TRANSLATION & LOCALIZATION VOLUME 1

An Anthology of Essays on Translation

Abstract

A riveting collection of scholarly articles from the academic, commercial and practical aspects of translation and localization in the modern world.

Translation & Localization

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About the Author

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1. Multilingual Localization A Project Management Perspective



Multilingual **e-learning localization** is the conversion of e-learning content into different languages at the same time. Such an enterprise requires a colossal effort in coordination and management.

1.1. A Herculean Task

Each localization project has several stages, interspersed by checks and reviews and innumerable micro-processes in the workflow. Multiplying each of these over several languages is a herculean task. It calls for astounding skills on the part of the project manager, in terms of understanding of language, people management as well as workflow management, tracking and execution.

As a leading e-learning localization provider in Europe and India, we were approached by a client and commissioned a task of translating their e-learning tutorials. The company has operations in several countries of Europe, Asia and India. The project involved the conversion from English into 15 world languages.

The tutorials serve as training modules for new recruits. They were being developed to reduce the dependency on human trainers and substitute them with a repository of graded tutorials, beginning from the fundamentals to in-depth training in various aspects of the company's functions and processes.

1.2. Requirement Analysis

Our project management team analysed the requirement in direct consultation with the client and identified the following aspects of the training material.

- **Text Translation**: There were three aspects to the text.
 - o text for **narration**
 - o text for **reference** (for reading in the side bar)
 - o **central display text**, coupled with diagrams and animations
- **Subtitles:** The tutorials also comprised video documentaries. While some had to be subtitled, others had to be dubbed with voiceover in the respective language.
- **Voiceover.** The translated narration scripts were to be rendered to a narrator's voice in each language. The narrator would explain the concepts and synchronise the same with the accompanying on-screen displays.
- Integration & Testing

1.3. Process / Task

First, the content was to be translated. Next the subtitles for the video documentaries would be created, timed and integrated. Simultaneously, the narration script would be recorded to create voiceover audio files. Subsequently, the content created in every target language would undergo a client review before integration.

The process is summarised in sequential representation below:

1. Translation

- 1.1. Queries
- 1.2. Glossary
- 1.3. Resolutions
- 1.4. Revision

2. Subtitling

3. Client Validation

- 3.1. Feedback
- 3.2. Revision

4. Voiceover

- 4.1. Audio Script
- 4.2. Recording
- 4.3. Checking and Revision
- 4.4. Handover to Localization Team

5. Integration & Synchronization

- 5.1. On-Screen Text
- 5.2. On-Screen Animation
- 5.3. Integration of Audio Files

6. Testing

6.1. Checking, Feedback and Correction

This required coordination with fifteen counterparts of the various branches of the client, and thirteen language teams, comprising translators, reviewers and voiceover artistes. This herculean task presented several challenges.



1.4. Challenges in Multilingual Localization

Identifying & Hiring Translators and Linguists

The first step is to identify the linguists who can do the work. There are different linguistic tasks involved – translation, editing, script editing and voiceover. Identifying the right match for each of the tasks in each of the fifteen languages is nothing short of a feat. It's a gamble of sorts, as not all linguists are known to the project manager. Experience

The capabilities of each linguist are known by reference and past experience only. Hiring them, and assigning the contract is a matter of immense responsibility for the localising company and the project manager.

1.5. Standardizing Processes across Language Teams

The process for localization is inherently complex. Each project will demand, and each organisation will adapt and develop unique processes over time. The work style and process flow of the client may not foresee the issues faced by the localizing team. To adapt and communicate with the client is an important milestone in the healthy development of our own process, to align, streamline and leverage areas of efficiency.

1.6. Defining Processes, Instructions and Style Guides

Every sub-process of the larger process requires clear definition. At the conceptual stage, it pays that all expectations be translated into carefully drafted and easy-to-understand instructions. This ensures not only compliance but also consistency of execution across all language teams. The possibility of error is also reduced considerably.

When defining instructions for a multilingual e-learning localization project, the following are the mantras to bear in mind.

Simplification – despite the complexities and detailing in the global requirement of the project.

Reduction – summarise and avoid too many repetitions and details – and yet be able to orientate the linguist to the larger goal and direction of the task.

Unitisation – classify and contain instructions within logical sections.

Sequence and Progression – systematise and structure instructions in a step-by-step format to facilitate ease of comprehension.

If the above principles are applied while drafting process documents, we can bring in greater clarity, remove ambiguity, and reduce effort during execution and tracking. Confusion is avoided and rework is averted.

1.7. Diverse Cultures - Diverse Communication Abilities

After having defined the instructions, it is a challenge to ensure that all language teams have understood the instructions. In order to simplify instructions, it is not only necessary to draft instructions in simple English as we understand it, but also to make sure that the words and phrases we choose are understood correctly. Different countries have different variations of the English language, and do not interpret idiomatic expressions in the same way as others.

To ensure that translators and linguists understand correctly the nitty-gritties of the instructions, and to bring finer points to their attention, it takes a great deal of effort and attention. Once shared, there needs to be a process of feedback in an interaction to recognise that the understanding of the instructions matches the intended message. Both the communication and feedback are a stupendous task when executed over 15 language teams.

1.8. Cross-Language & Cross-Function Coordination

The challenge of such a project is that we have multiple teams, one for every language. And in every team has to execute multiple functions. This means that the coordinator has to multiply his efforts and find a way to keep track of each stage in each language team. Managing 5 main and 3-4 sub-functions over 15 teams can be a perplexing task.

1.8.1. Managing People, Capabilities & Limitations

Temperaments of linguists: Each human being is different and has his own limitations and strengths. The skills of a linguist are rare and along with managing their expertise, one also needs to manage the limitations of personality and working style. A keen project manager will need to be attuned to the needs, expectations and pace of the translator.

While some translators are more accommodating, others can have strong opinions on matters and may be averse to suggestions and changes. While some are accommodating, others can be hard to convince. How best, then, to work with and around such limitation, or how to fill the gap is a challenge. In a multilingual project, these challenges get compounded.

