Professional translators should do research to try to find the CAT tool that adapts best to the work they do and which includes the resources they need to be able to work faster and better (Bowker 2002, p.128). This is the reason why CAT tool evaluations are very useful and important when translators want to choose a CAT tool to work with; and even more essential, when they are going to spend money on purchasing the tool. Nevertheless, "since competing companies develop their own tools, evaluation reports on the performance of the tools they have designed are considered highly confidential. Thus publicly available reports only appear once the tools are ready to be released or already in the market as product reviews for end-users" (Bowker 2002, p.132). Consequently, the evaluation carried out in this M.A. thesis aims to contribute to the scarce field of CAT tool evaluations in a non-confidential and public way, showing that researchers can also be end users who benefit from the findings of the research.

The CAT tools evaluated in this research project are two of the ones which could be accessed at the Faculty of Translation and Interpreting (University of Geneva): SDL Trados Studio 2014 and MemoQ 2013; even though, it has to be mentioned, that there are further developed versions of the tools: MemoQ 2015 and SDL Trados Studio 2015. In both cases, a license needs to be purchased in order to be able to use these programs. MemoQ 2013 R2 translator pro and SDL Trados Studio 2014 SP2 were the exact versions evaluated in this study. They are quite similar; they both have a term base, an automatic quality assurance function, a translation memory and a fully integrated translation environment (MemoQ 2015).
4. Research methodology

This chapter will describe the methodology followed to evaluate MemoQ 2013 and SDL Trados Studio 2014 in the framework of this specific study. The design of the evaluation will be presented in the following section, and after that, the different steps carried out to develop the final and main experiment will be explained. The methodological strategy chosen to give an answer to the questions above mentioned has been empirical research, because it “seeks new data, new information derived from the observation of data and from experimental work; it seeks evidence which supports or disconfirms hypotheses, or generates new ones” (Williams and Chesterman 2002, p.58), and therefore it is the one needed to find out which tool is more suitable to work with the latest version of HTML and its structural elements. More precisely, the empirical research method applied has been the experiment, where the research questions have been tested, then the results obtained have been analysed and this has enabled me to draw some conclusions.

4.1. Creation and design

The seven steps proposed by EAGLES (1999) have guided this evaluation. However, the characteristics assessed in MemoQ 2013 and SDL Trados Studio 2014 have been taken from the ISO/IEC 25010 standards (2011) since they were more updated and appropriate for the purpose of this research which focuses in quality in use: "the degree to which a product or system can be used by specific users to meet their needs to achieve specific goals with effectiveness, efficiency, freedom from risk⁶, and satisfaction in specific contexts of use" (ISO/IEC 25010 2011, p.8). In table 3 appear all the characteristics and subcharacteristics taken into account in the quality in use model.

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⁶ The characteristics "efficiency" and "freedom from risk" are not considered in this evaluation.
Table 3. Quality in use model

Effectiveness

Efficiency

Satisfaction
- Usefulness
- Trust
- Pleasure
- Comfort

Freedom from risk
- Economic risk mitigation
- Health and safety risk mitigation
- Environmental risk mitigation

Context coverage
- Context completeness
- Flexibility

However, in this research project, only three of these characteristics and some of their subcharacteristics are going to be evaluated. Only the ones which are truly relevant for the study – and assess the suitability of the CAT tools– were chosen for the specific context established. The other characteristics have not been used because they did not allow evaluating the suitability to localise a HTML5 website which contains HTML5 new structural elements. Therefore, the characteristics applied have been: effectiveness, satisfaction and context coverage. From satisfaction, the subcharacteristics chosen are usefulness, pleasure and trust, and from context coverage, context completeness is pertinent to be used. These characteristics considered focus on the user’s perception of the tool.

Each characteristic is going to be evaluated in different ways, below there is a summary table with all the characteristics and subcharacteristics, their definitions and how they are going to be assessed to collect the results. Some of the evaluation methods have been carried out by me, for instance the viewing of the recordings to get information about the participants' performance, the verification of the translatable text shown by the tools, and the complete assessment of the "context coverage"
characteristic. However, the rest of the evaluation methods applied are questions included in the task questionnaire (see Appendix I).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Effectiveness: &quot;accuracy and completeness with which users achieve specified goals.&quot; (ISO/IEC 25010 2011, p.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation methods</td>
<td>- Time that participants have spent to accomplish the task with each CAT tool measured using BB Flashback Express.</td>
</tr>
<tr>
<td></td>
<td>- Number of windows open while localising with the tools verified with the recordings of participant's screens.</td>
</tr>
<tr>
<td></td>
<td>- Analysis of the answers to the questions below and checking the recordings to see if participants had used the view pane function (MemoQ), preview (aperçu) and editor function (SDL Trados Studio).</td>
</tr>
<tr>
<td></td>
<td>▪ Have you used the “VIEW PANE” function while translating with MemoQ 2013?</td>
</tr>
<tr>
<td></td>
<td>▪ Have you used the “APERÇU” function while translating with SDL Trados Studio 2014?</td>
</tr>
<tr>
<td></td>
<td>▪ Have you used the “ÉDITEUR” function while translating with SDL Trados Studio 2014?</td>
</tr>
<tr>
<td></td>
<td>▪ If “yes”, how useful have you found it for performing the task?</td>
</tr>
<tr>
<td></td>
<td>▪ If “no”, why not? I did not know this function existed/ Other reasons (please specify)</td>
</tr>
<tr>
<td></td>
<td>- Translatable text shown or not shown by each one of the tools and analysis of the answers provided.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Satisfaction: &quot;degree to which user needs are satisfied when a product or system is used in a specific context of use.&quot; (ISO/IEC 25010 2011, p.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcharacteristic</td>
<td>ISO definition</td>
</tr>
</tbody>
</table>
| Usefulness | "Degree to which a user is satisfied with their perceived achievement of pragmatic goals, including the results of use and the consequences of use." (ISO/IEC 25010 2011, p.9) | -How useful has the tool been while localising the website?  
-How would you rate your overall experience translating with the tool? |
| Pleasure | "Degree to which a user obtains pleasure from fulfilling their personal needs." (ISO/IEC 25010 2011, p.9) | -How easy have you found performing this task with the tool?  
-Which tool have you preferred when completing this task and why? |
| Trust | "Degree to which a user or other stakeholder has confidence that a product or system will behave as intended." (ISO/IEC 25010 2011, p.9) | -How fast do you think the tool has allowed you to perform this task?  
-Which tool has allowed you to perform this task faster and why?  
- How would you rate the quality of the final product after using the tool?  
- Which tool have you found the most adequate for performing this task and why? |
- Do you think you have been able to localise all the website’s translatable text with the tool?

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Context coverage: &quot;degree to which a product or system can be used with effectiveness, efficiency, freedom from risk and satisfaction in both specified contexts of use and in contexts beyond those initially explicitly identified.&quot; (ISO/IEC 25010 2011, p.9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcharacteristic</td>
<td>ISO definition: &quot;Degree to which a product or system can be used with effectiveness, efficiency, freedom from risk and satisfaction in all specified contexts of use.&quot; (ISO/IEC 25010 2011, p.9)</td>
</tr>
<tr>
<td>Evaluation methods</td>
<td>- Verification of how the two CAT tools perform these operations: support HTML5 format, be able to recognise and work with HTML5 structural elements and support the languages the users work with.</td>
</tr>
</tbody>
</table>

Table 4. Summary table of characteristics and evaluation methods

In other words, following the seven steps recommended by EAGLES, firstly the purpose of the evaluation was defined and contextualised by writing the research questions regarding a specific context (step 1 and 2), then the main characteristics and subcharacteristics useful for the evaluation were indicated (step 3), as well as the way to measure and provide scores to each one of them (step 4 and 5), and finally, the actual experiment to carry out the evaluation was made and executed (step 6 and 7). The last two steps will be described in the next sections, since it will be explained how the websites, questionnaires and the activities to do during the experiment were created, and also how the experiment was implemented.
4.2. Participants

There were fourteen subjects who participated in the experiment. All of them were studying Translation at the University of Geneva: thirteen were undertaking the Master of Arts in Translation and one was undertaking the Bachelor of Arts in Multilingual Communication considered the undergraduate degree in Translation at this University. These fourteen participants had taken the Localisation course taught at the University, which is an important aspect regarding the experiment is about website localisation. The full profile of the participants and their technical background are presented in the "5. Results" section.

Participants were personally invited to participate in the experiment. When their answer was positive I contacted them through email sending them a link to an online poll system\(^7\) with several timeslots to choose from. Those timeslots were defined based on the availability of the faculty computer room. On a second email, information regarding their terms of participation and the time requirements was sent. After receiving their answers to the online plot the computer room was booked having into consideration the most voted options. Finally, participants were contacted again to let them know the exact day of the experiment. Participants did not receive any monetary compensation for their participation.

4.3. Website' creation

An important objective of this research project is to evaluate the two chosen CAT tools to see which one is more suitable in the process of localising HTML5 websites containing HTML5 structural elements. Therefore, to be able to accomplish the evaluation, two websites in HTML5 language were created for the participants to localise during the experiment. I used a HTML5 website that my thesis supervisor, Lucía Morado, had created for one of her Bachelor's courses at the University of Geneva called Technologies de l'information et de la communication (Communication and Information Technologies) as a model to create the websites. I modified it using Notepad ++ and adapted it to my experiment's purposes. My supervisor's original website was made using an Adobe Dreamweaver CC 2014 template.

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\(^7\) [http://doodle.com/es/](http://doodle.com/es/)
For the experiment carried out in this research, one of the websites was called "Website 1" (see figure 5 and 6 below and complete source code in Appendix A) and included a "css" folder with the style sheet containing the format and design of the website, an "img" folder with the images present in the website and two web pages with the text and HTML5 structural elements, one called "index" and the other one "contact". The second one was "Website 2" (see figure 7 and 8 below and complete source code in Appendix B) and included a "css" folder and an "img" folder, and also two web pages: "index" and "research". The text and images of the websites were taken from the official websites of the University of Geneva website, in the case of Website 2, and from the website of the Faculty of Translation and Interpreting, in the case of Website 1, which are public and real.
Figure 6. Website 1 (contact.html)

Figure 7. Website 2 (index.html)
The two websites were created in English and participants had to translate them into their mother tongues during the experiment. Both websites contain similar information and the text did not contain any translation or terminology difficulty. The nine structural elements are present in the two websites. When possible, the original title, description, and keywords of the websites were respected and taken from the official websites. However, there were many cases in which the official websites did not provide this kind of information and even though I tried to find other web pages of the University of Geneva (UNIGE) whose information could suit my websites, sometimes it was impossible to find something suitable. In those cases, the descriptions, titles and keywords were recreated as real as possible matching the text appearing in the web page in question. For instance, the title of the research web page in the UNIGE official website in English was: "Excellence of Research – L’université se présente – UNIGE". As you can see, it mixes English and French so I changed the title to one which seemed more accurate: "Excellence of Research – International – UNIGE".

The two websites have nearly the same number of words (409 altogether): Website 1 has 217 words and Website 2 has 194, there is a very small difference of twenty-five words which may correspond to two sentences. The translation task of 409 words prepared for the experiment lasts approximately 1 hour, which follows similar previous experimental efforts: O’Brien (2010, p.261) in her article about eye-tracking stated that "we tend to choose quite short texts for our research studies [and
that] the reasons for 200-300 word texts are numerous and valid. For example, participants could get tired or bored quickly". Besides, Mesa-Lao (2014, p.154) considers that a translation task of 500 words lasting one hour would be appropriate for an experimental task with professional translators used to translate technical texts. Since for this research the translators concerned are going to be students of a Master of Arts (except for one student doing the Bachelor of Arts) and it is not going to be eye-tracking but localisation of websites, the number of words and length of the activity seem suitable. Our hypothesis of time and adequacy of the texts chosen was confirmed after conducting a pilot study (described in section 4.6).

The source code of the web pages created was verified in the W3C validator (W3C 2012). This validator is experimental for HTML5 but both websites (four web pages in total) were successfully checked as HTML5, as shown in the figure below.

![Figure 9. Validation of contact.html (Website 1)](image)

Even though the two websites were identified as HTML5, the program showed a few warnings in each web page. All the warnings made reference to the lack of headings before a "section" structural element (see figure below). Nevertheless, headings were not added before some of the section elements to get rid of the warning signs because the text of the websites was very short. There was only one paragraph per web page and it already had one or two headings depending on the web page.
Web accessibility has been taken into consideration while creating the websites. The guidelines proposed by W3C (W3C 2015) have been followed with respect to the "alt" attribute on images. The function of some of the images in these two websites is decorative since "purely decorative images are visual enhancements, decoration or embellishments that provide no function or information beyond aesthetics to users who can view the images" (Ibid.). In these cases, they suggest using an empty alt attribute (alt="") and this is what has been applied (see an example in the figure below).

![Image Example](img/planet.jpg)
In the case of the logo of the University of Geneva, image which appears in every web page created, since it is an image which only displays text and that is its only function, the same text should appear written in the "alt" attribute (W3C 2015), as shown in figure 12.

One of the images incorporated in Index of Website 2 is more than decorative; it enhances slightly the content of the web page conveying a good feeling about the University and about its students, who study outside in a sunny day regarding the image. This is why according to the W3C guidelines an alternative text has been provided to describe the image so that people with a vision impairment or any other problem can have access to the information given by the image (see figure below).

