THE JOURNEY OF THE TRANSLATION ACTIVITY FROM LINEAR TO NON-LINEAR DIMENSION[•]

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Abstract

In the near future and even today more fields of translation are expected to move towards new translation practices. There are several reasons for these changes. Recently, translation activity has gained a new dimension in our modern society witnessing important transformations especially in information and communication technologies and turning into a global village. These transformations were brought by new technologies. Translation technologies were also affected from this situation and as a result translators have found themselves in more different settings than in the past during the translating process. In relation with this, our study discusses the journey of the translation activity from its linear dimension to non-linear dimension. In doing so, the study also deals with the underlying the reasons of this journey and focuses on the concept of the productivity which can be associated with the non-linear translation approach as well as differentiating it from the concept of the translation quality associated with the linear translation approach. The study follows a descriptive approach and presents some figures as to the discussed matter.

Keywords: Linear, Non-linear, Translation Technologies, Translation Quality, Productivity, Productivity in Translation.

1. Introduction[1]

This study[2] that discusses the journey of the translation activity from linearity to non-linearity intends to explain the reason of that journey in the light of the developments happening in the translation workstations of translators especially as of the 21st century witnessing a huge amount of digital revolutions and improvements in computerized technologies. While using only a pen, a paper and a dictionary in the past, translators can now use automated translation tools that facilitate the translation process and these tools are always updated in parallel with the proliferation of productivity based translations.

The development of translation technologies in fact goes back to the first half of the 20th century. In 1930s, first machine translation systems were introduced and they were composed of various mechanical multilingual dictionaries[3]. The idea of MT systems was actually based on the research in artificial intelligence. On the automatization of the translation activity, the first patent was obtained by Petr Petrovich Troyanskii in 1933. Troyanskii put forward a three phase model:

1. The conversion of a source language expression by a human into a logical structure,

2. The draft translation of this form in the target language by a machine,

3. The post editing of this draft by a human and the production of the final translation in the target language (Güner, 2015, s. 47-48).

Research on applied machine translation gained a momentum in Cold War period, especially in 1950s. That's why USA invested in MT technologies to produce translations for the purpose of providing

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[1] This study was carried out using a descriptive methodology. The article was also presented in XII. European Conference on Social and Behavioral Sciences.

[2] There are lots of resources on translation technologies. However, in the light of the literature review we carried out, readers can also see the following books and articles: Austermühl, Frank (2001), *Electronic Tools for Translators*, Austermühl, Frank (2011), "On Clouds and Crowds: Current Developments in Translation Technology", *Translation in Transition*, Bowker, Lynne (2002), *Computer Aided Translation Technology: A Practical Introduction*, Canim Alkan, Sinem (2008), *Türkiye'de Çeviri Bürolarında Web Sitesi Yerelleştirmeleri ve Bu Süreçte Bilgi Teknolojilerinin Kullanımı* (Master Thesis), Canım Alkan, Sinem (2013), *Web Sitesi Yerelleştirmelerinde Bir Eyleyen olarak Çevirmenin Konumu: Türkiye Örneği,* (Ph.D Thesis), Esselink, Bert (2000), *A Practical Guide to Localization*, O'Hagan, Minako ve Ashworth David (2002), *Translation-Mediated Communication in a Digital World: Facing the Challanges of Globalization and Localization.*, Pym, Anthony (2004), *the Moving Text: Localization, Translation and Distribution*, Pym, Anthony (2010), *Exploring Translation Theories.* Şahin, Mehmet (2013), *Çeviri ve Teknoloji,* Garcia, Ignacio (2006), "Translators on Translation Memories: A Blessing or a Curse?" *Translation Technology and Its Teaching*, Sin Wai, Chan (2015), "The Development of Translation Technology" *The Routledge Encyclopedia of Translation Technology*, Sin Wai, Chan (2015), "Computer Aided Translation" *The Routledge Encyclopedia of Translation Technology.*, Jimenez Crespo, Miguel A. (2013), *Translation and Web Localization, Odacıoğlu's Çeviribilimde Yerelleştirmesine Paradigmasına Doğru* (2016) (Ph.D thesis).