1.8.2. Adaptability & Learning Curve of each Team Member

The ability to learn, comprehend and follow instructions varies from individual to individual. And the larger the team, the more intricate is the management of the diversity in capabilities. The project manager has the compounded challenge of bringing each team member to speed.

First, they need to identify deviations and lapses. Next, they must find a way to bridge the gap in understanding. And subsequently, they gently help the linguist see what is expected, and comply with the standards of the project. This calls for sensitivity, tact and restraint.

1.8.3. Managing A Team and Team Members / Peoples' Management

The rules of people management apply to every enterprise. All team members expect to be treated respectfully and honoured for their work.

It pays to consider and treat team members a client and not an employee. Freelance linguists are after all accepting our work, just like a client accepts our service. By making this fundamental change in our approach, we can win their cooperation and enhanced contribution to the project.

Further, we must consider team members as partners in the project, regardless of the nature of engagement. We must provide the translators and other linguists an overview of the entire project. Introduce them to other linguists in the production line and with the translators and linguists of the other language teams.

It pays to have joint meetings to provide orientation and direction. Provide time and scope for them to share their ideas. Linguists come with rich experience. If we merely treat them like an isolated part within the entire machinery, we lose out on valuable experience and ideas. When treating them as partners, we can bank on their resources, skills, experience and ideas.

1.8.4. Tools, Technology, Knowledge Transfer

CAT (computer aided translation) tools, CMS (content management systems), word processors, spreadsheets, file sharing platforms and many more technologies abound. Each day there are new software. Training and exchange of knowledge within the team is essential for consistency and streamlining of the workflow.

1.8.5. Tracking Progress

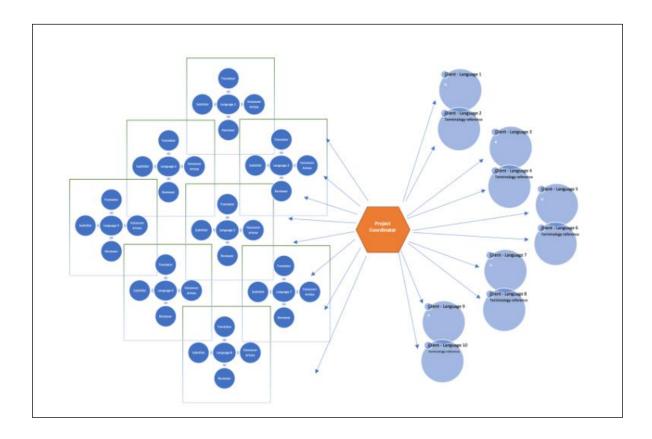
Monitoring the progress of work at each stage and checking off various parameters in a timely fashion are essential in order to avert mishaps. For a project of this complexity to progress to successfully and meet deadlines, it is important to track the workflow at every stage. Neglect or oversight of any one minute steps can impact the overall delivery.

An efficient tracking method should be developed. In this way, we do not rely on memory. Simplicity and ease of tracking are essential characteristics of a tracking system.

1.8.6. Client Management

Keeping a client satisfied and confident of our capabilities is essential for business.

Keeping the client informed about the progress and delivering at relevant milestones form part of the project manager's central functions. The project coordinator functions as a point of contact and apprises the client of all progress and any contingencies that might emerge.



2. Translation, Language Conversion and Language Service Providers

2.1. Language Conversion or Translation

Generally known as translation, language conversion refers to the rendition of text of one language in a different one. Language conversion involves relaying to the reader the message of a text that was written in a different language.

2.2. For Whom is Translation a Profession

Ideally, translation is a line of work suitable for those who have a flair for language. Bilingual and multilingual men and women who have a near native command over two or more languages are most suited. Those who enjoy language and appreciate literature, expression and style make the best translators. Of course, mere interest and flair are not sufficient. Professional translation requires professional training and education in the field of linguistics and translation as a discipline, a specific course of studies. It is a combination of skill and training that make a good translator.

2.3. Application and Scope of Translation

Today, translation has widened its range of application. What was in the past only restricted to literature, novels, and religious texts, slowly expanded to trade and technology. In the not so recent past, globalization and the industrial revolution, coupled with the great advancements in science and technology, necessitated the transfer of knowledge across language communities. Then came the internet revolution, shrunk the world, and overcame physical distances. This presented the possibility to communicate and share content across continents, making it important for language communities to understand each other. More and more content in science, technology, television, films, and e-learning material

2.4. Areas of Translation & Localization

In the highly professional era of specialization in translation, translation activities are broadly categorised in many domains.

2.4.1. Literature Translation

The traditional role of translation was in literature, poetry, drama and prose. This had an intercultural significance in the days of the past. Today, too, its role has been enhanced by tourism and globalisation.

2.4.2. Translation in Science & Technology

This by far is the most prolific application of translation in the modern world which is increasingly becoming a knowledge-based society.

2.4.3. Mechanical, Engineering, Oil & Gas Translation

Technology transfer, outsourcing and offshore manufacturing necessitate the conversion of technical knowledge and literature into the language of the employees and consumers.

2.4.4. Scientific & Technical Translation

In the area of science, technology, research and development, technical translation is increasingly gaining importance. Patents, research papers, inventions, articles in journals and new technology needs the best minds from different language communities to collaborate.

2.4.5. Medical & Pharmaceutical Translation

The translation of medical and pharmaceutical literature requires great care. Not only are the nuances of language, but also the intricacies of terminology are of critical importance. A detailed article below explains the scope and implication of errors in medical translation, and how quality and accuracy in translation is maintained in this domain.

2.4.6. IT and Software Localization

The boom in information technology, artificial intelligence and software industry has touched every aspect of life. Without exception. Software, website, and applications require localization to enhance their outreach and use.