Figure 11. Decorative image used in index.html (Website 2)

Figure 12. Text alternative for the logo of the University of Geneva

Figure 13. Image in Website 2 which enhances the web page content
There are other cases in which the images were decorative and therefore the empty "alt" followed the image in the source code; however, the images were inserted in a `<figure>` element and also a `<figcaption>` was needed "to identify the caption text" (W3C 2015), as shown in the following figure.

```
<aside>
  <figure>
    <img src="img/researchers.jpg" alt="" width="260">
    <figcaption>Fig1. Researchers at the UNIGE</figcaption>
  </figure>
</aside>
```

Figure 14. Decorative image with figcaption in research.html (Website 2)

The experiment consisted of localising the two websites described in this section. Consequently, the metadata content included in the `<head>` element (see figure 15) was considered important as it was part of the text participants had to translate. In addition, this metadata content contextualises the web page and provides very useful information for SEO (Search Engine Optimization) and web accessibility. Besides, to avoid copyright infringements a disclaimer has been added in the four web pages created (see figure 16).

```
<html>
  <head>
    <meta charset="utf-8">
    <meta name="author" content="Laura Castro">
    <meta name="description" content="The University of Geneva (UNIGE) enjoys a strong international reputation, both for the quality of its research (it ranks among the top institutions among the League Turnover) and its diversity as a hub for scientific excellence and innovation."/>
  </head>
```

(UNIGE) enjoys a strong international reputation, both for the quality of its research (it ranks among the top institutions among the League Turnover).
of European Research Universities) and the excellence of its education.
This acclaim has been won in part due to its strong ties to many national
and international Geneva-based organizations."

<!-- Disclaimer: This website is built for academic research purposes
(test pages) and must not be published online by the participants at
this study. The author declines all responsibility regarding copyright
infringements due to unauthorized online publishing of these pages. -->

Figure 15. Metadata content in index.html (Website 2)

Figure 16. Disclaimer added to the web pages

4.4. Data collection methods:

As mentioned before, the whole experiment consisted of four different parts: background
questionnaire, introductory activity with MemoQ 2013 (called First steps with MemoQ),
localisation task with MemoQ 2013 and SDL Trados Studio 2014, and a task questionnaire.
However, the data was only collected from three of them: the background questionnaire, the task
questionnaire, and from screen recordings of the performance during the exercises with both tools.
All this data was gathered and analysed in the following chapters: "5. Results" and "6. Discussion
of Results".

The translations produced by the participants during the localisation task will not be taken into
consideration. In this study, the main aspect assessed is the suitability of the CAT tools chosen to
localise a HTML5 website. Therefore, I am principally interested in how the tools work during the
localisation process and whether participants were satisfied or not with the experience of localising
a HTML5 website with the tools selected. Moreover, the texts included in the websites are very
simple and do not present any translation or terminology difficulty. What is more, participants were informed before the experiment started that their translations were not going to be evaluated.

Table 5. Parts of the experiment

4.5. Questionnaires
Once the aspects of the evaluation were clear and established, the questionnaires were designed. Here, a description of how the questionnaires were designed is enunciated and also a presentation of the two questionnaires carried out. The information provided by the participants regarding the questions included in the questionnaires will be discussed in the 5. Results section. A questionnaire is a "method of generating data for your research" (Oates 2006, p.219) through questions that respondents are expected to answer truly, and in this research project there were two questionnaires, a background questionnaire and a task questionnaire. The first one was completed before the localisation tasks, and its questions were designed to gather information about the participants' profile. The second one was completed after the localisation tasks and the questions in it were designed to evaluate MemoQ 2013 and SDL Trados Studio 2014 and to collect data about the participants' knowledge of HTML and HTML5.

In addition, two types of questions were used in the questionnaires above mentioned: open and closed questions. Although the majority of questions were closed, because the participants were obliged to select one out of the already pre-defined answers (Oates 2006, p.222), in some occasions, they had "to decide what answer to give" (Oates 2006, p.222), for instance when they had to justify
why they had chosen one tool, the other or both in questions 11, 12 and 13 of the task questionnaire or when they had to describe their experience working with HTML5 (question 17). Besides, among the closed questions, three response formats were applied: the yes/no answers, the 1-5 likert scales and the answers in which they had to select items from lists.

An example of a yes/no answer incorporated in the background questionnaire would be: "Have you used MemoQ 2013 for translating before?" And participants could only say "yes" or "no" to respond. The answers with 1-5 likert scales allowed the participants to rate their answers from 1 to 5, where 1 always represented a low score and 5 a high one. There are many of these questions in both questionnaires; one example would be question 6 of the task questionnaire: "How easy has been doing this task with MemoQ?" And five scores could be provided from 1 being "not easy at all" and 5 being "very easy". The third kind of questions were the ones with lists and where participants had to choose items from the list to give an answer. For instance, in question 18 of the task questionnaire participants were expected to select all the HTML5 structural elements they knew before localising the website from the list shown in the figure below.

HTML 5 structural elements

```
<nav> </nav>
<section> </section>
<article> </article>
<main> </main>
<aside> </aside>
<header> </header>
<footer> </footer>
<figure> </figure>
<figcaption> </figcaption>
```

Figure 17. Answer with items in a list (Task Questionnaire)

In the background questionnaire (Appendix E), participants were required to answer questions about themselves: age, gender, mother tongue and language combination; questions about their studies in Translation: year of studies, if they were doing a Master or a Bachelor of Arts and specialisation chosen if they were studying a M.A. In addition, there were also questions about their experience using Computer Assisted Translation (CAT) tools: if they had taken some courses
which might have provided them more CAT tool knowledge (Localisation, TAO and OAT), if they had worked with the tools evaluated in this research or not and "if yes" how useful they would rate them, how often they used CAT tools and if they had previously worked with a given series of different CAT tools. And finally, participants were asked to provide information about their experience with HTML language: how familiar they found themselves working with it, if they had created a website using HTML, and in case this answer was positive, what program or editor they had used to create it and how they actually designed it, working with the source code or using a WYSIWYG editor.

In the task questionnaire (Appendix I), there were questions for the participants to evaluate each tool separately (section 1 and 2), and questions in which they had to compare their performance with both of the tools and choose one of them or the option "both the same" if they could not find any difference between them (section 3). In addition, in section 4 they were asked about their knowledge and experience translating HTML and HTML5 files. There were also some other questions to collect information about how much they knew about the new HTML5 structural elements and if they could recognise them in the websites they had translated during the experiment. Section 5 evaluated whether the participants had used the main functions available with SDL Trados Studio 2014 and MemoQ 2013 to carry out the localisation tasks: view pane (MemoQ) and SDL Trados Studio's preview (aperçu) and editor (éditeur). If they had used them they were required to rate the usefulness of the function and if they had not, they should justify why they did not. What is more, other questions to collect data about how participants proceeded before they had started to localise the websites, during the localisation process and after it, were included. The last two questions aimed to see if participants had noticed that the websites had metadata content that needed to be localised which was not shown by SDL Trados Studio 2014.

4.6. Pilot study

In order to test the validity of the design of our experiment –questionnaires’ clarity, time allocated, and performance of the tools– a pilot study was carried out on the 18th May 2015 in the computer room of the Faculty of Translation and Interpreting at the University of Geneva. In the same place and under the same conditions as the subsequent experiment, lessons learnt from this initial experience were incorporated into the main study. Two students in their first year of the Master of
Arts in Translation at the University of Geneva undertook the pilot study. They had chosen Specialised Translation as their area of specialisation and had not taken the Localisation or TAO (Traduction assistée par ordinateur) courses. In addition, both had Spanish as their mother tongue and their language combination was English and French into Spanish. Only one of the participants had done the Bachelor of Arts in Multilingual Communication in the University of Geneva and had taken the course called OAT (Outils d’aide à la traduction). Above all, this pilot study was meant to help me verify if the instructions were right and clear. Before they started doing the experiment, I asked them to let me know when they thought that any of the questions were not easily understandable or if there was a mistake in the instructions. It also helped me to confirm that the difficulty and length of the texts chosen was adequate.

Even though the overall experiment went fine, some small issues were encountered. The initial idea was to create the projects with SDL Trados Studio and MemoQ myself, projects for group A and projects for group B, so that participants did not have to dedicate time to do this task. I had created different files of projects, with their correspondent translation memories, two for the Spanish speakers (group A and group B), two for the French and two for the Italian speakers so to cover all the mother tongues of the participants. They just had to choose the project of their mother tongue and group, as indicated in the instructions.

However, the path of the translation memory already created with MemoQ pointed the computer used to create the projects (which was different from the one used during the pilot study) and this made impossible for them to use that translation memory. In addition, the biggest problem was the export of the documents translated with MemoQ because by default, when we export the documents with MemoQ using "export active document", the tool places the document in the folder where the source text you uploaded to the program is. Consequently, as it was me who uploaded the source text, participants could not find their translated documents anywhere because the path pointed to the computer used to create the project. This problem did not happen with SDL Trados Studio because when you create a project with this tool, it automatically creates a specific folder to locate the translated documents (e.g. Es-es when Spanish is the target language) inside the main project folder. In order to solve these issues, I decided it was better that they created the whole project with MemoQ and with SDL Trados Studio because it was not a long process and it avoided
these paths problems. Therefore, the instructions for these exercises were modified and the stage to create the project was added.

As mentioned in section "4.1 Creation and design", before the exercises with SDL Trados Studio and MemoQ, there was an introductory activity with MemoQ 2013 in which they had to upload an article to work with it. However, in the pilot study, the instructions to download the folder I sent to their email accounts with all the documents and folders needed for the experiment were not part of the "First steps with MemoQ" activity, they were in the exercises with MemoQ and SDL Trados Studio which took place after it. This was a mistake because they needed to use the article in that folder, so I changed it for the final experiment.

The recordings of the screen with BB Flashback Express were too large to be placed in their personal drives (H:\PRIVE) provided by the University of Geneva (which have an average capacity of 2 GB per student and that they are frequently used); therefore, they had to locate the corresponding .fbr file in the desktop of the virtual machine. Participants could not zip it and send it to my email account either. When I tried to download it to a USB, the computers of the computer room did not recognise the USB in the virtual machine, but actually this happened because, at that moment, I did not know that there was a way to connect the USB with the virtual machine, clicking on "connect USB device" for the virtual machine to read the USB. One of the participants proposed a solution which helped me gather all the information of the pilot study, s/he suggested using Google Drive to upload the .fbr file and then share it with me. This is how I managed to export these files.

In addition, both participants pointed out some mistakes in the instructions. For instance, the fact that when they opened SDL Trados Studio 2014 there were some adverts which appeared before the first instruction and image of the instructions and they did not know what to do because it was not written in the instructions. This made me realise that I had to be very precise writing the instructions and describe every step carefully. Besides, they mentioned that they spent quite a lot of time trying to find the other document to translate right after translating the first file with SDL Trados Studio because the image and the instructions were not clear enough (trying to find the "fichiers" button). Therefore, I highlighted this button in red in the image that I included in the final experiment.
4.7 Logistics

The final experiment took place at the computer room in the sixth floor of the UNI-MAIL building at the University of Geneva and it was held without any major problems. As mentioned before, fourteen students attended the experiment. However, even though I wanted the experiment to be carried out in one day, I had to adjust to the subjects' availability and the computer room's availability. Therefore, the experiment had to take place at three different timeslots. Two students undertook the experiment on the 28th of May 2015 at 9.15 am. Another student participated in the experiment that same day at 14.15 pm. And eleven people participated in the experiment held on the 29th of May 2015 at 12.15 pm. The instructions which guided the participants in the "First steps with MemoQ" and in the localisation task had been written trying to be as similar as possible to the way in which instructions are provided in the Master courses at the University of Geneva, using some of these instructions as a model. During the whole experiment, participants worked in the Windows 7 virtual machine installed in the computers, because MemoQ 2013 and SDL Trados Studio 2014 were available there. They all worked in the same room and with the same set of computers available in the room. In the image below (figure 18) the type of computers that were used for the experiment are shown: Intel processor, 2.00 Go of RAM memory and using Windows 7.
When participants arrived in the computer room to take part in the experiment, they were asked to sit down in front of a computer. There, they had a participant information sheet (Appendix C) and a consent form (Appendix D) that they were required to read and fill in. Moreover, they were asked to remain silent and to raise their hand if they had any questions. In the participant information sheet, the main details of the experiment were outlined such as: the overview of the experiment, the time commitment, the confidentiality of the participants’ data, the voluntary character of the participation, the fact that participants could leave at any time and that there were no risks associated with the study. The consent form guaranteed that every participant was aware of the nature of the study and was happy to proceed with the experiment. They had to sign it.

Immediately after this, they were given the background questionnaire (Appendix E), which is described in section "4.5 Questionnaires". Afterwards, we started the introductory activity with

Figure 18. Type of computer used during the experiment
MemoQ 2013 called "First steps with MemoQ" (Appendix F). All the participants had the instructions of the activity in paper. I explained every step, following the instructions, and showing them how to do it in a big screen. This task's aim was for participants to familiarise themselves with MemoQ's 2013 environment, in order to be able to do the following activity of the experiment which consisted of using the tool to localise a website. Firstly, subjects had to create a project, import the article they were going to translate, create a translation memory, translate the first six segments of the article and export the translated document. They were shown, both by my explanation and the instructions, how to open and work with the view pane function, and how to interpret all the information that appears in the translation editor.

Then, participants had to do the localisation task. I distributed the instructions of the localisation task to each one of the participants. Some of them were part of group A (see instructions in Appendix G) and some others were part of group B (see instructions in Appendix H). In the end, there were 7 people who had been group A and 7 who had been group B. Since they were sat in lines, I distributed the instructions so that two people next to each other were never in the same group to avoid any kind of influence. Before they started the task, participants were provided with a spare piece of paper so that they could write down their thoughts immediately after using the tool in order not to forget about their observations and opinions on the tools and to be able to answer the task questionnaire correctly.

Firstly, people in group A localised website 1(Appendix A) with SDL Trados Studio 2014. Secondly, they localised website 2 (Appendix B) using MemoQ 2013. Subjects in group B localised firstly website 1 with MemoQ 2013 and afterwards, they localised website 2 with SDL Trados Studio 2014. In the localisation task, also called experiment in the instructions, participants were required to create the project, create the translation memory, or in MemoQ's case, use the one they had already created during the First steps with MemoQ, import the documents, translate the web pages and export the translated documents. They did all these actions with both CAT tools. None of the participants used the paper they were given to note down their thoughts.