[3] See also Dohert, 2016: 952.

intelligence to compete with USSR (Güner, 2015, s. 48). In connection with this, the real purpose to create MT systems stemmed from the political climate of World War II and more importantly the Cold War. Therefore, the first efforts were made on translations from Russian to English (Archer, 2010: 95). At this point, it can be asserted that the birth of the MT systems was first developed for military purposes. These systems came out especially with the use of Systran by American Air Forces. The logic of the use of these systems was listening and decrypting the Soviet communication (Büyükaslan, 2005, s. 2-3).

Except political and military purposes, the progress of MT systems was slow at the beginning and there was not any improvement in their application. Therefore, ALPAC which is the abbreviated form of Automatic Language Processing Advisory Committee reported that fully automatic systems capable of good quality translation were impossible in 1966. The research that was carried out in the USA on MT systems declined in accordance with the ALPAC report. But, this did not banish the public perception of the MT research in other countries. Especially since the beginning of 1970s, the development of MT systems went on. Computer based tools for translators and operational MT systems were started to be produced. In spite of the ALPAC report, systems were installed and they were put into cost-effective operation in both the USA and other countries (Hutchins, 2001, s. 2-3).

Starting from 1990s onwards, companies started understanding the need to translate their products so as to be effective on international markets. They, therefore, sought ways to increase their productivity rate in translation. As a result of this, MT systems were developed and they were over time replaced by the state of art translation technologies capable of accelerating the translation process and thus the productivity rates of translations. So, especially computer companies can now simship the original product together with its translated versions by benefiting from these technologies (see also Doherty, 2016).

These new kind of translation tools in translators' life also brought new approaches and methods together and the way the translation is done has in parallel shifted from traditional methods to more complicated models. The next chapter discusses the traditional methods[4] that slow today's translators who live in a fast production society and new ways developed to increase the productivity by comparing linearity and non-linearity of the translation activity.

In the study we follow a descriptive approach and seek to find the answers of the **research questions** listed below:

1. What is the relationship of non-linearity or paradigmatic axis of language with the translation technologies?
2. What do translation technologies bring new to translators?
3. What is a linear or syntagmatic translation?
4. What is a non-linear or paradigmatic translation?
5. What is the difference between an ordinary reader and digital text readers/users?

2. Linearity and Non-Linearity: Linearity and Non-Linearity of Translation Activity

The technology changes the nature of the translator's cognitive abilities, social relations and professional status by transforming the translation activity. With the use of new translation technologies like translation memory (TM) and translation management tools, the paradigmatic is imposed upon the syntagmatic. The syntagmatic can be associated with Aristotle's beginning, middle and end and it is related with linearity or linear reading in other words. In deed all texts have it from novels to computer instructions to sentences and phrases. In syntagmatic (horizontal) axis of language, one starts at a certain point, read in a certain direction, and ideally finishes at an equally pre-determined point. Nevertheless, technology directs readers of texts and translators to the paradigmatic (vertical) axis of language, non-linearity in other words. (Pym, 2011, s. 1- 2). What does this stand for? In paradigmatic axis of language, the reader does not have to start from the beginning. Especially web sites and some technological documents are read by readers/users in a paradigmatic way because the readers/users or more suitably digital text readers can access the document with one click and the computer text opens a vertical (paradigmatic) dimension from which the items are selected that the digital text reader is seeking. In addition, websites that the digital text reader wants to access in search engines are brought to him/her in a vertical movement and he/she chooses one of them. The digital text reader can also sometimes do a quick search using key terms on the document with Control+F (Control+Find) short-cuts. The use of electronic texts in this way is generally paradigmatic (Pym, 2011, s. 3).

The reason why these specific texts are read in this way is actually caused by fast-production/consumption society. In other words, information on the internet and digital texts are always quickly updated. The digital text reader, therefore, does not have to start reading the whole text from the beginning every time but they prefer to read the selected sentences or paragraphs that respond to their

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[4] This method can still be used in the translation of texts which require quality, like a literary text. However, it is not advised to use them for pragmatic texts bringing to the mind "productivity is more important than the quality".

actual needs. This situation makes the productivity important because especially digital texts are produced fast by using modern technologies. IT has brought together a screen culture that replaces the print culture through computers (e-mail, databases and other stored information) (Craciunescu, Gerding-Salas, Stringer-O'Keeffe http://www3.uji.es/~aferna/EA0921/7a.pdf).