2.5. Language Conversion in Trade, Commerce, Law and Banking

2.5.1. Legal Translation

Translation of contracts, lease agreements and other legal documents require not just language skills but also knowledge of law, differences in the laws of different lands, and the equivalents in the legal concepts. The article below gives and in-depth analysis and description of the complexity of legal translation.

2.5.2. Financial Translation

Financial reports, banking related documents, corporate tax computations and many statutory documents related to company performance require skilful translation. Like any other domain-specific translation, the knowledge of the subject matter and correct terminology is important.

2.6. E-Learning Localization & Translation

In a knowledge society education, skill development and continuing learning are part of general lifestyle. Today, the internet has facilitated learning like never before. Content is being made available to audiences across the globe and the language barrier is being overcome with different modes of translation, either with subtitles, or voiceover and narration conversion.

2.7. Entertainment Industry - Subtitling, Voiceover, Closed Captions

Film, television, YouTube and other online streams have revolutionised the news and entertainment industry. Subtitling, dubbing and closed captions are forms of translation and language conversion which have made available to the discerning audience content from different parts of the world.

2.8. Language Service Providers (LSP)

A language service provider is an agency that takes care of a customer's translation requirements. Translation will take several forms such as written translation, subtitling, localization and voiceover translation. Further, the domains (subject-matter) of each translation may be different. Selecting the right translator, supporting technology and the most suitable quality control process is beyond the scope of hiring a translator directly.

This is where a translation agency plays a vital role in ensuring your translation needs are met with accuracy and timely delivery.

3. Legal Translation at WordPar International



3.1. Introduction

Legal document translation is a specialised area of service that requires skilled legal translators. The article outlines the process we follow at WordPar to ensure well-drafted legal translations by legal experts.

We treat legal translations as fresh drafts and engage legal experts and qualified legal translators for the drafting of such translations.

3.2. Specialised Legal Translation

Legal terminology must be accurately translated ensuring the meaning in the legal context. Minor errors in legal translation can result in grave consequences. We entrust our legal translations to qualified legal experts, integrating best practices in the legal sphere. The translators are expected to work in close consultation with legal advisors of the countries of origin and use.

3.3. Legal Terminology and Glossaries

It is imperative that the translator is familiar with the legal system, laws and practices of the country for which the translation is being done. As part of the process, we generate a glossary of legal terms for every project. Client feedback and preferences are incorporated based on mutual discussions. This glossary can be made available to clients upon request.

3.4. Native Translators & Legal Experts

All our translators are native speakers of the target language. They are professional translators specialised in legal translation. Most of our legal translators are lawyers themselves or have studied law as a discipline in their formal education and specialise in legal translation. To translate legal documents, one cannot depend of linguists without legal knowledge and understanding of jurisprudence.

3.5. Review by Second Translator and Legal Expert

Legal translations at WordPar are reviewed by a legal expert of the target country. As per requirements of ISO 17100 standards, our translations go through a second review to check for factual correctness of names, reference numbers, dates, amounts and so on. All prices include the cost of review and proofreading.

3.6. Confidentiality & Non-Disclosure

To safeguard the confidentiality requirements of our clients, we enter into non-disclosure agreements with our clients All team members are parties to non-disclosure agreements with WordPar. Client data is protected by law. We also follow ISO 27001 standards for data security.

3.7. Efficient Workflow

We at WordPar have efficient workflow and project management practices which ensure quality, efficiency and punctuality. Close coordination between the manager, linguists and legal experts and clarity in instructions and expectations are a hallmark of our process.

3.8. Timely Turnaround

We understand the need for speed in legal matters without compromising on accuracy and correctness of terminology. Timely interventions & coordination by the planners, executors and stakeholders result in process efficiency and timely completion.

We pay close attention to this dialectic and work a fine balance between accuracy and speed. Deadlines are negotiated and agreed upon ahead of a project. We honour our commitments and always submit translations on time. In urgent cases, we can also submit draft versions of the translations before the final review.

3.9. Types of Legal Documents

At WordPar we translate ALL types of legal documents including, but not limited to, the following:

- contracts, agreements,
- mergers, acquisitions
- lease deeds
- sale agreements and sale deeds
- educational records
- transcripts
- degrees
- diplomas
- travel documents
- passports
- visas

- civil documents
- marriage certificates
- birth certificates
- divorce decrees
- death certificates
- financial & tax records
- bank statements
- investment statements
- proof of salary and income
- income tax returns
- other tax documents

3.10. Certification and Notarisation

WordPar provides certified legal translations. All our translations are accompanied by self-attested affidavits which are legally binding. Further, all translated documents are notarised for due legal compliance. Our affidavits may be produced in any court of law or government bodies to claim validity and acceptability.

4. Medical & Pharmaceutical Translation – Expectations, Challenges, Solutions

Medical translation plays an ancillary role in medical research & practice today. It is a kind of technical translation that requires a high level of skill and knowledge. In addition to translation credentials, the linguist also must possess adequate knowledge or mastery of medical concepts and terminology.

4.1. Need - Challenges and Risks

The need for medical translation is felt in an array of situations. Pharma companies and CROs have a worldwide outreach for their medicines and must make all literature about the production and use available to people in different languages. Manufacturers of medical equipment have a competitive advantage when their literature is translated in different languages. Doctors and medical professionals need to treat and interact with patients of different cultures and linguistic backgrounds.

4.2. Health Perspective

Patients may have allergies which must be correctly understood by the doctors, without ambiguity. Medical reports and medical histories require accuracy because the diagnosis and treatment can make a difference between life and death. Manufacturing and assembly manuals can go awry if not translated correctly or if misinterpreted by the translator.

Just as a good diagnosis is essential in administering the right treatment for a disease, so also, an accurate rendition of the same is equally crucial in a multilingual situation. Translation of prescriptions, medical and consent forms require a great deal of care and attention. Allergies to particular substances or drugs must be correctly understood, interpreted and reported.

Any error can lead to the wrong choice of treatment or course of medication, which may not have otherwise been the intention of the doctor, patient or health-care professional.