Moreover, participants were required, in the instructions, to record their performances with BB Flashback Express. Before they started localising they had to run the program and when they finished they had to stop it and save the recording in the desktop, since the file was too big to be saved anywhere else. In addition, they were asked to send all their translated files to my email
account in a zipped folder once they had completely finished the localisation task. After this, they had to raise their hand to let me know that they had finished, and then, I saved the BB flashback file in a hard drive or uploaded it to my Google Drive[^8] with the rest of their documents in order to have a back up copy with all the information. The last part of the experiment consisted of filling in the task questionnaire (Appendix I), which is fully described in section "4.5 Questionnaires".

The experiment was implemented three times and all of them went fine. There were only a couple of minor problems. There was one participant who forgot the logging details and could not access the university network. Therefore s/he had to work in my session, using my password. Moreover, not many of the participants could send me the translated files to my email. Even though SDL Trados Studio 2014 and MemoQ 2013 were closed, it did not let them zip the folder. I exported all the documents from every participant myself just in case. Also, two participants mentioned that they were trying to use a shortcut in MemoQ and this stopped BB Flashback Express. When this happened, they stopped localising and called me immediately, we then restarted BB Flashback. In some cases, they had to save all the documents in the desktop, because their personal drives (H:\PRIVE) provided by the University of Geneva were full.

5. Results

This chapter presents and describes the results obtained in this research project. Their in-depth interpretation and the tendencies observed when analysing the results as a whole are part of the next chapter: ‘Discussion of results’. All the information included in the following results was gathered during the days when the experiment took place: 28th and 29th of May 2015. Firstly, the results obtained from the background questionnaire are introduced, then the ones from the task questionnaire, and finally the results obtained from the analysis of the videos. Consequently, with the information taken from the background questionnaire, the profile of the participants is defined, indicating their previous experience with CAT tools and with HTML. Besides, from the answers provided in the task questionnaire, SDL Trados Studio 2014 and MemoQ 2013 are evaluated separately by the participants of the experiment regarding their performance during the localisation exercises. Then, the two CAT tools' performance is evaluated comparatively, participants having to decide on which one they preferred or whether they did not prefer any in particular. Next, more information about participants HTML, HTML5 and structural elements' knowledge is revealed. Section 5 of the task questionnaire provides information about how participants performed during the localisation task. Finally, thanks to the analysis of the videos, the time participants spent localising the websites with each tool is specified.

5.1. Participants' profile

Among the fourteen subjects who participated in the experiment, there were twelve women and two men. The participant’s mean age was 26.21, with the oldest subject being 40 and the youngest being 21 years old. Three mother tongues were represented in the experiment: Spanish (N=7), Italian (N=4) and French (N=3). There were six participants who had French-English→Spanish as their language combination, two who had French-English→Italian, two with German-English→French, one with German-English→Italian language combination, one who had French-German→Italian⁹, one with English→Spanish and finally one subject with English-Spanish→French as language combination.

⁹This subject could participate in the experiment because s/he had a very good level of English. The last English exam s/he completed was the Certificate in Advanced English (CAE) of Cambridge.
All the participants were studying at the Faculty of Translation and Interpreting of Geneva and doing their Master of Arts in Translation except for one who was completing the 3rd year of the Bachelor of Arts in Multilingual Communication. The majority of the subjects studying a M.A. were in their 2nd year (N=8 participants), but there were also three of them who were in their 1st year M.A. and two others who were in their 3rd year. All the subjects had taken the Localisation course provided at the Faculty; even the participant who was finishing the Bachelor of Arts attended the course this present year under the lecturer’s approval. Seven of the fourteen subjects took the Localisation course this academic year, five of them studied it one year ago and two of them took it two years ago. In this course, students learn about website localisation, HTML and are taught to create multilingual websites. The fact that the participants of the experiment had this knowledge was vital for this research project because it focuses specifically on website localisation of HTML5 files.

In addition, most of the participants studying the Master of Arts in Translation (N=13) are doing the specialisation in Translation Technologies or “TIM” (N=9), which represents a valuable aspect for the study since this is its research area. The remaining four subjects have chosen Specialised Translation as their area of specialisation. Undertaking the TIM specialisation and having two passive languages in the language combination means that students need to take six courses (30 ECTS credits) of the Translation Technology area out of a total of seventeen (95 ECTS credits) courses to complete a Master of 120 ECTS credits, and doing the Specialised Translation one means that they only need to take one subject (5 ECTS credits) offered by the Translation Technologies area out of the seventeen needed to complete the Master (without taking the 25 ECTS credits of the thesis into consideration).

Besides, the subject who was doing the B.A. also took a course called “OAT” (Outils d’aide à la traduction - Computer-Assisted Translation Tools) which is a subject taught in B.A. where they learn how to use several CAT tools including SDL Trados Studio and MemoQ. This is very important because the experiment evaluates precisely these two CAT tools. There were three other participants who indicated that they had done this OAT course, two of them took this course because they studied a Bachelor of Arts in Translation at the same Faculty, and one participant took this course during her Erasmus year at this Faculty. It is also relevant the fact that nine out of
the thirteen participants studying the M.A. took the subject called “TAO” (*Traduction assitée par ordinateur*) where students learn how to use SDL Trados Studio in depth.

### 5.1.1. Participants’ experience with CAT tools

In the section ‘Experience with Computer Assisted Translation (CAT) tools’ of the background questionnaire, respondents were asked to indicate how often they used CAT tools. Six participants selected the answer "I use them only when I am required to do so". Five participants answered that "they use them only with some of their translation assignments" and the remaining three subjects indicated that they have used them, but that they do not use them for their daily work. It is interesting to mention that none of the participants chose the options "I have never used them" or "I use them in all my translation activities" (see figure below).

![How often do you use CAT tools?](image)

**Figure 19. How often participants use CAT tools**

#### Previous experience with SDL Trados Studio 2014

When asked if they had used SDL Trados Studio 2014 for translating before, twelve respondents answered "yes", and two of them "no". One of the subjects who answered "no" wrote a note next to the answer saying that s/he had not used the 2014 version of SDL Trados Studio but that s/he
had used SDL Trados Studio 2011 before. A few days after the experiment, the other person who answered negatively was asked why s/he had said "no" since this subject indicated in the same questionnaire that s/he had taken the Localisation and TAO courses, where s/he was required to use SDL Trados Studio. S/he said that s/he had only used the 2011 version available at the University of Geneva when s/he took the Localisation course two years ago\(^\text{10}\). The participants who answered "yes" had to specify how familiar they were with SDL Trados Studio\(^\text{11}\). They considered themselves to be familiarized with the aforementioned tool (\(\bar{X} = 3.08, \text{sd} = 0.99\)).

**Previous experience with MemoQ 2013**

The same question was asked but this time the tool concerned was MemoQ 2013: "Have you used MemoQ 2013 for translating before?" Eight participants answered "no", and six answered "yes". The subjects who said they had used MemoQ before rated how familiar they were with this tool\(^\text{12}\), and the results showed that their familiarity with it was low (\(\bar{X} = 1.83, \text{sd} = 0.75\)).

During the planning of this research and before the preparation of the experiment, the fact that students were going to be more familiar with SDL Trados Studio was already taken into account. As students of the FTI of Geneva, it was considered that SDL Trados Studio is taught in more subjects than MemoQ. In order to minimise this difference as much as the scope of this thesis could let me, the participants of the experiment undertook an initial activity with MemoQ 2013 called "First steps with MemoQ" which lasted approximately 20-30 minutes\(^\text{13}\). During this activity, they learnt the basic functions offered by MemoQ and familiarised themselves with the tool in order to be able to accomplish the task prepared in the experiment.

**Previous experience with other CAT tools**

Respondents were also required to select from a predefined list the CAT tools they had used before. In the list, there were five tools (Wordfast, Multitrans, Virtaal, Wordbee and SDL Passolo) and a

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\(^{10}\) In the academic year 2014-2015 the FTI of the University of Geneva started using SDL Trados 2014.

\(^{11}\) Using a 1 to 5 likert scale in which 1 represented being "not familiar at all" with the tool and 5 indicated being "very familiar" with it.

\(^{12}\) Using a 1 to 5 likert scale in which 1 represented being "not familiar at all" with the tool and 5 indicated being "very familiar" with it.

\(^{13}\) The experiment took place three different times with three different groups of people. The first time there were two people and the second time there was only one person and therefore these times the activity with MemoQ went a bit faster than the third time when eleven people participated.
cell reserved for other tools different from these ones that the participants might have used. As shown in figure 20, Multitrans was the tool participants had used the most (N=13), then Wordfast and SDL Passolo (N=11), Virtaal had been used by 6 participants and Wordbee by 5 of them. Only one participant provided additional information and mentioned that s/he had used Omega T too.

![CAT tools used before](image)

Figure 20. CAT tools that participants had used before

### 5.1.2. Participants’ experience with HTML

Participants were asked to rate how familiar they were with HTML. Results showed that their familiarity with HTML was low (X̄ = 2.78, sd = 1.05). Nevertheless, twelve out of fourteen respondents specified that they had created a website using HTML before. And out of these twelve, eight subjects indicated that they had created the website using Notepad ++. One subject stated that s/he had used Kompozer and Notepad ++ to create websites, one subject did not answer this question, one other subject indicated that s/he did not remember what program or editor s/he used and the remaining participant mentioned that s/he had used Wix. Besides, eleven of the twelve participants mentioned before specified that they had created the website working with the source

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14 According to a 1 to 5 likert scale in which 1 was “not familiar at all” and 5 was "very familiar".
15 Online editor used to create websites (http://es.wix.com/)
code. And out of these eleven respondents, four indicated that they had also used a WYSIWYG editor to create websites. One subject specified that s/he had only used the WYSIWYG editor.

### 5.1.1. Tools' performance

The first section of the task questionnaire was an evaluation of the participants' experience using SDL Trados Studio 2014 during the completion of the experiment's exercise, and the second section was the same evaluation of the participants' experience using MemoQ 2013 whilst completing the other exercise. In this part, the results obtained in both sections are presented altogether in order to be able to compare the information collected regarding both CAT tools. Figure 21 shows a summary of the data gathered in these sections. The first question in section 1 was: "How easy have you found performing this task with [tool]?", and the overall response regarding the use of SDL Trados was that they found it easy (\( \bar{X} = 4, sd = 0.78 \)), whereas the use of MemoQ received slightly higher scores (\( \bar{X} = 4.14, sd = 0.66 \)) (see figure 22). The second question was: "How fast do you think [tool] has allowed you to perform this task?", and respondents specified that SDL Trados Studio 2014 had let them work fast (\( \bar{X} = 4.07, sd = 0.73 \)) and MemoQ slightly faster (\( \bar{X} = 4.28, sd = 0.91 \)) (see figure 23). In the third question: "How useful has [tool] been while localising the website?", participants rated SDL Trados Studio 2014 a bit lower than they had done in the previous two questions (\( \bar{X} = 3.64, sd = 0.92 \)), but they considered it useful; in the case of MemoQ, the scores were again slightly higher (\( \bar{X} = 4.14, sd = 1.09 \)) (see figure 24). It is interesting to highlight that participants gave high scores to both CAT tools.

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16 Using a 1 to 5 likert scale in which 1 indicated that performing the task with the tool was "not easy at all", and 5 meant that is was "very easy".

17 According to a 1 to 5 likert scale in which 1 was "very slow" and 5 was "very fast".

18 According to a 1 to 5 likert scale in which 1 was "not useful at all" and 5 was "very useful".
Figure 21. Comparison of some of the results obtained with the tools studied

<table>
<thead>
<tr>
<th></th>
<th>Easy</th>
<th>Fast</th>
<th>Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SDL</strong></td>
<td>4</td>
<td>4.07</td>
<td>3.64</td>
</tr>
<tr>
<td><strong>MemoQ</strong></td>
<td>4.14</td>
<td>4.28</td>
<td>4.14</td>
</tr>
</tbody>
</table>

Figure 22. How easy have you found performing the task with the tool? 19

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19 Bloxplots graphs presented in this dissertation were created using the tool Excélpatas (Robayo 2011).
Figure 23. How fast you think the tool has allowed you to perform the task?

Figure 24. How useful has the tool been while localising the website?
5.1.2. Quality of the final product and overall experience

The fourth question in section 1 and the ninth question in section 2 of the task questionnaire required participants to rate the quality of the final product after using SDL Trados Studio, and after using MemoQ 2013, respectively\textsuperscript{20}. Participants believed that the quality of the final product with SDL Trados Studio was high (\( \bar{x} = 4.07 \), sd = 0.82), although they rated a bit higher the quality of the final product with MemoQ (\( \bar{x} = 4.21 \), sd = 0.80) (see figure 25 below). In the fifth and the tenth question of these sections, subjects were expected to rate their overall experience translating with SDL Trados Studio, and with MemoQ\textsuperscript{21}. Thanks to their answers, it has been calculated that participants considered the overall experience translating with SDL Trados Studio as being high (\( \bar{x} = 3.92 \), sd = 0.91), and their experience with MemoQ as being higher (\( \bar{x} = 4.28 \), sd = 0.72) (see figure 26 below).

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{figure25.png}
\caption{How would you rate the quality of the final product after using the tool?}
\end{figure}

\textsuperscript{20} Using a 1 to 5 likert scale in which 1 indicated that the quality was "very poor" and 5 implied that the quality was "very high".

\textsuperscript{21} Using a 1 to 5 likert scale in which 1 indicated that the overall experience was "very negative" and 5 implied that the overall experience was "very positive".