In parallel with these developments, in the translation of these digital texts, translators must also use new translation workstations foregrounding the productivity and in parallel paradigmatic axis of language rather than the quality or traditional syntagmatic axis of language. According to O'Hagan (2006), the shift from print to electronic media is changing the translation procedures and methods by provoking new ways of translating (O'Hagan, 2006, s. 1)

The translation technologies like translation memories allow translators to do their translations in a paradigmatic way. In the traditional translation models, translators can, however, see the whole document in the translation process and hence they know what the context of the text is in general and translate in a syntagmatic way. At this point, one can ask whether the paradigmatic axis of language in translation technologies restricts the translator by directing him/her to do his/her translation in a decontextualized way[5]. The decontextualized translation is in general not be applied in literary texts where the quality is of utmost importance. But in the translation of digital texts, the productivity as emphasized above is more important than the quality and the productivity is achieved by the translator using a modern translation technology tool supporting the paradigmatic axis of language. In connection with this, Pym also claims that:

> "These days we more readily concede that our work is determined by internet searches, glossaries, spell checkers, grammar checkers, translation memory and machine-translation databases, and anything else resembling a communication technology. This peculiarly technological movement is not especially away from the text as such, but away from the linearity. The more technology, the less easy it is to make decisions in terms of linearity, and the less we tend to see translation as communicating between people" (Pym, 2011, s. 4).

> "An element of return, perhaps, but not simply so. We noted above that the technologies impose the paradigmatic on the syntagmatic, thus upsetting the fundamental linearity of the text. That linearity does not return; the technologies do not lead us, for example, into a world of narrative construction, of beginnings, middles and ends linked by human characters. Instead, what we potentially find as the dominant mode of constructing knowledge is a dialogue, or more simply discussion - interactive exchange between a multiplicity of agents. And this can happen before, after, or in the middle of solving translation problems. Dialogue, not narrative, may become a part of a new humanization" (Pym, 2011, s. 7).

These translation technology tools are today mostly used in a new industry called localization industry. Localization can be regarded as the most technology-driven and technology-dependent sector of the translation industry, since it deals with the electronic content which is not "translatable" without using technology due to the very nature of the medium (O'Hagan, 2006, s.5) Since the early 1990s, localization service providers have started offering new services, advice and training in the area of globalization, internationalization, localization and translation (GILT) as well as the expertise and other services enabling companies to sell their products all over the world (Lommel, 2003, s. 6). The popularity of this industry comes from the logic that it allows the simship of translated products together with their original versions all the regions in the world (Odacıoğlu and Köktürk, 2015, s. 1086). This principle suits well with the concept of productivity so that companies would localize the contents about their products which must be simshipped with no delay. Because translators using state of art translation technologies do not have time to check their translations for quality, they mostly attach importance to the increased productivity on the localization/translation market. This can be understood from the fact that translators have already started translating highly specialized contents such as digital manuals (often in PDF format), digital documents, online help files etc. (Odacıoğlu and Köktürk, 2015, s. 1091-1092).

2.1 Cat Tools Supporting Paradigmatic Axis of Language

New translation technologies that support paradigmatic axis of language can generally be named as CAT tools. According to Zhang and Chai (2015, s. 430),

> "With a globalizing economy, all global companies, either big or small, aim to sell their products to global markets, which results in a huge demand in multi-lingual documents production, such as software development, localization, product brochures, web pages and etc. Some global giants, such as IBM, Microsoft, Dell, Oracles, and etc, have huge demands and they require fast services. Thus the old and traditional translation service cannot meet their needs, as it largely depended upon human resources

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[5] Decontextualized translation may still endanger the humanization of the communicative use of language by dehumanizing it. But however, nowadays computer users tend to read websites with Control+F function to locate keywords on that page instead of going through an instruction manual page by page. In doing so, they actually follow a paradigmatic way. Therefore, paradigmatic translation tools that bring decontextualized translation together must be used for the translation of this kind of pragmatic texts (see also Pym, 2002).

and was too slow. They require better and faster language services to meet the market needs. Therefore, CAT tools were invented, and was proved as well highly efficient. By and by, more companies require language service providers to adopt CAT tools. CAT tools were soon widely used in the industry. Due to the huge market demand, translation technologies have been developing very rapidly. In 1984, there is only Trados in Europe. Now CAT tools have been developed in all parts of the world. It is estimated that "about three computer-aided translation systems have been produced every year during the last 28 years".