4.3. Legal & Financial Implications

Errors in translation have clinical consequences including health or life hazard. They can lead to serious financial claims and lawsuits. Stakes are so high in medical translation, that it is worth investing a higher price to ensure that a translation is 100% accurate.

4.4. Types of Medical Documents

There is a broad range of documents when we speak of medical translations. The following is an exhaustive list of documents that we include within its scope.

- application dossiers
- registrations for new medicines & devices
- instructions manuals for medical equipment
- health surveys
- consent forms, posters, leaflets, brochures
- clinical trials
- clinical protocols
- manufacturing process descriptions
- production manuals
- pharmacological studies
- articles in scientific journals

- regulatory documents
- patents for drugs and vacciness

4.5. Examples of Errors

Below are some examples of translations that can go seriously wrong.

While translating from Portuguese to English, *«déficit cognitivo ligeiro»* has many times been incorrectly translated as *«light dementia»* while the right term should be: *«mild dementia»*. This happens because *«ligeiro»* gets literally translated to *«light»* .

Another example is from Hungarian. The term 'drug' translated as *«drog»* or *«kábítószer»* which refer to illicit drugs like LSD, heroin, cocaine, etc. The correct translation is *«gyógyszer»* which means medicine, used for healing people.

In translating from French to English, for instance, an « otorhinolaryngologue » must be translated as «ENT (ear nose throat) physician». The word is Latin based in French use, but not always in English (depending on the target audience).

A common error in English to Korean is for the term *«chronic renal failure»*. It should be translated as *«*만성 신부전», but is sometimes translated as *«*만성 신기능 상실». This happens due to the meaning of the Korean word *«*부전» which means imperfection, and is quite similar in meaning to *«*기능 상실», which actually means loss of function.

In Japanese, «高糖» is an incorrect choice for *«diabetes»*. The appropriate word for diabetes is *«*糖尿病».

Language Pair	Source Text	Incorrect	Correct
		Translation	Translation
Portuguese > English	déficit cognitivo ligeiro	light dementia	mild dementia
French > English	otorhinolaryngologue	otorhinolaryngologist	ENT physician
English > Hungarian	drug	kábítószer, drog	gyógyszer
English > Korean	chronic renal failure	만성 신기능 상실	만성 신부전
English > Japanese	diabetes	高糖	糖尿病

Table 1: Examples of Errors in Translation

While translating from English to Turkish for example, measurement units like "mL" need to be converted to "ml". We also change the place of "%" like "%4" for "4%". These are important when one is working on license files as everything is based largely on numbers.

4.6. Qualifications

Considering the complexity and highly technical nature of medical translation, it requires a corresponding level of specialisation. The two focal components are **qualification** and **specialisation** in medical translation. Education in the area of medicine is undoubtedly an added advantage.

The translator should be a qualified professional linguist. Next, they should specialise in medical translation. Often, medical practitioners with linguistic qualifications also assume the role of medical translators. They can also play the role of consultants, lexicographers (for glossary generation) or reviewers within the process of translation.

For medical interpreters, knowledge of medical mediation is essential.

4.7. Ongoing Training

In reality, the number of qualified and specialised medical translators is far less than the need. Medical translations will perforce be done by non-medicos. From within the industry, there is a need to train and develop the skills required for this wing of translation. Ongoing education and research on the part of agencies and translators has grown. This needs to be regulated and monitored.

4.8. Quality Control - Method over Person

Quality control is an aspect of vital significance in medical translation. Detection of errors is critical. It is necessary to make medical translation more process driven and less dependent on the individual translator. Translation companies need to stress not only on training and qualification, but also verification and review.

4.9. Quality Management - Practices, Methods & Procedures

Methods, processes and procedures are crucial, both in science and translation. Especially in medical translation. The field of medicine itself is vast. It is not always possible to have translators with the right combination of qualifications and specialisation. What then are the ways to ensure accuracy and quality in medical translation? A multi-pronged approach may be necessary. The various aspects and practices are discussed here.

4.10. Translator Selection

This is by far the most fundamental quality control measure. Identifying and selecting the right fit for the requirement obviates effort in review, verification and correction. Translators should be qualified linguists and specialise in medical and pharmaceuticals.

4.11. Pre-Translation Preparation and Post-Translation Verification

Medical translation must have multiple levels of control and error detection. A typical translation process will follow the following stages:

4.11.1. Preparation (Pre-Translation)

- 1.1. preparation of glossary
- 1.2. consultation, reference and research
- 1.3. conceptual debrief

4.11.2. Translation

4.11.3. Verification (Post-Translation)

- 1.4. review & reconciliation
- 1.5. proofreading
- 1.6. review for legal compliance with local laws

4.12. Engaging Medical Professionals in the Process

A physician or medical professional must form part of the process in at least one phase of the process. Below is a schematic representation of the various possibilities of where and how a medico contributes to the quality check. They can either be the consultant for glossary development or participate in a debrief at the pre-translation stage. They could be the translators themselves, or review, vet and validate a translation.

			Option A	Option B	Option C	Option D
on						
lati	preparation of glossary	medico				
ans		specialised linguist				
Pre-Translation Preparation	consultation and research	medico				
Pre P		specialised linguist				
Trar	slation	medico				
		specialised linguist				
	2 nd translator verification	medico				
atio)		specialised linguist				
nsla atio	3 rd translator proofreading	medico				
ost-Translatic Verifications		specialised linguist				
Post-Translation Verifications	4 th - legal compliance	medico				
Ā		specialised linguist				

4.13. Lexicographical Consultation, Reference & Research

Medicine being a vast area of knowledge, translator must continue to research glossaries, dictionaries and other reference material. The process of translation especially in the medical field is one of ongoing education. Translators require access to ready references to concepts and terms. One such online medical dictionary available easily is the Harvard Medical School's medical dictionary.