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5.1.3. Adequacy

In the third section of the task questionnaire, there were three questions (11, 12 and 13) where participants had to choose either SDL Trados Studio, MemoQ or answer "both the same" taking into account their experience localising the websites during the experiment. In question 11: "Which tool have you found the most adequate for performing this task and why?", six participants indicated that they had found the two CAT tools equally adequate, six participants found MemoQ more adequate and two participants found SDL Trados Studio more adequate (see figure below). Among the subjects who chose "both the same" to answer the question, they gave different reasons to justify it. One participant mentioned that s/he believed that the text was simple enough to be completed well with any of the CAT tools. Another participant indicated that s/he could not write "À" with SDL Trados Studio but s/he also had some difficulties with the shortcut used to copy a segment from source to target with MemoQ. In addition, one subject added that s/he found both CAT tools used the tags similarly, and another subject mentioned that s/he thought both of the tools were adequate even if MemoQ's view pane function helped considerably to perform the task. There were two participants who answered "both the same" who did not justify their answer.
Firstly, the reasons given by the participants who answered that MemoQ was more adequate than SDL Trados Studio for performing the task are presented. Secondly, the reasons why some of the participants preferred SDL Trados Studio are introduced. One participant indicated that MemoQ was more user-friendly and easy to use. Another participant added that the interface was clearer, that s/he liked the fact that MemoQ opens the translated document once you export it, and that MemoQ's matches recognition was better than SDL Trados' one. A third subject commented that even though s/he knew how to use SDL Trados before, s/he noticed that MemoQ was much faster and easier to work with, and a fourth subject indicated that the fact that MemoQ inserted the tags which apply the format to the text automatically was useful. What is more, the last two participants who thought MemoQ was more adequate mentioned that the view pane was helpful. One of these two also indicated that the fact that MemoQ provided an idea of the final result helped the participant during the localisation process. The two respondents who stated that SDL Trados was more adequate than MemoQ gave the following reasons: one participant mentioned that SDL Trados introduces the matches or already translated segments directly in the target text and the second participant indicated that the HTML tags are more visible in Trados and this makes the translatable text clearer to see and read.

Figure 27. Question 11 of the Task Questionnaire
Question 12 in section 3 of the task questionnaire: "Which tool have you preferred when completing this task and why?" obtained these results: eight answers where MemoQ was the tool preferred to do the task, four answers where participants did not choose any of the tools because they considered that SDL Trados Studio and MemoQ were both suitable for the task, and two answers where SDL Trados was the preferred tool (see figure 28). The participants who preferred MemoQ explained their decision providing the following reasons: four mentioned that MemoQ was easier to use than SDL Trados; three commented that MemoQ proposed more segments already translated; two participants also indicated that it was easier to create a project and one added that the exporting process was faster as well. One participant suggested that s/he had the impression that s/he had more control over the overall product working with MemoQ. In addition, two subjects mentioned that the interface was more user-friendly, one that it was a good point that MemoQ opened the translated document once exported, and another participant added that s/he really liked the view pane function.

![Bar chart showing tool preference](image)

Figure 28. Question 12 of the Task Questionnaire

Continuing with question 12, two of the four participants who could not decide on which tool they preferred because they thought they were both good justified their answers, the other two did not. One of the subjects mentioned that s/he liked both tools to perform the task because s/he had already worked many times before with SDL Trados and knew more commands; however, s/he thought that s/he worked faster with MemoQ. The other subject explained that s/he liked MemoQ because
it has the view pane function which s/he thinks is very useful, but s/he also liked SDL Trados because the translated segments suggested by the translation memory are more useful than the ones MemoQ proposes. Besides, only two participants preferred SDL Trados to complete the task. In SDL Trados’ favour, one participant mentioned that s/he performed the task faster with SDL Trados, and the other subject indicated that maybe s/he preferred SDL Trados because s/he was already familiar with SDL Trados 2011.

5.1.5. Time perception

Question 13 of the task questionnaire: "Which tool has allowed you to perform this task faster and why?" showed the general perception participants had regarding the time they had spent working with each of the tools. Responses were quite varied: six respondents considered they worked faster with MemoQ, four thought that they had spent the same time working with SDL Trados and with MemoQ, and four others indicated that SDL Trados had allowed them to perform the task faster (see figure 29). What is more, the following reasons were provided by the participants who chose MemoQ: creating a project with MemoQ was easier and faster (N=3), MemoQ's interface was more intuitive (N=2), the fact that the viewpane opened itself by default was helpful (N=1), exporting the project with MemoQ was easier (N=1), and MemoQ is not very complicated for a small task (N=1). One of the participants who answered "both the same" did not justify the answer but the other three did. One respondent mentioned that even though s/he worked faster with SDL Trados, this tool proposed fewer segments already translated than MemoQ. The other two participants indicated that the time they spent with both tools was similar. One of these two added that maybe s/he was faster with MemoQ because right before the localisation task we had the introductory activity with MemoQ. The other one mentioned that the pretranslation tasks were a bit more straightforward with MemoQ. Besides, two of the respondents who thought SDL Trados was faster commented their answer: one of them explained that s/he believed so because SDL Trados shows the segments already translated and introduces them directly in the target segment, and the other one indicated that maybe s/he found it faster because s/he was familiar with SDL Trados 2011. Figure 30 shows a summary of the results obtained in section 3 "Comparison of both CAT tools" of the task questionnaire (questions 11, 12 and 13).
5.1.6. HTML knowledge

Moving on to section 4 "Personal Knowledge of HTML language" of the task questionnaire, participants were asked if they had translated a HTML file using SDL Trados Studio before
The vast majority of them replied affirmatively (N=11) and only three, negatively. However, when asked if they had translated a HTML file using MemoQ (question 15), the opposite happened, most of them answered "no" (N=11) and only three participants answered "yes". In addition, they were asked to say if they were aware of a new version of HTML called HTML5 (question 16): eight subjects responded "yes", and six other subjects "no".

There was also another yes/no question to help me gather more information about whether respondents had worked with HTML5 before or not (question 17). Only three participants stated that they had worked with HTML5 before, and as expected, it was three of the ones who had said that they knew HTML5 existed. Two participants did not answer this question; and one of these two had mentioned in the previous question that s/he was aware of HTML5. The remaining nine participants answered negatively. If they answered "yes" to this question, they were required to describe briefly their experience working with HTML5. One of the participants indicated that s/he had used HTML5 language to create web pages and to add animations to HTML5. Another participant mentioned that s/he had used Wix\(^\text{22}\) to create a website and it uses HTML5 language. S/he also commented that s/he does not know the real differences between HTML5 and the previous versions of HTML. The third participant mentioned that s/he thinks that the website template that s/he chose to create a website for the Localisation course uses HTML5 language.

To find out more information about their knowledge of HTML5 and precisely about the new structural elements, which are studied in this research, the two following questions were added in the questionnaire (question 18 and 19). The first one was: "Did you know any of the HTML5 structural elements shown below before performing this task?" Nine participants answered "yes", and five answered "no". In addition, the ones who answered "yes" were required to specify from a given list all the structural elements that they knew. Figure 31 below shows all the times that each one of the elements was selected by the participants. In short, the structural elements that were selected more times were "header" (N=9) and "footer" (N=8). I believe that participants may have confused "header" with "head", one of the main parts of a HTML document structure, which is placed before the \texttt{<body>}. Then, "main" was selected five times, "figcaption" four and "figure", "navigation", "section" and "article" three times. The "aside" element was never selected.

\footnote{22 Online editor used to create websites (http://es.wix.com/)}
The second question was: "Were you aware that there were HTML5 structural elements in the task you have carried out?" The vast majority of subjects answered "no" (N=12), only two of them answered affirmatively. The ones who answered "yes" were asked to select the elements that they had seen. Consequently, one of the participants selected five elements (navigation, section, header, footer and figure) and the other one selected just the "figure" element. Therefore, they did not see the following elements in the website: article, main, aside and figcaption.

### 5.1.7. Preview options

The final section of the task questionnaire deals with the task performance. Questions 20, 21 and 22 aimed to collect information about the most important functions of the two CAT tools evaluated: the "view pane" from MemoQ 2013, and the "aperçu" (preview) and the "éditeur" (editor) from SDL Trados Studio 2014. In question 20, participants were required to report whether they had used the "view pane" function while translating with MemoQ or not. The ones who answered affirmatively had to answer the following question too: "If, "yes", how useful have you found it for performing the task?". Eight subjects specified that they had used it and it is relevant to mention...
that they rated\textsuperscript{23} the usefulness of this function as being high (\( \bar{x} = 4.62, sd = 0.51 \)). Nevertheless, six participants reported that they had not used the view pane. Three of these six participants indicated that they did not know that this function existed, and the remaining three gave other reasons. However, it is in fact false that they did not know that this function existed because right before doing the tasks with SDL Trados Studio and with MemoQ we had done an activity together with MemoQ in which I taught them how to translate using MemoQ and I showed them the view pane function. They also had this explanation in the instructions of the activity (see the First steps with MemoQ in Appendix F). What is more, I also showed them this function to see if when translating with SDL Trados they were going to try and find a function similar to this one. This leads me to believe that they might have not paid full attention in that part of the activity or that the instructions were not clear enough. Two of the three participants who did not use the view pane and provided other reasons mentioned that they forgot about this function when translating, and the other participant indicated that s/he forgot to turn it on. In addition, it is important to highlight that four of the six participants who did not use the view pane had this function open while translating because it is activated by default in most cases.

In question 21, participants were required to report if they had used the "aperçu" function while translating with SDL Trados Studio 2014. The vast majority of respondents indicated that they had not used it (N=12), and only two of them mentioned that they had used it. Five of the participants who did not use it specified that the reason why was that they did not know this function existed. Four others indicated that they knew it existed but they forgot about using it. One participant added that s/he never uses it because s/he thinks it is not useful. Two others did not justify their negative answer. Besides, the two participants who reported that they had used the "aperçu" function were also required to rate the usefulness of the function for performing the task\textsuperscript{24}. One of them used the "aperçu" function for a very short period of time and not during the whole translation process. I could see in the BBFlashback video that s/he only opened this function for two minutes; s/he saw how it showed the translated text and closed it. S/he rated the usefulness of this function as being low, which leads me to think that s/he did not find the information this function provided very interesting and that is why s/he decided not to leave it open while translating. However, the other

\textsuperscript{23} According to a 1 to 5 likert scale in which 1 was "not useful at all" and 5 was "very useful".

\textsuperscript{24} According to a 1 to 5 likert scale in which 1 was "not useful at all" and 5 was "very useful".
participant used the "aperçu" function during the whole translation process with SDL Trados Studio 2014 and rated the usefulness of the function as being high.

SDL Trados Studio 2014’s "éditeur" function (see figure below) was evaluated in question 22. It is a navigation option which provides information about the structure of the file being translated. Most of the participants did not use it while translating with the CAT tool (N=10); in fact, six of them mentioned that they did not know this function existed, and four participants provided different reasons why they did not use it: one respondent indicated that during the activity s/he forgot to use it, another one mentioned that s/he was in a hurry to finish translating, another one specified that s/he saw the function in the interface but s/he did not know that it could have been useful for translating. Besides, s/he added that s/he was afraid of doing something wrong if s/he clicked on it. The fourth participant did not use it because the text was very short. However, four participants reported that they had used the "éditeur" function. They rated the usefulness of this function as being medium25 (\( \bar{x} = 3 \), sd = 0.81). It is interesting the fact that the majority of participants mentioned that they did not know this function existed. However, when reviewing the videos, I noticed that in every case the "éditeur" function was open by default.

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25 According to a 1 to 5 likert scale in which 1 was "not useful at all" and 5 was "very useful".
Question 23 of the task questionnaire: "Did you perform any of these actions **before** localising the website?" revealed that none of the fourteen participants opened the website in a web browser or used Notepad ++ before localising the website to have an idea of how the original website looked like. They did not look for the translatable text in order to be sure about having translated all the words and sentences required. The same results were obtained in question 24: "Did you perform any of these actions **while** localising the website?". Nobody opened the website in a web browser or used Notepad ++ to verify that the changes they were making were appearing in the target document, for instance, or to see how the information translated was being displayed. In addition, there was a participant who mentioned that s/he had opened the website in a web browser and used Notepad ++ before and while localising the websites; however, this statement was false. I could verify in the video that s/he did not perform any of these actions. The same happened with another subject who answered that s/he had opened the website in a web browser while localising the websites. It was not true. However, the viewing of BB Flashback recordings confirmed that the participants who answered negatively did not perform any of the actions previously mentioned.

The results collected in question 25: "Did you perform any of these actions **when you finished** localising the website?" were different. Ten participants indicated that they had opened the website in a web browser when they finished localising. However, only four of these responses were true. The cases in which the participants opened the four documents translated (two translated with SDL Trados Studio and two with MemoQ) in a web browser were considered as being "true". As verified in the videos, MemoQ opened by default the translated documents of each one of the participants when they exported them. This is why I only considered "true" the cases where the participant had the initiative to go and open the documents translated with SDL Trados Studio. What is more, only one participant stated that s/he had used Notepad ++ when s/he finished localising; however, this was not true. On the other hand, four participants reported that they had not performed any of those actions and it was true.

The last two questions of the task questionnaire wish to know if the participants were able to find out whether SDL Trados Studio 2014 and MemoQ 2013 allowed them to localise all the websites' text or not. It has been verified that SDL Trados Studio does not show all the translatable text necessary to localise the website, it skips the website's description and the key words. However, MemoQ shows it all. This will be explained in detail in the next chapter, "6. Discussion of Results".
Interestingly, nine respondents thought that SDL Trados Studio had allowed them to localise the entire website's translatable text, and only five thought it had not. With respect to MemoQ, the majority of subjects (N=9) thought that it had showed them all the translatable text, and five participants thought it had not. None of the participants answered both questions right. Either they thought both tools had shown them the translatable text or both tools had not.

5.2. Time
The videos recorded using BB Flashback express have allowed me to measure the time that participants spent working with MemoQ (Time_MQ), and working with SDL Trados Studio (Time_SDL). These time codes have been calculated from the moment that the tool started loading once the participant had clicked on it until the moment that the participant exported the two translated documents. The sum of these two time codes (Time_real_act) is also important because it is the actual time that the participants spent doing the exercise with the tool. Besides, another time code (Time_nonstop) which has been taken into account is the one that measures the time since the participant pressed the record button in BB Flashback express until s/he stopped it. The subtraction of the "Time_nonstop" and "Time_real_act" is also interesting because it shows the period of time when participants were not translating but performing other actions also necessary for the exercises (Timeinbetween); for instance, reading the instructions or verifying that they had exported both of the translated documents. The most interesting aspect of the data is that participants spent more time doing the exercise with MemoQ (\(\bar{x} = 1274.31\) [21 minutes and 23 seconds], sd = 277.80) than with SDL Trados Studio (\(\bar{x} = 1085.66\) [18 minutes and 9 seconds], sd = 239.05). The table below shows the time codes previously explained of each one of the fourteen participants in the experiment measured in seconds. In addition, figure 32 compares the time participants spent translating with the tools evaluated.
<table>
<thead>
<tr>
<th>Time_MQ</th>
<th>TimeSDL</th>
<th>Time_real_act</th>
<th>Time_nonstop</th>
<th>Timeinbetween</th>
</tr>
</thead>
<tbody>
<tr>
<td>1123,80</td>
<td>1080,00</td>
<td>2203,80</td>
<td>2550,00</td>
<td>346,20</td>
</tr>
<tr>
<td>680,40</td>
<td>698,40</td>
<td>1378,80</td>
<td>1444,20</td>
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Table 6. Time codes of the experiment

![Box plot comparing Time_MQ and Time(SDL)](image)

Figure 32. Time spent with both tools (secs)
6. Discussion of results

The results presented in the previous section are going to be interpreted in this section following the order in table 4 of the 4.1 Creation and Design section, where all the aspects evaluated in this study appear summarised. The results collected provide information about the three characteristics assessed in MemoQ 2013 and SDL Trados Studio 2014: effectiveness, satisfaction and context coverage. In this chapter, results are analysed and commented, and when pertinent, a correlation analysis between variables is presented. What is more, the computing of the correlation coefficients of the data collected has allowed me to triangulate different results and observe some interesting relationships among different types of data. All variables that were measured quantitatively (for instance: time, age, adequacy, familiarity, etc.) were correlated against each other, and correlation coefficients from ±0.5 onwards were taken into consideration; in other words, I have only studied moderate, strong and very strong relationships (Salkind 2010, p.129) for making certain assumptions concerning the tendencies shown by the results.

6.1. Effectiveness

The first of the three characteristics evaluated was effectiveness: "accuracy and completeness with which users achieve specified goals" (ISO/IEC 25010 2011, p.8). A table containing the summary of the characteristics assessed was presented in section "4.1 Creation and Design". The time each of the CAT tools in question spent to accomplish the tasks was one aspect taken into account to evaluate effectiveness. Therefore, the majority of participants (N=11) spent considerably less time working with SDL Trados Studio 2014 than with MemoQ 2013 (N=3). In addition, in the three cases where they worked faster with MemoQ, they only worked slightly faster. The difference was not significant: one of them worked 18 seconds faster with MemoQ, another one worked 57.6 seconds faster and the last one worked 1 minute faster.

The situation mentioned before has much to do with the fact that MemoQ was the tool chosen by eight out of fourteen participants when asked which tool they had preferred when completing the task. Besides, this positive perception of MemoQ regarding the task is interesting since participants had greater experience using SDL Trados Studio. All of them had taken the Localisation course, nine of them had done the TAO course and four of them had undertaken the OAT course, which means that they had used SDL Trados Studio in all these subjects. Whereas for MemoQ, only six
participants indicated that they had used it before, and they rated their familiarity with the tool as being low (\(\bar{x} = 1.83, \text{sd} = 0.75\)).

In addition, in the OAT course they are also taught how to use MemoQ, and three out of the four participants who said that they had undertaken the OAT course also answered that they had worked with MemoQ before. In order to counteract their bigger experience with SDL Trados Studio, they did an introductory activity with MemoQ right before performing the localisation tasks; however, this did not affect the speed of their performance. From the analysis of the results, it could be inferred that their greater experience with SDL Trados Studio is what made them perform the tasks faster with this tool even though they may not have noticed it since they might have felt a bit more comfortable working with MemoQ, also because this tool has the view pane function, which eight of the participants have used and have provided high scores in regards to its usefulness.

A strong correlation was found between the time that participants spent performing the localisation task with MemoQ and the age of the participants (\(r = 0.7\)), which means that, in general, the older the participant the more time s/he spent on the task with MemoQ (see figure 33). This could be related to the fact that the younger participants were also the ones that had already worked with this tool (in their BA courses), and we could also infer that the previous experience with the tool could have an impact in the translation time. In fact, a very strong relationship (\(r = -0.84\)) was also found between the previous experience with MemoQ and the time they spent on the tool (see figure 34).
There was also a strong and direct relationship ($r=0.60$) between the scores given to rate the quality of the final product after using MemoQ and the time they spent working with this tool during the task. These results are striking because one would think that if they spent a lot of time with a tool to do the task, they would not rate the quality of the final product as good because they would consider the tool as being slow. However, it seems that the participants did not prioritise the time they had spent working but the quality of the final product. I think that the fact that MemoQ opens
the localised file in a web browser by default once it is exported has played an important role in this result (see figure below).

![Graph showing correlation between quality of final product and time spent on MemoQ](image)

**Figure 35. Quality of the final product and time spent on MemoQ (correlation)**

A strong correlation ($r= -0.61$) between the time participants spent working with MemoQ and their previous knowledge with SDL Trados Studio has been observed (see figure 36). The greater the previous experience with SDL Trados Studio, the lesser the time they spent to perform the task with MemoQ. This might indicate that knowing how to use SDL Trados Studio well could have an impact when working with a similar CAT tool (MemoQ in this case). These two tools are quite similar in many aspects and having the skills to get by with SDL Trados Studio can be helpful to understand how to work with MemoQ and get used to it faster. In addition, as shown in figure 37, a very strong relationship ($r= 0.81$) was observed between the time that participants spent to perform the task with SDL Trados Studio 2014 and the time they spent to do it with MemoQ 2013. Results indicate that the subjects who have spent more time working with SDL Trados Studio have also spent more time working with MemoQ. This relates with the previous finding and suggests that the people less familiarised with CAT tools work slower when they are required to use them.
Interestingly, as mentioned before when speaking about the time spent working with MemoQ, there was a moderate relationship ($r = 0.55$), a lower tendency than in MemoQ's case ($r = 0.7$), between the time participants spent working with SDL Trados Studio and their age. The older the participant the more time s/he spent on the task with SDL Trados Studio (see figure 38). What is more, it is
clear that this tendency is consistent as it takes place with both CAT tools. In addition, another tendency repeats itself with a lower correlation coefficient ($r = -0.51$) than the one obtained with MemoQ ($r = -0.61$), between the time spent with SDL Trados Studio and how familiar participants were with the tool before the experiment (see figure 39). The less familiar were the slowest.

Figure 38. Participants' age and time spent on SDL (correlation)

Figure 39. Familiarity with SDL and time spent on SDL (correlation)
Another factor to measure effectiveness was the number of windows participants had opened while localising the websites, since, in theory, a very effective tool should allow the participants to accomplish the task needed without having to leave the environment the tool provides; for instance, using other programs at the same time or looking for a lot of information on a web browser. However, in the experiment, none of the participants used another program while localising the websites with SDL Trados Studio or MemoQ. There were just a few participants who looked for information to help them translate: one opened a web browser and used Google Translate to translate the text and then s/he reviewed the translation; another one used WordReference website to look up the word "humanities" and find the translation, and also opened Wikipedia to see how to translate "League of European Research University". Also, another participant opened the website of the University of Geneva to look for a translation for the word "humanities" into French, to see if there was a Faculty with that name in the French version of the website.

Effectiveness of a CAT tool has also been evaluated in this study by assessing its most useful localisation-related functions. MemoQ's 2013 view pane, and in SDL Trados 2014’s case, the preview (aperçu) and the editor (éditeur). The results collected reveal that the function that most participants used was the view pane (N=8), and also the one that they have judged as being more useful. This function allowed participants to see the changes they were doing while they were translating, and to have an idea more or less correct but not perfect of where the images and text were located in the actual website (see figure 40).
Then, the SDL Trados Studio's editor has been the second function most used (N=4). All of the participants had it open because it is part of the default translation interface of SDL Trados Studio 2014; however, participants have not exploited the information this function provides. This is the function, out of the three taken into account, which gives more data about the HTML5 structural elements included in the website they were localising, it identified most of the structural elements and as participants were translating it was unfolding the different parts of the website's structure (see figure 41). Besides, there were only two participants who indicated that they knew that there were HTML5 structural elements in the websites, and interestingly, none of these two are the ones who answered that they had used the editor function (N=4).

In addition, SDL Trados Studio also provided additional information, at the right side of the translation interface (see figure 41), about the website's structure and about the translatable text shown, where "T+" is a title (the title of the website), "ATT" is an attribute (the alternative text of the image), "H+" is a heading, "LI+" is a list item (text that also links that web page with another one) and "P+" is a paragraph. The third function taken into account in this research project is the preview (aperçu) function that SDL Trados Studio offers. As shown in figure 42, it just displays the text which is being translated. It does not show any images or hyperlinks, but at least, it could be useful to differentiate the part of text which appears in the website from the "alt" text of the
images. It is clear that this function does not help much while localising a HTML5 website, where images, design and structure are very important.
The last evaluation method implemented to measure effectiveness was the translatable text shown by SDL Trados Studio 2014 and MemoQ 2013. The fact that SDL Trados Studio does not show all the websites' translatable text is an important flaw of this tool. During the experiment, participants had to localise the websites, which means translating the text which is going to be visible in the website (text which is in the website's body) as well as the text which is part of the metadata content which provides useful information for the Internet search engines and the accessibility devices. What is more, according to Schiller, "the three tags that are significant in the context of online search, and consequently for the translation of a website, are the title tag, the description content metatag and the keywords metatag" (2006, p.538) Therefore, the description and keywords of the website must be translated too, and with SDL Trados Studio participants were not able to do it as shown in figure 43 and 44: Figure 43 displays the source code of the "Contact.html" web page in Website 1, and figure 44 reveals that the website's description and keywords do not appear in SDL Trados Studio's interface. On the contrary, MemoQ 2013 shows all the text which is needed for the localisation of the website: website's title, website's description and keywords (see figure 45 and 46), text of the website's body, images' alternative text, and the figcaptions (title given to an image).
Figure 44. Keywords and description (contact.html) are not shown by SDL

Figure 45. Description and keywords in the source code of index.html
Satisfaction

The second main characteristic evaluated was satisfaction: "degree to which user needs are satisfied when a product or system is used in a specific context of use" (ISO/IEC 25010 2011, p.8). This characteristic was important in the evaluation because users must be satisfied working with the CAT tool to actually end up using it. From satisfaction, three subcharacteristics were taken into consideration for the evaluation: usefulness, pleasure and trust (see figure x).

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6.1 Satisfaction

The second main characteristic evaluated was satisfaction: "degree to which user needs are satisfied when a product or system is used in a specific context of use" (ISO/IEC 25010 2011, p.8). This characteristic was important in the evaluation because users must be satisfied working with the CAT tool to actually end up using it. From satisfaction, three subcharacteristics were taken into consideration for the evaluation: usefulness, pleasure and trust (see figure x).
Usefulness is "the degree to which a user is satisfied with their perceived achievement of pragmatic goals, including the results of use and the consequences of use" (ISO/IEC 25010 2011, p.9). This subcharacteristic, as shown in the summary table in section 4.1, was measured with the data collected from the participants' answers to these two questions: "How useful has the tool been while localising the website?" And "how would you rate your overall experience translating with the tool?". Both questions are part of section 1 and 2 of the task questionnaire (Appendix I) and therefore participants answered in the first place the two questions considering SDL Trados Studio 2014 and after that, the same two questions about MemoQ 2013. When comparing their answers, subjects rated the usefulness of SDL Trados Studio as being more than medium ($\bar{x} = 3.64$, $sd = 0.92$) but MemoQ received a higher score ($\bar{x} = 4.14$, $sd = 1.09$). What is more, according to their overall experience translating with both tools, the mean score provided to MemoQ was higher ($\bar{x} = 4.28$, $sd = 0.72$) than the one given to SDL Trados Studio ($\bar{x} = 3.92$, $sd = 0.91$).

Pleasure, the "degree to which a user obtains pleasure from fulfilling their personal needs" (ISO/IEC 25010 2011, p.9), was the second subcharacteristic and was analysed through the following questions: "How easy have you found performing this task with the tool?" (Questions 1 and 6 of the task questionnaire), and "which tool have you preferred when completing this task and why?" (Section 3- question 12 of the task questionnaire). Regarding the first question, participants' scores given to each one of the tools have been compared, and they have rated high both tools, but MemoQ ($\bar{x} = 4.14$, $sd = 0.66$) slightly higher than SDL Trados Studio ($\bar{x} = 4$, $sd = 0.78$). The answers provided to the second question have shown that eight participants considered that
MemoQ was the tool they preferred the most. Only two participants preferred SDL Trados Studio, and four subjects selected the "both the same" option, which means that they did not prefer one tool over the other.

The last satisfaction's subcharacteristic taken into account was trust: "degree to which a user or other stakeholder has confidence that a product or system will behave as intended" (ISO/IEC 25010 2011, p.9). The concept of "trust" in this study refers to the participants' perception of the possibilities of the tools. The results obtained were surprising because the greater previous experience with SDL Trados Studio 2014 has not influenced the answers provided by the participants in the experiment. It seems that the introductory activity with MemoQ 2013 (Appendix F) the day of the experiment was enough practice for the participants to understand how the tool worked and to highly trust it.

The first two questions used to evaluate trust had to do with the time participants spent working with each of the tools: How fast do you think the tool has allowed you to perform this task? (Section 1 and 2 of the task questionnaire) and which tool has allowed you to perform this task faster and why? (Section 3 of the task questionnaire). Comparing the results obtained, when participants rated how fast each tool had been individually, they provided high scores to both of them, although they rated MemoQ slightly higher (\( \bar{x} = 4.28, sd = 0.91 \)) than SDL Trados Studio (\( \bar{x} = 4.07, sd = 0.73 \)).