4.14. Translation Style, Conventions & Guidelines

There is **no room for ambiguity** in medical translation. Translators should in the first instance self-assess their capability to participate in such translation activity. One should avoid idiomatic

use of language as much as possible. Medical translation is a highly technical and scientific subject, and figurative use of language can be completely avoided. Word-for-word translation is to be avoided and sense-for-sense translation is to be adopted.

Client debriefs are of great consequence. Clients can have their own guidelines, conventions and preferences, which need to be shared with the translation team. When no documented guidelines are available, an agency MUST **develop a glossary** and a list of queries, and run it by the client. A structured list of queries and terms validated by the client goes a long way in avoiding rework.

It is important to **develop a glossary** overtime. Conventions should be agreed upon for acronyms and highly technical words, for which equivalents are not available in the target language. Translators' associations could consider transliteration or borrowing of terms from the source language into the target text. They should check medical symbols and special characters.

4.15. Back Translation (Reverse Translation)

Back translation is a way to verify a translation, whereby a translated text is translated by another person back into the source language and then compared with the original source text. Any distance between the original and back-translated text will reveal shortfalls.

This method may not actually be a very reliable method. There could be an error in the reverse translation and hence may not necessarily reflect errors in the original translation. Secondly, idiomatic expressions that the first translator may have correctly conveyed in the target text may have been literally translated during reverse translation. The same applies for cultural adaptations of technical terms.

4.16. Parallel Translation & Reconciliation

This method is more suited in locating and removing errors in translation. The process entails the translation by two independent translators, which are reviewed by a third translator, who reconciles the differences. This takes place in close collaboration with each other to even out differences of opinion and rule out ambiguity.

4.17. Regulatory Compliance

Clinical protocols require statutory compliance. Medical translators (or reviewers) are expected to have knowledge of local laws, regulations and statutory compliances. If not all translators, at least one such consultant must be present on the team.

4.18. At WordPar International

At WordPar we painstakingly take steps to implement best practices as mentioned above. The hallmarks of our medical translation processes are **research**, **regulatory compliance** and **subject matter expertise**. Our team of translators include life science professionals, specialised translators and legal consultants.

Our clients include CROs, pharma and biotechnology companies.

Expectations of clients may vary depending on the implications and intended audience of the translation. Simple consent forms and advisories may require lesser levels of review than a clinical trial report. The levels of verification are discussed before a project plan and cost estimate are prepared.

We work hand-in-hand with our clients to assess their needs and explain to them the benefits of investing in accurate and quality translation considering the risks of error and the advantages of good translation.

5. Professional vs. Amateur Translation



Hiring professional translators is worth the price we pay in return for expertise, accuracy and, well, professionalism. An unprofessional translation can alienate an audience and have detrimental impact on the image and sales of a company.

A company or client has three options to fulfill his or her translation requirements. The first is to use machine translation such as Google and Babelfish. The next is to hire a bilingual person or employee within his organization. And finally, one can employ a professional and qualified translator.

Each option has advantages and disadvantages. The choice is essentially a dialectic between cost, time and quality of output. Let us analyze each option one by one.

5.1. Machine Translation

Machine translations are free, fast, and convenient. However, the output is not necessarily or always desirable. Especially when it comes to idiomatic expressions, technical translations and context driven interpretation, the machine fails miserably. Although there has been tremendous improvement over the past decades, as more and more translation memory is added to the database of these machines, the subtle differences in meaning are often lost in machine translation. Errors are rampant and there is no quality control mechanism.

5.2. Amateur Human Translation

Many organizations attempt to economise by engaging amateur translator rather instead of qualified translators. Some managers, in the mistaken belief that translations is a simple rendering involving bilingual proficiency, look for staff bilingual staff and assign the task to them. They overlook the fact that translation is qualified and specialised profession. Moreover, the managers are also making the mistake of hiring the same translator for translation in both directions. Professional translation should ideally be done by a native speaker of the target language. However, this idea is unknown to amateurs and their managers. The result will most certainly be ineffective, loosely translated texts.

5.3. Professional Human Translation

In contrast to amateur translation, professional translators will provide a host of advantages.

5.4. Professionalism

Firstly, as the name suggests, the translations will be professional! That says a lot! Professionalism naturally means accurate, timely, appropriate and well-presented and well-rounded translations. What is required to create an impression and improve brand value for a corporation.

5.5. Technical Skill

Professional translators are linguists. They are qualified, trained and experienced in the subtle art and science of writing and interpreting. They are able to understand the nuances of a text in the source text and transfer the spirit and meaning to the target the text, beyond a mere literal rendition. A professional translator is sensitive to the intended objective and purpose of the source text, and intended effect of the writer. This is possible only when the translator has studied textual analysis, which is not necessarily the skill that an amateur bilingual person may have.

5.6. Technical Knowledge of Linguistics

A professional translator is a trained linguist and his scientific knowledge leads to a scientific approach to the morpho-syntactic correspondence of his writing with the source. His knowledge of grammar of both languages will ensure correct choice of tenses, voices and moods as well as other grammatical devices across both languages. Many language pairs have varying degrees of correspondence in the application of tenses, cases and prepositions, which can often lead to misinterpretation across cultures. A linguist will bridge this gap owing to his knowledge of linguistics and grammar of both languages.

5.7. Domain-Specific Terminology

A professional trained to undertake requisite research into the terminology and registers of the given subject matter in both languages. The word "debit" and "debt" or "credit" can be interpreted differently in different areas. The words have different meanings in finance and accounting. Credit means liability in financial and banking terms and a slightly different think in accounting terms. A professional is trained to cull out the subtle differences and escape the trap of mistranslation which arises by a mere dictionary reference.

5.8. Training in Translation Process

A professional translator is also trained to do a due diligence, research, editing and review of their work before submission. Quality control is embedded in the scientific process of translation. Even before a second check is done by a reviewer or editor, a translator will themselves undertake adequate reviews.

5.9. Computer Aided Translation Tools

A qualified translator has knowledge of automated tools, not machine translation tools but computer aided translation tools and the use of translation memories. An amateur translator may or may not have the knowledge of these tools. CAT tools go a long way in according consistency and accuracy to the translations, enhancing their quality.