The second question aimed to make participants decide on one of the tools and interestingly, six of the subjects thought that they had performed the task faster with MemoQ, four others thought that they had spent nearly the same time working with both tools, and the remaining four participants were the only ones who were right because they reported that they had accomplished the task faster with SDL Trados Studio. These results suggest that participants trusted MemoQ a lot even though their previous experience with this tool (before the day of the experiment) was low or nonexistent. The majority of the participants spent less time working with SDL Trados Studio 2014; however, many of them thought that they had worked faster using MemoQ 2013.

Trust was also evaluated with the answers that respondents provided to these three other questions: "How would you rate the quality of the final product after using the tool?" (Questions 4 and 9 of the task questionnaire); "which tool have you found the most adequate for performing this task and why?" (Question 11 of the task questionnaire), and "do you think you have been able to localise all the website's translatable text with the tool?" (Questions 26 and 27 of the task questionnaire).
questions aimed to collect information about what participants thought and how they felt while localising the websites with the tools. Their perceptions are useful and even though they are not always right, like the results obtained for the third question reveal, they provide data of how they performed during the localisation task, what they paid attention to and what they did not, what they considered important and what not.

Participants did not realise that SDL Trados Studio 2014 did not show all the translatable text of the website they were required to localise. Results show that they did not pay attention to this aspect of the tool. However, when dealing with a localisation task, it is essential to review that you are translating all the necessary text strings. This is why participants should have opened the website in a web browser and opened it in an advanced text editor or any similar program to be able to inspect the source code. If they had done it, they would have realised that SDL Trados Studio 2014 did not display all the translatable text. Another clue which could have made participants be aware of SDL Trados Studios' flaw is that they used both tools, one after the other, and they could have compared the text shown by each one of the tools because the two websites they had to localise were very similar. Despite the fact that they did not answer the question correctly, results show that participants trusted both tools because nine participants thought that MemoQ 2013 and SDL Trados Studio 2014 had shown all the translatable text.

Regarding the quality of the final product, participants trusted slightly more MemoQ 2013 (\( \bar{X} = 4.21, \text{sd} = 0.80 \)) than SDL Trados Studio 2014 (\( \bar{X} = 4.07, \text{sd} = 0.82 \)). However, the difference is not remarkable. In addition, with regards to which of the tools was more adequate, some respondents found it hard to decide on which one to choose and they selected the option "both the same" (N=6). Six other participants selected MemoQ, and two others chose SDL Trados Studio. From these results, it could be inferred that participants rated their trust on both tools as being high.

It could be reported from the evaluation of the satisfaction characteristic that participants had a very positive reaction towards MemoQ 2013. Despite the lower familiarity with this tool, it received higher scores in many of the questions studied. This is very interesting and reveals how "easy" it is for students of Translation who already know how to use one CAT tool well to learn another CAT tool. Also, how fast they can learn how to use it, the introductory activity with MemoQ being approximately 20-30 minutes. It is also remarkable, how satisfied they were with it after the localisation task.
6.2. Context coverage

The third main characteristic used to evaluate the two CAT tools in question was context coverage (see figure 48): the "degree to which a product or system can be used with effectiveness, efficiency, freedom from risk and satisfaction in both specified contexts of use and in contexts beyond those initially explicitly identified" (ISO/IEC 25010 2011, p.9). Precisely, its subcharacteristic called context completeness is the one taken into consideration: the "degree to which a product or system can be used with effectiveness, efficiency, freedom from risk and satisfaction in all specified contexts of use (ISO/IEC 25010 2011, p.9). It is important to mention that efficiency and freedom from risk are characteristics which have not been part of the evaluation and therefore they were not studied in this section either.

Figure 48. Subcharacteristic evaluated of context coverage

Context completeness assesses whether the CAT tool is appropriate for the specific context of the research project, which in this case is the following: a translator with localisation skills (at least s/he has completed one university course on Localisation) and who is studying a Master of Arts in Translation at the Faculty of Translation and Interpreting of Geneva wants to localise a HTML5 website which contains several new structural elements. S/he aims to find out which of the tools, SDL Trados Studio 2014 or MemoQ 2013, is the most suitable to accomplish the task. Consequently, it has been verified that both CAT tools support HTML5 format and are able to work with websites created using HTML5 language. Besides, the two tools support all the languages required for the experiment and context: Spanish, English, Italian and French, and they can be selected as source or target languages.
MemoQ 2013 and SDL Trados Studio 2014 recognise and support HTML5 structural elements too. The editor in SDL Trados Studio 2014 shows the type of structural element translators are modifying while translating a segment; however, this tool does not show immediately all the translatable text present in the website and its preview function does not give an accurate idea of how the real website looks like. In addition, the preview does not display any of the images included in the website nor the text format. MemoQ 2013 recognises the HTML5 elements and gives an idea of how the real web page is with its view pane, showing images and text with the same format they have in the real website. However, the images are not located in the correct places and neither are some parts of the text. It does not display the website's background colour either because the tool does not apply the corresponding css style sheet. MemoQ 2013 does not have an editor like the one in SDL Trados Studio which shows the website's structure but displays all the translatable text necessary to localise websites properly. MemoQ inserts the format tags automatically in the target segment. This is useful and it does not allow users to corrupt the tags so that the format stays the same as in the original text.
7. Conclusions

This research project aimed to provide an answer to the research questions formulated at the beginning of the study. The first one being: Are CAT tools prepared to localise HTML5? To which, due to the limitations of the current research (only two CAT tools were analysed and compared), this question can only be answered partially. However, according to the evaluation carried out, it could be determined that the two CAT tools studied, MemoQ 2013 and SDL Trados Studio 2014, are prepared to localise HTML5 websites, even though some improvements could be introduced. Both tools can open, import, work with HTML files and export them. They support many languages too. Nevertheless, during the experiment, SDL Trados Studio 2014 did not show all the translatable text of the websites participants were required to localise. This represents an important flaw of this tool when comparing it with MemoQ 2013. Translators who use SDL Trados Studio 2014 must be aware of this and make sure they review the source code of the files, to take notice of the text strings that do not appear in SDL Trados Studio's translation editor by default, in order not to leave text untranslated. Another solution, which implies spending time and having an advanced knowledge of SDL Trados Studio 2014, would be to create a specific filter in SDL Trados Studio 2014 for the tool to show the content of the missing tags.

In the experiment, it has been verified that MemoQ 2013 showed all the necessary translatable text by default. Therefore, I would answer "yes" to the first research question, at least with respect to the CAT tools evaluated; although translators should not trust these CAT tools blindly, they should verify that all they need to translate is shown by the tool. HTML5 has been recently approved and CAT tools are currently getting ready to work with it. Moreover, the two CAT tools evaluated may not help translators as much as they could yet. SDL Trados Studio's preview options did not show the website's images neither the text format nor all the translatable text, which does not provide users a real idea of the final product. Translators have to open the website in a web browser to view the changes they are making in the website. Nonetheless, SDL Trados Studio provides quite a lot of information about the website's structure and its structural elements, which can be helpful. MemoQ's 2013 view pane displays a much better preview of the product being localised; however, it is not perfectly accurate. It does not provide additional information about the structure; which is essential for localising websites. In short, although SDL Trados Studio 2014 and MemoQ 2013 are suitable for localising HTML5, they still have room for improvement so that translators' experience localising HTML5 files is optimal.
The exhaustive evaluation carried out and explained in detail above aims to provide answers to the research questions. The second research question is: which tool from MemoQ 2013 and SDL Trados 2014 is the most suitable when localising a HTML5 website with HTML5 new structural elements? And that is why an experiment with a sample of fourteen students was designed and implemented. In the experiment, participants encountered themselves in the situation expressed in the research question. They had to use both tools, MemoQ 2013 and SDL Trados 2014, and translate two similar HTML5 websites: one with one tool and one with the other, following the instructions of the experiment. Then, they were required to fill in a questionnaire about the task completed giving their opinion about both of the tools evaluated.

It is important to remind that the experiment has been elaborated as part of a bigger evaluation which has been carefully and thoroughly designed using the seven steps proposed by EAGLES (1999) and three characteristics from the ISO/IEC 25010 standards (2011). These characteristics are the ones which best represented the aspects of the tools that, according to the specific scenario in question, needed to be assessed to determine which of the tools was more suitable to accomplish the task expressed in the second research question. The characteristics are effectiveness, satisfaction and context coverage.

Taking into account the evaluation methods used to assess the effectiveness of the tools, results show that participants have worked faster with SDL Trados Studio 2014. However, MemoQ 2013 has shown all the translatable text of the website and SDL Trados studio has not. It is also important to mention that the localisation-related function that more participants used was the view pane of MemoQ 2013. Moreover, the evaluation methods used to assess satisfaction show that MemoQ 2013 received slightly higher scores in terms of usefulness, pleasure and trust. Nevertheless, the results were not much higher than the ones SDL Trados Studio 2014 received. Finally, after the evaluation of context coverage, results show that both tools are adapted to the specific context in question. They support HTML5 format, have functions which recognise, although in a different way, HTML5 structural elements, and support the languages users work with.

Therefore, the results of this research project indicate that none of the CAT tools evaluated is more suitable than the other regarding the localisation of a HTML5 website with HTML5 new structural elements. The difference found in the results is not conclusive enough to determine that one tool is better for this task. However, these findings enhance our understanding of the use of CAT tools.
and show that the participants with a greater experience with SDL Trados Studio have worked faster with MemoQ and are also satisfied with this tool, which was new or relatively new for most of them. This leads to the most important finding of my thesis, the fact that knowing how to use one CAT tool well helps considerably to adapt to a new environment. It makes it easier for the person involved to understand the functioning of the new tool and be able to work with it very soon after being introduced to it.

These results also imply that previous training with one tool is mandatory, for the users to be able to adapt to other environments. In the experiment implemented, there were only six people who said that they had used MemoQ before, and they rated their familiarity with the tool as being low. On the contrary, twelve participants indicated that they had used SDL Trados Studio before. This is why, in order to be in the same conditions as SDL Trados Studio for the evaluation, participants received a 30 minutes training about how to use MemoQ 2013 during the introductory activity with MemoQ. Only with this training, participants were able to work and localise the website with MemoQ. What is more, they provided higher scores to MemoQ regarding satisfaction with the tool, which is very interesting.

Other important results were found in this research project. The older the participant the more time s/he spent doing the localisation task with both tools during the experiment. In addition, the finding that regardless of the few previous experience working with MemoQ, participants trusted it a lot and were slightly more satisfied with this tool. Many of them even thought that they had worked faster with MemoQ, when this was not the case. It is striking, it means that they felt comfortable localising the HTML5 website with this tool. Moreover, it is interesting to mention again that none of the participants noticed that it was only SDL Trados Studio the tool which did not show all the translatable text during the experiment. Besides, it is worth noting that only two participants recognised some of the structural elements present in the websites; despite the fact that nine participants indicated that they knew some structural elements before participating in the experiment in the task questionnaire. This result is logical because none of the participants accessed the source code with any tool and therefore were not aware of the translatable text not shown by the CAT tool, and only four said that they had used the editor in SDL Trados Studio, the two best ways they had to realise about the structural elements presence in the website.
7.1. Limitations and future work

It is necessary to acknowledge the limitations of this research project. Time is one of the aspects to highlight, because the time I could dedicate to implement the experiment was limited. I did not have the means to pay students to attend the experiment; therefore, I had to rely on their generosity and design an experiment that lasted a maximum of 1 h 45 min. It is true that a more exhaustive experiment lasting more time and having longer activities and a longer introduction to MemoQ would have been more accurate. However, according to the results, the introductory activity with MemoQ carried out seemed to be enough for participants to be able to work with this tool, an even to find it useful and rate it high.

Besides, ideally, all the participants should have undergone the experiment the same day and at the same time, in terms of them being influenced by other people's opinions and experiences regarding the experiment. However, this was impossible. I had to do the experiment when participants were willing to attend it and during the hours when the computer room was available at the University. Therefore, the experiment took place in two different days and at three different time slots. Nevertheless, the risk of inter-participants influence was minimal because most of the participants had different language combinations, and therefore they belonged to different language units and went to most of the classes only with students who had the same mother tongue as them. Moreover, participants were in different years of the Master.