5.10. Timely Delivery - Adherence to Deadlines

A professional translator will correctly assess the turnaround time before taking up and assignment and most will adhere to the their commitments. Professionalism can be expected from professionals.

It is not surprise then, that hiring a qualified, professional translator has many more advantages than any other mode of translation. It is worth paying for the technical skill and expertise, than to suffer the brunt of a bad translation.

6. Film Subtitling

Subtitling for films involves adding a textual (written) translation of the spoken dialogue of a film on screen. Usually, they are displayed at the bottom of the screen and match the speech in running time. This makes films viewable by a larger audience beyond the country or region of production. It is therefore a linguistic conversion at two levels – one at the level of language (one language to the other), and the other at the level of modality (spoken to written).

6.1. Accuracy

Translation accuracy is very important and therefore it is important to have a seasoned translator who understands the nuances, cultural references, and idiom of both languages. It is not enough to translate word-for-word or to give a literal translation. Literal translations will sound very artificial, inappropriate, and sometimes completely wrong where the equivalent expressions of both languages vary.

6.2. Technical Requirements

Subtitles must also take into consideration the **length and readability** of written text on screen. It must fit the frame, line breaks must be appropriately placed, and should match the length of the dialogue in time, so as for the viewer to read comfortably and relate the text with what is going on on screen. The **timings** of the subtitles should match the screenplay and dialogue, for this very purpose. **Character limit** and line breaks therefore are important considerations. The linguist must balance **linguistic and technical requirements** in film subtitling.

6.3. Placement

Besides these, sometimes a little **creativity** is involved in the **placement of subtitles** too! Sometimes, they may be placed on locations other than the bottom – may be overlaid over a banner that appears on the screen, or act like a balloon imitating a comic book, or to show an unspoken thought. Creativity and need dictate how and where the subtitles can be placed on screen. This is the creativity that **multi-modal translation** has scope for today.

6.4. Cultural Differences

When translating, one should be mindful of cultural differences. When translating from one language to another, especially in spoken and colloquial language, one is also translating culture. There is often a line that can get crossed due to ignorance. Knowledge of what is inappropriate in certain cultures, and how best to get across the meaning of gestures, rituals or idiomatic expressions in speech in a culturally sensitive way, is very important. For this a translator must be acquainted well with the language AND culture of the target audience.

6.5. Quality Control

Like any other translator, subtitles should also undergo scrutiny and a test to check all components such as accuracy, length, timing, placement, and overall presentation.

6.6. Tools & Software

There are many tools available today, both freeware and paid. Subtitle Converter, Hardcode Subtitles and Subtitle Editor are a few. Besides these, most CAT tools are now equipped to deal with subtitles with time stamping. Subtitling is an eclectic mix of several skills, linguistic, creative, and technical.

7. Humanoid Translation (Machine-assisted Human Translation)



The goal of several linguistic AI programs and developers has consciously or unconsciously been to create a world where everyone has access to the other via language, despite language, and by language. Meaning to say, that people are able to communicate with each other instantaneously. Translation and interpretation software and instant voice recognition software are making things easier.

With each passing day, artificial intelligence engines are getting smarter, better and more efficient, but are not yet perfect. Meaning is still lost in translation. Even when human beings translate, meaning is at risk of being lost. Meaning has several aspects. Besides the semantic, there is also the syntactical, functional and idiomatic sense that is often lost for want of cultural, contextual and subtle distinctive knowledge. What can one then expect of a machine that is most likely based on lexical replacement.

For centuries, how to translate has been an point of theorisation & discussion. It was clear among cross cultural communication-facilitators that translation is the transference of the **meaning** and **sense** of words, in both their **denotative** as well as **connotative** senses, in the **literal** as well as **figurative** senses, and not merely the replacement of words.

In the earlier years, automatic translation was based on the principle of mechanical **replacement** of words, often without as much as a syntactical reordering of words. Clearly, such developers have even overlooked the morpho-syntactical variations of languages, how some languages inflect words unlike English or others.

The problem lie in that developers of automated translation software were not linguists and linguists were not developers!!! This disconnect initially made automated translation an exercise in cryptography and the reader invariably became the de facto descriptor. The problem of communication was yet not solved! And is still in the process of being solved.

And with success! There is no denying that progress has been made. In leaps and bounds. Linguists have joined the bandwagon and work in tandem with developers. Linguistics and translation methodology are becoming part of the repertoire of skills required to be developers for translation software. Interdisciplinary knowledge transfer and collaboration have revolutionised the way in which machines are translating today. Machine translation combined with cumulative and limitless translation memory have facilitated an unprecedented artificial intelligence in the field.

Although we seem nowhere near an infallible technology, the advancements are impressive, and have and will continue to have far reaching implications.

Machine assisted human translation is helpful in increasing productivity and speed. Translators who earlier translated about 3,000 to 4,000 words a day are now able to double their output effortlessly. All assists in day-to-day interpretation of important texts. For doctors, lawyers, bankers and simply anyone who needs a quick, preliminary gist of a text, this is a boon! Despite all its limitations, machine translation at least provides a basis foundation for subsequent work and possible improvement.

The world's consumption of translation services has multiplied several times over in the last few decades owing to the expansion of the world-wide-net and knowledge based economies. The global outlook and outreach of the world, the integration of nations under the ambit of glocalization has led to unprecedented requirement for translation and cultural exchange. Machine translation has helped keep up with this increasing demand.

Machines can aid in accuracy and enhance quality of translations. Today's machines provide high-quality first-draft, which translators go on to edit. Machine generated translations reduce the burden of repetitions within texts. They provide a high level of automated consistency. This makes the job of a translator easier and the output better. Machine translation has therefore graduated to the category of a word processor and translation tool.

Of course, artificial intelligence has yet not replaced the human brain and perhaps never will, considering the complexity of the human brain and linguistic competence. But surely, it has proven its mettle over the last couple of decades and challenged the views of naysayers. It is here to stay. It is here to grow. It is here to assist in creating a world without linguistic boundaries.