In the future, this study could be done differently, with participants who have more experience translating with MemoQ than with SDL Trados Studio. It could be useful to compare the results obtained with the ones this research project provides. Further research would also be useful to broaden the research presented in this study. In addition, a bigger sample of students would be highly recommended to confirm or to deny the tendencies highlighted by my analysis. It would enable the researcher to obtain more valid conclusions. What is more, a future study investigating how other CAT tools work with HTML5 files and a comparison with the results obtained in this research project would be very worth undertaking. Moreover, a similar analysis with a sample of participants who have the same language combination could be implemented. Or a similar analysis in which an open source tool and SDL Trados Studio or MemoQ are evaluated and compared.
8. Bibliography


Appendices

Appendix A – Website 1: Faculty of Translation and Interpreting

Index.html

```html
<!doctype html>
<!-- This website was created by Laura Castro for an experiment included in her MA thesis -->
<html>
<head>
    <meta charset="utf-8">
    <meta name="author" content="Laura castro">
    <meta name="description" content="The Faculty of Translation and Interpreting (FTI, formerly ETI) is located in Geneva, Switzerland, an international crossroads at the heart of Europe, and boasts approximately 500 students from all over the world and 100 teachers and researchers. Students in this exceptional setting benefit from optimal conditions, numerous computer and audiovisual resources, and one of the best-stocked and equipped specialised libraries in Europe."/>
    <meta name="generator" content="Adobe Dreamweaver CC 2014">
    <meta name="keywords" content="FTI, Europe, Switzerland, Faculty of Translation and Interpreting, University of Geneva">
    <link rel="stylesheet" type="text/css" href="css/MonStyle.css">
    <title>About us - Faculty of Translation and Interpreting - UNIGE</title>
</head>

<body >

    <div class="container">

        <header>
            <img src="img/logo.jpg" alt="Université de Genève"
```
The Faculty of Translation and Interpreting (FTI) is one of the oldest centres for translation and interpreting education and research in the world. Students can choose their language combination from Arabic, English, French, German, Italian, Spanish and Russian.
Contact.html

<!doctype html>
<!-- This website was created by Laura Castro for an experiment included in her MA thesis -->
<html>
<head>
    <meta charset="utf-8">
    <meta name="author" content="Laura Castro">
    <meta name="description" content="Faculty of Translation and Interpreting (FTI, formerly ETI), University of Geneva: contacts.">
    <meta name="generator" content="Adobe Dreamweaver CC 2014">
    <meta name="keywords" content="FTI, Europe, Switzerland, Faculty of Translation and Interpreting, University of Geneva">
    <link rel="stylesheet" type="text/css" href="css/MonStyle.css">
    <title>Contacts - Faculty of Translation and Interpreting - UNIGE</title>
</head>

<body>
<div class="container">
<header>
    <img src="img/logo.jpg" alt="Université de Genève" class="logo">
</header>
</div>
</body>
</html>
The Faculty is located on the 6th floor of the Uni Mail university building. The postal address is: Faculté de traduction et d'interprétation 40, Boulevard du Pont d'Arve 1211 GENEVE 4 (SUISSE).
Appendix B – Website 2: University of Geneva

Index.html

<!doctype html>
<!-- This website was created by Laura Castro for an experiment included in her MA thesis -->
<html>
<head>
    <meta charset="utf-8">
    <meta name="author" content="Laura Castro">
    <meta name="description" content="The University of Geneva (UNIGE) enjoys a strong international reputation, both for the quality of its research (it ranks among the top institutions among the League of European Research Universities) and the excellence of its education. This acclaim has been won in part due to its strong ties to many national and international Geneva-based organizations.">
    <meta name="generator" content="Adobe Dreamweaver CC 2014">
    <meta name="keywords" content="University of Geneva, Switzerland, Europe, UNIGE, Education programmes">
    <link rel="stylesheet" type="text/css" href="css/MonStyle.css">
    <title>About the University - International - UNIGE</title>
</head>

<body >
<div class="container">

<header>
  <img src="img/logo.jpg" alt="Université de Genève" class="logo">
  <h1>INTERNATIONAL</h1>
</header>

<nav class="sidebar1">
  <ul class="nav">
    <li><a href="research.html">Research</a></li>
  </ul>
  <img src="img/planet.jpg" alt="" width="175">
</nav>

<main>
  <article class="content">
    <h2>About the University</h2>
    <section>
      <figure>
        <img src="img/uni.jpg" alt="Students of different nationalities studying outdoors" width="500" height="200">
      </figure>
    </section>
    <section>
      <p>With 16,000 students of more than 140 different nationalities, the University of Geneva (UNIGE) offers more than 280 types of degrees and more than 250 Continuing Education programmes covering an extremely wide variety of fields: exact sciences, medicine and humanities.</p>
    </section>
  </article>
</main>
</div>
Research.html

<!doctype html>
<!-- This website was created by Laura Castro for an experiment included in her MA thesis -->
<html>
<head>
  <meta charset="utf-8">
  <meta name="author" content="Laura Castro">
  <meta name="description" content="University of Geneva: research.">
  <meta name="generator" content="Adobe Dreamweaver CC 2014">
  <meta name="keywords" content="University of Geneva, Switzerland, research, UNIGE, science">
  <link rel="stylesheet" type="text/css" href="css/MonStyle.css">
  <title>Excellence of research - International - UNIGE</title>
<h2>Excellence of Research</h2>

<p>The UNIGE (University of Geneva) research strengths are life sciences (genetics, molecular and chemical biology, bioinformatics), physics and chemistry, astrophysics and also some specific fields in social sciences and humanities.</p>
Appendix C – Participant Information Sheet

Participant Information Sheet

Experiment in Website Localisation

INVITATION TO TAKE PART IN A RESEARCH STUDY

I am conducting an experiment to evaluate the performance of two different CAT tools during the localisation of websites. In this study you will be asked to complete a translation task and two questionnaires. At the beginning, we will do an exercise for you to familiarise yourself with one of the CAT tools.

TIME COMMITMENT

The study will take approximately 1 hour and 30 minutes to complete in total.

TERMINATION OF PARTICIPATION

You may decide to withdraw from this research at any time, there are no penalties for withdrawing from the study.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary.

RISKS
There are no known risks associated with this study. If you should at any time find yourself upset or uncomfortable, you may quit at any time.

CONFIDENTIALITY/ANONYMITY

- I will not collect any identifying information, except your e-mail account and name, from you but I will ask you to report your demographic information such as, your age and gender. Your name and e-mail will only be used for initial identification in relation to this study and no other, under no circumstances these data would be published or revealed.

- The data we collect may be published in scholarly journals but no individual participant or their data will be identified.

FOR FURTHER INFORMATION ABOUT THIS RESEARCH STUDY: contact Laura Castro Hernández, MA student on lauracastrohern@gmail.com or 0786863770.
Appendix D – Consent Form

Consent Form

Study title:  **Experiment in Website Localisation**

Researcher:  Laura Castro

Please tick the statement below if you are happy to proceed.

☐ I confirm that I have read the Information Sheet regarding the proposed research and understand the nature of the study

☐ I acknowledge that I have had the opportunity to ask the researchers involved in this research any questions that I might have and these have been met to my satisfaction

☐ I understand the terms under which I am participating

☐ I understand that the information that I give may be used by researcher’s involved in this research and that my participation is voluntary and that I may withdraw myself and my data at any time throughout the study until the research is submitted

Name of participant  ____________________________________________________________

Most accessible e-mail  __________________________________________________________

Signature of participant  __________________________________________________________
Appendix E – Background Questionnaire

BACKGROUND QUESTIONNAIRE

SECTION 1 – General questions

Name: ………………………. Surname: ………………..

Gender: masculine/feminine Age: ……..

Mother tongue(s): ………………………

Language combination(s): ……………………………………………………

Current year of studies (e.g. 2nd year MA): ………………………………..

Specialisation (if in MA): ……………………………………………………..

• Are you currently doing the Localisation course?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If “no”, when did you do the course in Localisation of the FTI? ……… years ago.

• If studying a BA, did you do the course called OAT (Outils d’aide à la traduction) last year?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

• If studying a MA, have you done the course called TAO (*Traduction assistée par ordinateur*)?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 2 – Experience with Computer Assisted Translation (CAT) tools**

How often do you use CAT tools?

<table>
<thead>
<tr>
<th>I use them in all my translation activities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I use them only with some of my translation assignments</td>
<td></td>
</tr>
<tr>
<td>I use them only when I am required to do so</td>
<td></td>
</tr>
<tr>
<td>I have used them, but I do not use them for my daily work</td>
<td></td>
</tr>
<tr>
<td>I have never used them</td>
<td></td>
</tr>
</tbody>
</table>

• Have you used SDL Trados Studio 2014 for translating before?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If “yes”, how familiar are you with this CAT tool?
• Have you used MemoQ 2013 for translating before?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If “yes”, how familiar are you with this CAT tool?

<table>
<thead>
<tr>
<th>1 (not familiar at all)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very familiar)</th>
</tr>
</thead>
</table>

• Please select from this list the CAT tools that you have used before:

<table>
<thead>
<tr>
<th>Wordfast</th>
<th>Multitran</th>
<th>Virtaal</th>
<th>Wordbee</th>
<th>SDL Passolo</th>
<th>Other (please specify)</th>
</tr>
</thead>
</table>

SECTION 3 – Experience with HTML language
• How familiar are you with HTML?

<table>
<thead>
<tr>
<th>1 (not familiar at all)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very familiar)</th>
</tr>
</thead>
</table>

• Have you ever created a website using HTML?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If “yes”, which program or editor did you use to create it?

........................................................................................................................................

If “yes”, how did you create it?

<table>
<thead>
<tr>
<th>Working with the source code</th>
<th>Using a WYSIWYG editor</th>
</tr>
</thead>
</table>

Thank you for completing this questionnaire
Appendix F – First steps with MemoQ

FIRST STEPS WITH MEMOQ

Introduction

The three main objectives of this exercise are: familiarise yourself with MemoQ 2013’s interface, learn how to use the translation editor in order to perform one of the experiment’s tasks and know how to export the translated documents.

First of all, you need to create a translation memory. After that, you need to open a Word document in MemoQ 2013 and translate the first 6 segments. And finally, you need to export the translated document in .doc format.

Please complete the following instructions step by step:

Instructions

- Log into the virtual machine FTI-W7 and start MemoQ 2013 R2 (Démarrer → MemoQ).

- Download the required files. All the files needed for this exercise and for the subsequent experiment have been sent to your email account in a folder called Experiment_CL. Please download it, unzip it and place it in your H:\PRIVE. Rename the folder: “Experiment_YourSurname”. If you cannot find the email or folder ask the researcher and she will provide you with the required files.

1. Create a project

   - Create a Project (Project → New Project). Name your project project_YourSurname, choose “English (United Kingdom)” as the source language and select your mother tongue as the target language.

   - Save your Project in the Experiment_YourSurname folder in H:\ PRIVE (Project directory) and click “Next”.


2. Import the documents you wish to translate

- Click on “Import” and select the document called Article_MemoQexercise.docx which is located in the Experiment_YourSurname folder in H:\PRIVE. Wait until the document has been uploaded and then click “Next”.

![MemoQ project interface showing file import process]

![MemoQ project interface showing translation documents]

- Import
- Import with options...
  - Remove
  - Reimport document
3. Create a translation memory

- Select “Create/use new”. Name your translation memory `TM_YourSurname`. Make sure that the language combination that appears in this window is the same one you put when you created the project. Save the TM in the `Experiment_YourSurname` folder in `H:\PRIVE (Path)`. Click “OK”.

- Now, select (it might be already selected) the translation memory you have just created and click on “Next”.

![Translation memory settings](image-url)
Now you have arrived to the window where you can create or import term bases. However, we are not going to do this now. We will move on directly to the translation stage. Select “Finish”.

4. Translate

You have finished creating the project. Now, to start translating, you need to double click on the document you are going to translate: ArticleMemoQexercise.docx.
• This image shows how all the information is displayed in MemoQ’s translation editor interface:

• In order to start translating, you have to place the cursor in a segment of the target text and start writing. Once you have finished, you must press “CTRL + Enter” for confirming the translation or right click on the mouse and select “confirm”. This action automatically saves the translation unit in the project’s translation memory.

• **Status column**: This column provides you with a lot of information:
  
  a. This symbol describes the match rate of the last inserted translation with regards to the translation memory.
b. 🔴💬 This symbol describes a comment: You can add comments by double-clicking on the icon.

c. ⚠️❗️ These symbols are warning signs. They indicate that there are mistakes in the translation.

d. Segment status: background colours have a specific meaning. For instance, the most common ones are the following:
   i. Grey. The segment hasn’t been translated yet.
   ii. Red. The segment has been translated but not confirmed yet.
   iii. Green. The segment has been confirmed.

- **Tags.** MemoQ uses tags to apply the format of the original document (e.g. highlighted words, italics, hyperlinks, etc.) This format has to be respected in the translation. To do this automatically, you can locate the cursor in the target segment where you want to insert the tag and press F9.

- **ONLY translate the first 5 segments.** When you have finished translating, please confirm those 5 segments.

5. **Export the translated document**

- In order to export the document you have translated, select “Project” and then “Export active document”. The translation is going to be exported as a word document and located in the same folder as the original file (in the **Experiment_YourSurname** folder in H:\PRIVE). MemoQ automatically inserts a code in the translation after the original file’s name (e.g. **Article_MemoQexercise_Spa-ES.docx**).
Appendix G – Localisation task (group A)

INSTRUCTIONS FOR THE EXPERIMENT

GROUP A

- Firstly, you need to localise Website 1 using SDL Trados Studio 2014.
- Secondly, you need to localise Website 2 using MemoQ 2013.

Please, take into account while completing this task, the fact that the linguistic quality of the translations will not be evaluated in this research project.

If you have any questions, please raise your hand and the researcher will come to help you. Do not ask your question out loud if it has to do with the performing of the experiment because this could have an influence on other people’s work.

Please complete the following instructions step by step:

Instructions to begin this experiment:

1. Log into the virtual machine FTI-W7.
2. Start BB FlashBack Express Recorder (Démarrer → Rechercher les programmes et fichiers → BB Flashback Express 5 Recorder. Select “continue” when the image below appears.

![BB FlashBack Express Recorder](image)
If the window “Check for updates” pops up select “cancel”.

Now, select “Record your screen”, then select (it might be already selected) “record full screen” and click on the red circular button.
You need to see the image below to make sure that the program is recording. It is very important that you DO NOT CLOSE OR PAUSE IT until you are told. If you wish you can minimise the window.

Instructions for **SDL Trados Studio**:

1. **Start SDL Trados Studio 2014** (Démarrer → SDL Trados Studio 2014). When the window below appears, select “annuler”.

2. **Create a project.** In “Accueil” select “Nouveau projet”.
Click on “suivant”.

Name the project **Tradosproject** _YourSurname_ and save it in the folder called **Trados** in the **Experiment** _YourSurname_ folder in H:\ PRIVE. Click on “suivant”.
Now, select the languages of the project. Choose “English (United Kingdom)” as the source language (langue source) and select your mother tongue as the target language (langue cible).
Select the folder with all the files you need to translate (Click on “Ajouter un dossier”, select the folder “Website 1” which is located in the Experiment_YourSurname folder in H:\PRIVE and click on “Sélectionner un dossier”). Select “suivant”.
3. **Create a translation memory.** Select “Créer” → “Nouvelle mémoire de traduction sur fichier”.

Name the translation memory **MT_Trados** and save it in the **Experiment_YourSurname** folder in H:\PRIVE. Select “suivant”, “suivant”, “terminer” et “fermer”.