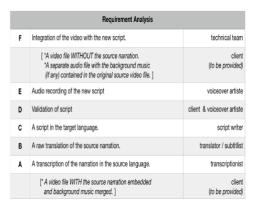
8. Challenges and Processes in a Complete Voiceover and Video Integration Project

The article below describes the various steps that go into a complete voiceover integration project given only a video with an audio narration in the source language. The case is taken from a real project for conversion of a video narration from one language to several.

The input material was a video which contained a background track and a narration. No script, translation or subtitle document was provided. This was a stimulating and engaging project with a myriad challenges, not only by virtue of the number of different target languages, but also the sheer number of intermediate processes and sub-processes, many of which did not form part of the final deliverables, but were essential in the path.

8.1. Requirement Analysis

The main task involved replacing the source narration with a target narration. This required the following in reverse order:



As can be seen from the table above, the requirements provide a step by step outline of the process in reverse order as we trace the requirements backwards. For ease of explanation, the processes have been numbered E-A and shall be referred to with he same letters in the rest of the article.

8.2. Transcription & B. Translation (Subtitling)

The first step involved the transcription of the existing voice narration in the source language so that it could be translated. In order to maintain integrity of frame size, it is important to have relevant and significant data on the same page. These include:

- 1. the timings (start and end) of a particular frame
- 2. the narrated text in that span of time
- 3. the character count of the transcribed text (calculated automatically)
- 4. the translation
- 5. the character count of the translation (calculated automatically)
- 6. the variation between source and target texts (also calculated automatically)
- 7. the translated text adapted for narration, and
- 8. its length

Sart	End	Transcription	Lengt h	Subtitle Text	Length	Variation	Script Text	Length
0.00	0.06	Some people have a lot, some have very little	45		0			
0.07	0.08	I was one of them.	18		0			
0.09	0.10	But I had a dream,	18		0			
0.11	0.13	To take what little I had and turn it into something meaningful	63		0			
0.13	0.16	To me , to my family, to the people in my small little world.	61		0			

The above format was devised and used for the transcription. With this information readily available and visible to the subtitlist / translator, s/he is able to immediately view the character count of one's translation and how much it deviates from the source. In this way, s/he can choose to modify the translation to fit the frame. Guidelines to this are usually provided by the client.

It is important here to note that there are two diverse goals to be achieved here. These determine the nature of the translation desired.

- 1. Is the objective to get good subtitles?
- 2. Is the objective to find a smooth-flowing script for narration in the target language?

The translator must know the objective so as to tweak his or her translation. While the first objective will lay emphasis on the visual representation of the text, the second objective will emphasise the aural element. Both texts can be markedly diverse. What may appear good to read considering the frame on screen, may not be the best heard in a background narration.

It may be wise to have two versions of the text available so that subtitles can be used where the narration is of a different language, and vice versa. For example, in a video with Kannada or Hebrew narrations, the English or Tamil subtitles can be superimposed, and likewise for the Tamil and English narrations, subtitles of other languages such as Kannada and Hebrew can be made available.

8.3. Script Writing & Editing

Once the source text is translated into its corresponding subtitles, the text must be modified or improved to make it tenable for a narration, something that reads fluidly. This involves not only making changes in the language and style but also the sequence of segments and perhaps shifting elements of various segments above and below across the script. This may be required for the structural differences of both languages as well as for better correlation with the presentations and happenings on screen. It is advisable to retain the time-codes for the script here too, as this acts as a guideline for the voiceover artiste while recording.

8.4. Validation of Script

The script is then validated by the voiceover artiste, and opinion could be sought from the translator as well. The best is for the script-writer, translator and the voiceover to work in consultation with each other, rather than the project manager having to transfer incremental versions of the script from one to the other. Collaborative improvement of the script in a team, works best. The final sign off should be by the voiceover artiste, who is going to narrate the script. Once internally finalised, the script is sent to the client for their final approval, if the client so desires.

In many projects, the role of the script-writer may be performed by the voiceover artiste; and the subtitle and script versions of the translations may both be created by a single linguist. These roles are fluid and need not be performed by different people. Important is that they be treated as distinct steps in the process and performed separately.

8.5. Voice Recording

After the script has been finalised and vetted, it is then rendered to the artiste's voice. It goes without saying that the artistes tries his or her best to adhere to the timings indicated in the scripts, without trying to hurry up or slow down too much. Variations in the duration of segments across two languages can be adjusted in the integration stage as we shall see.

8.6. Integration of Audio and Video

By this time, a new voice file in the target language is available. To integrate this with the original video it is important to have

- 1. the original video file WITHOUT any background audio or narration
- 2. background music file, if any

This video is not the same as the one used for transcription and subtitling in the first place. Here, the file has to be the raw file without any background audio so that the new narration can be integrated with it.

\While integrating the video with the narration AND the background scores, modifications in the length can be be made to of parts of the video in order to match the pace of the narration. If this is done, this should be notified to the subtitling division; this communication is vital as the time-coding of the subtitles in comparison with the final integrated video will vary and corresponding changes need to be effected in the subtitles before superimposing them on the new video.

And there we have it! The project is now ready for delivery to the client.

8.7. Post Scriptum

A systematic step-by-step process description, marking important inter-process communication makes the execution of the project methodical and stress-free. The overview of the chronology of the processes and the requirements at each step make it easier to plan ahead and communicate with all the stakeholders and linguists involved in the process. It illuminates expectations and requirements to each participant in the process. Background preparation for the upcoming and subsequent steps can be completed while an earlier stage is being implemented. For a project manager, the overview of such process adds to his / her efficiency and gives the client an affirmative and hassle-free experience with the team.

9. The Balancing Act

Time, Quality and Cost of Translation



Language service market, like other markets, presents is challenges while balancing cost, time, and quality. How does one decide what a fair price is?