Now, select “Terminer” et “fermer”.
4. **Translation stage.** Double click on the project (**Tradosproject_Castro**) and in “Fichiers” select **“Website 1”**. Trados shows you the files you need to translate: **contact** and **index**.
Double click on **index** and translate the document. Confirm the segments when you have finished translating them.

Now, open the **contact** document ("Fichiers" → double click on **contact**) and translate it as well.
Confirm all the segments.

5. **Export the translated files.**
   - Select “Tâches en mode batch”, click on “Finaliser” → “Suivant” → “Terminer” → “Fermer”.
Since you had your contact file open, you have exported only this document. You must do the same action to export the index file (“Fichiers” → “index” → “Tâches en mode batch”).

Do not close SDL Trados Studio yet.

Go to your Trados folder inside Experiment_YourSurname folder and make sure that in your “Es_es”, “Fr_fr” or “IT_it” folder (automatically created by SDL Trados to locate the translated files) → Website 1 you have both translated files (index.html and contact.html). If you just have one file, you will have to export the other file.

**Instructions for MemoQ:**

1. **Start MemoQ 2013 R2** (Démarrer → MemoQ 2013 R2)
2. Create a Project (Project → New Project). Name your project Memoqproject_YourSurname, choose “English (United Kingdom)” as the source language and select your mother tongue as the target language.

   Save your Project in the Experiment_YourSurname folder in H:\ PRIVE (Project directory) and click “Next”.

3. Click on “Import” and select “Website 2” in the Experiment_YourSurname folder in H:\ PRIVE. Press “CTRL” and click each one of the 4 elements to select them all (css, img, research.html and index.html), then click on “ouvrir”. Wait until the documents have been uploaded and then click “Next”.

4. Translation memory. If the program shows you the translation memory you created before during the MemoQ task: “MT_YourSurname” select this one and click on “Finish”. If it does not show it, select “Create/use new”. Name your translation memory MT_Memoq. Make sure that the language combination that appears in this window is the same one you put when you created the project. Save the TM in the Experiment_YourSurname folder in H:\ PRIVE (Path). Click “OK”. Now, select (it might be already selected) the translation memory you have just created and click on “Finish”.

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5. **Translation stage.** MemoQ shows you the two files you need to translate. Double click on the **index** and translate it. Confirm the segments when you have finished translating them. Now, open the **research** document (“Project Home” → double click on **research**) and translate it as well.

6. **Export the translated files.**

Confirm all the segments and export the **research** file, select “Project” and then “Export active document”. Now, select the other translated document (Project Home → click on the other file you need to export) and perform the same actions to export it. Please, verify that these translated files have been exported to the **Website 2** folder in the **Experiment_YourSurname** folder in H:\PRIVE with the following names: e.g. **index_spa-Es** or **research_spa-ES**.

**Instructions to finish this experiment:**

1. Stop BB Flashback by clicking on the red square button. **Save** the recording in your **Desktop**.

   ![BB FlashBack Pro 5 Recorder](image)

   If this message appears in your screen when you are trying to save the .fbr file select “yes”.

2. Zip the folder **Experiment_YourSurname** where all your translated files are located and send it to this email address: **lauracrohern@gmail.com**
3. Do not close your session in the virtual machine.
4. Raise your hand and let the researcher know that you have finished the experiment.

Now, you will have to fill in one last questionnaire.
Appendix H – Localisation task (group B)

INSTRUCTIONS FOR THE EXPERIMENT

GROUP B

- Firstly, you need to localise Website 1 using MemoQ 2013.
- Secondly, you need to localise Website 2 using SDL Trados Studio 2014.

Please, take into account while completing this task, the fact that the linguistic quality of the translations will not be evaluated in this research project.

If you have any questions, please raise your hand and the researcher will come to help you. Do not ask your question out loud if it has to do with the performing of the experiment because this could have an influence on other people’s work.

Please complete the following instructions step by step:

Instructions to begin this experiment:

1. Log into the virtual machine FTI-W7.
2. Start BB FlashBack Express Recorder (Démarrer → Rechercher les programmes et fichiers → BB Flashback Express 5 Recorder. Select “continue” when the image below appears.

If the window “Check for updates” pops up select “cancel”.

128
Now, select “Record your screen”, then select (it might be already selected) “record full screen” and click on the red circular button.
You need to see the image below to make sure that the program is recording. It is very important that you DO NOT CLOSE OR PAUSE IT until you are told. If you wish you can minimise the window.

Instructions for **MemoQ**:

1. **Start MemoQ 2013 R2** (Démarrer → MemoQ 2013 R2)

2. Create a Project (Project → New Project). Name your project **Memoqproject_YourSurname**, choose “English (United Kingdom)” as the source language and select your mother tongue as the target language.

   Save your Project in the **Experiment_YourSurname** folder in H:\ PRIVE (Project directory) and click “Next”.

3. Click on “Import” and select “**Website 1**” in the **Experiment_YourSurname** folder in H:\ PRIVE. Press “CTRL” and click each one of the 4 elements to select them all (**css, img, contact.html and index.html**), then click on “ouvrir”. Wait until the documents have been uploaded and then click “Next”.

4. Translation memory. If the program shows you the translation memory you created before during the MemoQ task: “**MT_YourSurname**” select this one and click on “Finish”. If it does not show it, select “Create/use new”. Name your translation memory **MT_Memoq**. Make sure that the language combination that appears in this window is the same one you put when you created the project. Save the TM in the **Experiment_YourSurname** folder in H:\ PRIVE (Path). Click “OK”. Now, select (it might be already selected) the translation memory you have just created and click on “Finish”.

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5. **Translation stage.** MemoQ is showing you the two files you need to translate. Double click on **index** and translate it. Confirm the segments when you have finished translating them. Now, open the **contact** document (“Project Home” → double click on **contact**) and translate it as well.

6. **Export the translated files.**

   Confirm all the segments and export the **contact** file, select “Project” and then “Export active document”. Now, select the other translated document (Project Home → click on the other file you need to export) and perform the same actions to export it. Please, verify that these translated files have been exported to the **Website 1** folder in the **Experiment_YourSurname** folder in H:\PRIVE with the following names: e.g. **index Spa-Es** or **contact Spa-ES**.

**Instructions for SDL Trados Studio:**

1. **Start SDL Trados Studio 2014** (Démarrer → SDL Trados Studio 2014). When the window below appears, select “annuler”.

![Integration SDL Language Cloud](image)

2. **Create a project.** In “Accueil” select “Nouveau projet”.
Click on “suivant”.

Name the project Tradosproject_YourSurname and save it in the folder called Trados in the Experiment_YourSurname folder in H:\PRIVE. Click on “suivant”.

Now, select the languages of the project. Choose “English (United Kingdom)” as the source language (langue source) and select your mother tongue as the target language (langue cible).
Select the folder with all the files you need to translate (Click on “Ajouter un dossier”, select the folder “Website 2” which is located in the Experiment_YourSurname folder in H:\PRIVE and click on “Sélectionner un dossier”). Select “suivant”.

3. **Create a translation memory.** Select “Créer” →“Nouvelle mémoire de traduction sur fichier”.
Name the translation memory **MT_Trados** and save it in the **Experiment_YourSurname** folder in H:\PRIVE. Select “suivant”, “suivant”, “terminer” et “fermer”.

Now, select “Terminer” et “fermer”.
4. **Translation stage.** Double click on the project (Tradosproject_Castro) and in “Fichiers” select “Website 2”. Trados shows you the files you need to translate: research and index.

Double click on **index** and translate the document. Confirm the segments when you have finished translating them.
Now, open the research document (“Fichiers” → double click on research) and translate it as well.
Confirm all the segments.

5. **Export the translated files.**
   - Select “Tâches en mode batch”, click on “Finaliser” → ”Suivant” → “Terminer” → “Fermer”.
Since you had your research file open, you have exported only this document. You must do the same action to export the index file (“Fichiers” → “index” → “Tâches en mode batch”).

Do not close SDL Trados Studio yet.

Go to your Trados folder inside Experiment_YourSurname folder and make sure that in your “Es_es”, “Fr_fr” or “IT_it” folder (automatically created by SDL Trados to locate the translated files) → Website 2 you have both translated files (index.html and research.html). If you just have one file, you will have to export the other file.
Instructions to finish this experiment:

1. Stop BB Flashback by clicking on the red square button. Save the recording in your Desktop.

   ![Screen recording complete]

   If this message appears in your screen when you are trying to save the .fbr file select “yes”.

   ![Warning]

2. Zip the folder Experiment_YourSurname where all your translated files are located and send it to this email address: lauracastrohern@gmail.com
3. Do not close your session in the virtual machine.
4. Raise your hand and let the researcher know that you have finished the experiment.

Now, you will have to fill in one last questionnaire.
Appendix I– Task Questionnaire

TASK QUESTIONNAIRE

Name: ………………………. Surname: ………………..

SECTION 1 – Evaluation of SDL Trados Studio 2014

1. How easy have you found performing this task with SDL Trados Studio?

<table>
<thead>
<tr>
<th>1 (not easy at all)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very easy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How fast do you think SDL Trados Studio has allowed you to perform this task?

<table>
<thead>
<tr>
<th>1 (very slow)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very fast)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. How useful has SDL Trados Studio been while localising the website?

<table>
<thead>
<tr>
<th>1 (not useful at all)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very useful)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. How would you rate the quality of the final product after using SDL Trados Studio?
5. How would you rate your overall experience translating with SDL Trados Studio?

<table>
<thead>
<tr>
<th>1 (very poor)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very high)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 2 – Evaluation of MemoQ 2013

6. How easy has been doing this task with MemoQ?

<table>
<thead>
<tr>
<th>1 (not easy at all)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very easy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. How fast do you think MemoQ has allowed you to perform this task?

<table>
<thead>
<tr>
<th>1 (very slow)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (very fast)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. How useful has MemoQ been while localising the website?
9. How would you rate the quality of the final product after using MemoQ?

1 (very poor)  2  3  4  5 (very high)

10. How would you rate your overall experience translating with MemoQ?

1 (very negative)  2  3  4  5 (very positive)

SECTION 3 – Comparison of both CAT tools

11. Which tool have you found the most adequate for performing this task and why?

<table>
<thead>
<tr>
<th>SDL Trados Studio</th>
<th>MemoQ</th>
<th>Both the same</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. Which tool have you preferred when completing this task and why?

<table>
<thead>
<tr>
<th>Tool</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trados Studio</td>
<td></td>
</tr>
<tr>
<td>MemoQ</td>
<td></td>
</tr>
<tr>
<td>Both the same</td>
<td></td>
</tr>
</tbody>
</table>


13. Which tool has allowed you to perform this task faster and why?

<table>
<thead>
<tr>
<th>Tool</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trados Studio</td>
<td></td>
</tr>
<tr>
<td>MemoQ</td>
<td></td>
</tr>
<tr>
<td>Both the same</td>
<td></td>
</tr>
</tbody>
</table>


SECTION 4 – Personal knowledge of HTML language

14. Had you translated a HTML file using SDL Trados Studio before?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>


15. Had you translated a HTML file using MemoQ before?
16. Were you aware that there is now a new version of HTML called HTML5?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

17. Have you worked with HTML5 before?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If “yes”, please describe briefly your experience:

................................................................................................................................................
................................................................................................................................................
................................................................................................................................................
................................................................................................................................................
................................................................................................................................................
................................................................................................................................................
................................................................................................................................................
................................................................................................................................................

18. Did you know any of the HTML 5 structural elements shown below before performing this task? If “yes”, please select the ones that you knew:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

HTML 5 structural elements

<nav> </nav>
19. Were you aware that there were HTML 5 structural elements in the task you have carried out? If “yes”, please select the ones that you have seen:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HTML 5 structural elements

| <nav> </nav> |
| <section> </section> |
| <article> </article> |
| <main> </main> |
| <aside> </aside> |
| <header> </header> |
| <footer> </footer> |
| <figure> </figure> |
| <figcaption> </figcaption> |

SECTION 5 – Task performance

20. Have you used the “VIEW PANE” function while translating with MemoQ 2013?
If, “yes”, how useful have you found it for performing the task?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(not useful at all)</td>
<td></td>
<td></td>
<td></td>
<td>(very useful)</td>
</tr>
</tbody>
</table>

If “no”, why not?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I did not know this function existed</td>
<td></td>
</tr>
<tr>
<td>Other reasons (please specify)</td>
<td>----------------------</td>
</tr>
</tbody>
</table>
21. Have you used the “APERÇU” function while translating with SDL Trados Studio 2014?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If “yes”, how useful have you found it for performing the task?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(not useful at all)</td>
<td></td>
<td></td>
<td></td>
<td>(very useful)</td>
</tr>
</tbody>
</table>
If “no”, why not?

<table>
<thead>
<tr>
<th>I did not know this function existed</th>
<th>Other reasons (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. Have you used the “ÉDITEUR” function while translating with SDL Studio 2014?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If “yes”, how useful have you found it for performing the task?
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(not useful at all)</td>
<td></td>
<td></td>
<td></td>
<td>(very useful)</td>
</tr>
</tbody>
</table>

If “no”, why not?

<table>
<thead>
<tr>
<th>I did not know this function existed</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Other reasons (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.................................</td>
</tr>
<tr>
<td>.................................</td>
</tr>
<tr>
<td>.................................</td>
</tr>
</tbody>
</table>

23. Did you perform any of these actions **before** localising the website?

<table>
<thead>
<tr>
<th>Opened the website in a web browser</th>
<th>Used Notepad++</th>
<th>Other [please specify]:</th>
<th>No, I have not</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.................................</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.................................</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.................................</td>
<td></td>
</tr>
</tbody>
</table>

24. Did you perform any of these actions **while localising the website**?
25. Did you perform any of these actions *when you finished* localising the website?

<table>
<thead>
<tr>
<th>Opened the website in a web browser</th>
<th>Used Notepad++</th>
<th>Other [please specify]:</th>
<th>No, I have not</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

26. Do you think you have been able to localise all the website’s translatable text with SDL Trados Studio 2014?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. Do you think you have been able to localise all the website’s translatable text with MemoQ?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Thank you for completing this questionnaire*