In simplistic terms, poor quality and quick translations are cheaper, whereas translations by professionals are better in quality, take more time and naturally cost more. Translations executed by agencies will have a higher cost for quality control, coordination, and localization.

Another important factor is the number of trained translators available and the demand for the work in a certain language pair. The general rules of demand and supply apply here.

The parameters that determine cost and among which we must balance are

- 1. Quality
- 2. Speed
- 3. Affordability
- 4. Availability of translators

9.1. Demand and Supply

9.1.1. Technology, Population, Economy

The more populous languages and the ones with the maximum technological development have the most demand for translations. Naturally Spanish, Chinese and German have a higher demand given the number of speakers and the extent to which their economies and technologies have developed. Clearly the demand for such translations will be higher than say Japanese, Korean and Hebrew, which are economically and technologically developed, but comparatively lesser in population. And certainly, the demand for African, Indian languages is lesser due to the lower economic and technological development.

The demand can be counteracted by supply. The language pairs for which more and more linguists train and qualify have a lowering effect in the prices for translations. In India, or example, one finds more German to English translators than for Italian and Hebrew to English. This clearly makes Italian and Hebrew translations more expensive than German.

9.2. Word Count, Repetition, Complexity

The higher the word count, the lower the translation rate can be. Higher word counts provide economies of scale. Further, repetitions within the text can also be considered as lower effort translations and hence factored into the price as a reduction. Translator tools assist in auto

translating similar segments, hence reducing effort, time and cost. More complex technical texts require a greater amount of expertise and therefore cost more than simpler subjects.

9.3. Computer Aided Translation (CAT) and other Tools

Technology assists all fields and professions. LSPs (language service providers) use a host of tools to help reduce cost without impacting accuracy and quality. The first of the list is CAT tools. These comprise segmentation and translation memories. They assist the translator in breaking down the translatable texts into coherent segments, remember the translation provided and then autotranslating or suggesting similar segments. Further, the tools serve a lexicographical function creating glossaries and also connecting with resources online to build a vast repository online.

The use of TMS or translation management system and CMS or multilingual content management system aim to reduce cost but succeed to do so only at optimum volumes where economies of scale set in. The deployment of such expensive tools is not suitable for small projects and advised for ongoing and large projects that churn content on a long-term basis in various languages. Again, there is a balancing force between cost of technology and volume of work overtime. The parameters that are key are scalability, versatility, and the facility for collaboration.

https://en.wikipedia.org/wiki/Translation_management_system

https://www.smartling.com/resources/101/translation-management-systems-101-what-is-a-tms-and-how-to-choose/

https://en.wikipedia.org/w/index.php?search=multilingual+CMS&title=Special%3ASearch&go=Go&ns0=1

9.4. Turnaround Time and Rushed Jobs

Rushed jobs have a premium to the cost. Both translators and the project team, the manager, reviewer, DTP etc. must work overtime and deliver the given job. The coordination and tight workflow ask for everyone's presence and attention at a given time. Thus there is a higher fee for rushed jobs.

For jobs that are not rushed and may extend over the regular process time are not charged this premium.

9.5. Project Management & Coordination

Cost is optimized by efficiency and efficiency comes with good management and coordination. An LSP will act as a project manager who will manage the entire project from start to finish – identifying translators, assigning the tasks, setting expectations and processes, setting the coordination with localization experts and terminological consultants. Managing several linguists and talents across different time zones to ensure seamless production is the job of the project coordinator. Your work is delivered on time and without cost escalation.

Services of an LSP are not limited to translation. There are several ancillary activities such as verification and review, editing, software engineering and localization testing. These are tasks undertaken and coordinated by the LSP. Additional services are often charged over and above the marked price for translation, which generally covers the core task of TEP – translation, editing and proofreading.

9.6. Complexity of Subject Matter

Domain-specific subject matter requires expertise in the said field to ensure terminological accuracy and appropriateness. The role of subject matter experts (SMEs) is understood in highly technical and specialised subject matters.

Medical documents require the intervention of medicos and medical professionals. Legal translations are never correct without legal education. Similarly, IT and banking subjects require domain specific knowledge. Although most technical, mechanical and IT domains are established terminologies and can be acquired with sufficient research and training as a translator, the nuances of medical and legal translation are not always easy to research. Legal and medical translation are therefore more expensive than mechanical, oil and gas, IT, finance and banking in general.

9.7. Cost of Translation Continuum

Machine translation is the cheapest (practically zero-cost) and has the fastest output.

Editing post machine translation is relatively more expensive. Properly done, it will require slow and careful read of every word and line. This is anywhere between half to a third of the price of a regular human translation.

TEP, or human translation, editing and proofreading is the best translation quality with the least output per day.

1	Professional Translation TEP				
		Machine Translation Post Edit			
Cost			Machine Translation		
Production					

Cost	TEP: \$0.20		
per		MTPE \$0.10	
word			MT < \$0.01
Output per day	<> 2,000 words/day	5,000-10,000 words /day	> 500,000 words /day

MT is best suited for internal consumption and for quick understanding of texts. It is not suitable for official or public consumption. Speed is the main concern, and quality is least important.

MTPE is a balance and relatively high quality translation is achievable, albeit with changes of oversight. Certainly not suitable for publishing, unless two or more rounds of human intervention are in place.

TEP with human translation is best suited for creative, original and publishing quality. Output per day is low, quality is high, and correspondingly the cost is high too.

9.8. Flexibility at WordPar - Evaluating your Requirements

9.8.1. Cost Advantage - Adaptability to New Technology

At WordPar International, we will adapt to the requirements of our clients. Whereas our traditional approach in inclined towards conventional human translation, editing and proofreading, we are flexible and consider MTPE upon a client's behest. When clients are considering translations for internal consumption or have a high quality machine translation, WordPar takes up post editing services at half the price of translation. Our editors and proofreaders will turnaround edited translations that are close to original and free of the flaws of machine translation. We understand that clients have varying needs and budget constraints and we are adapting to the changing language service environment.

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