The core of CAT tools[6] is known as the translation memory (TM). Translation memories store translated texts alongside its original source text (ST) so that these pairs can be re-used in future translations of similar documents (see Doherty, 2016, s. 950). Similarly, it can also be said that TM technology is an integral part of the translation process and it offers translators some translation proposals or matches (Christensen and Schjoldager, 2011, s.122). In addition, the degree of the automation and increase in productivity achieved by the TM technology is based on the type of the text to be translated. The most convenient text types for TM use are technical documents like specifications, online help files and user manuals that have standardized and repetitive linguistic features (Raido and Austermuehl, 2003, s. 10).
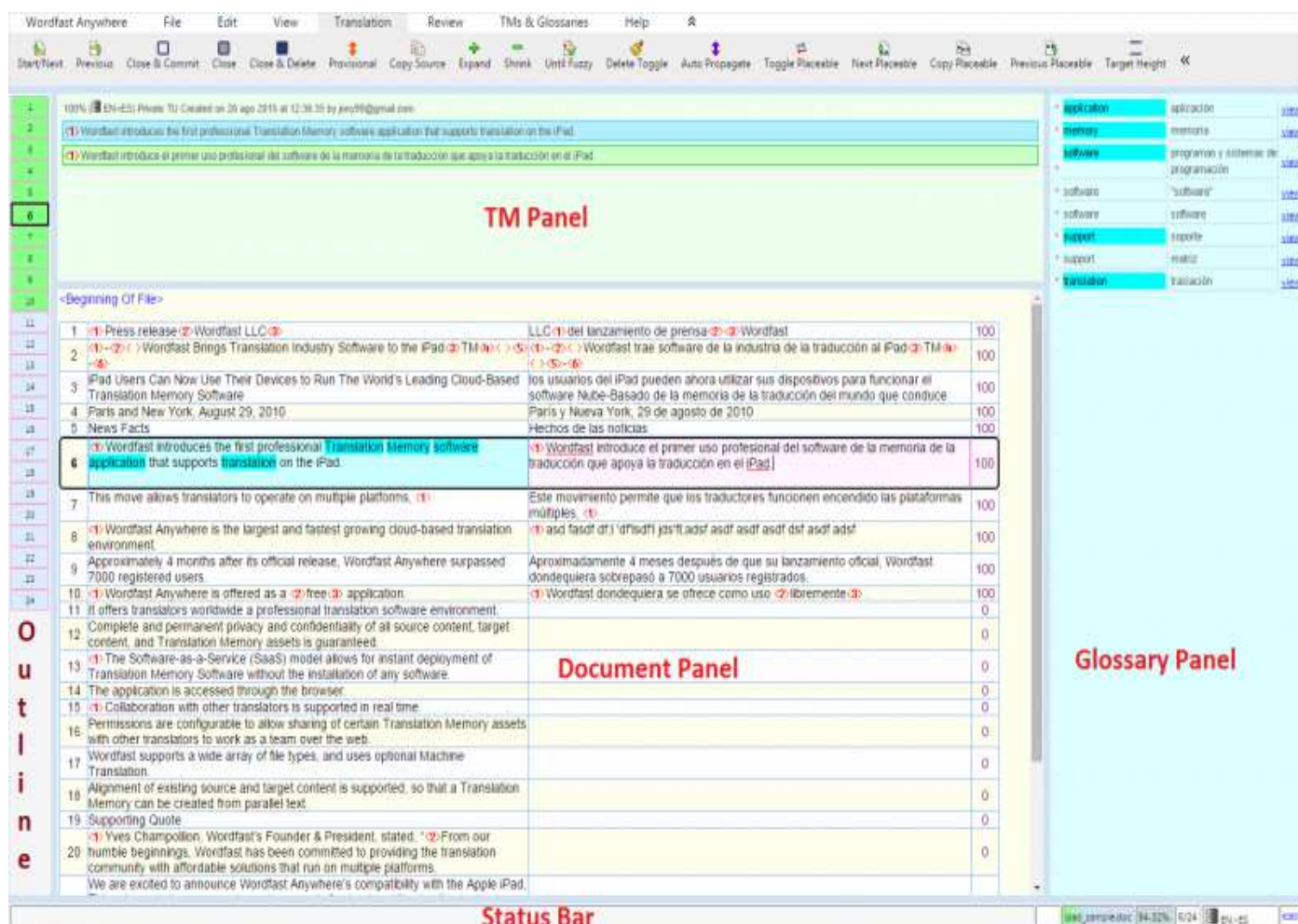
Figure 1: A Screenshot of SDL Trados[7]

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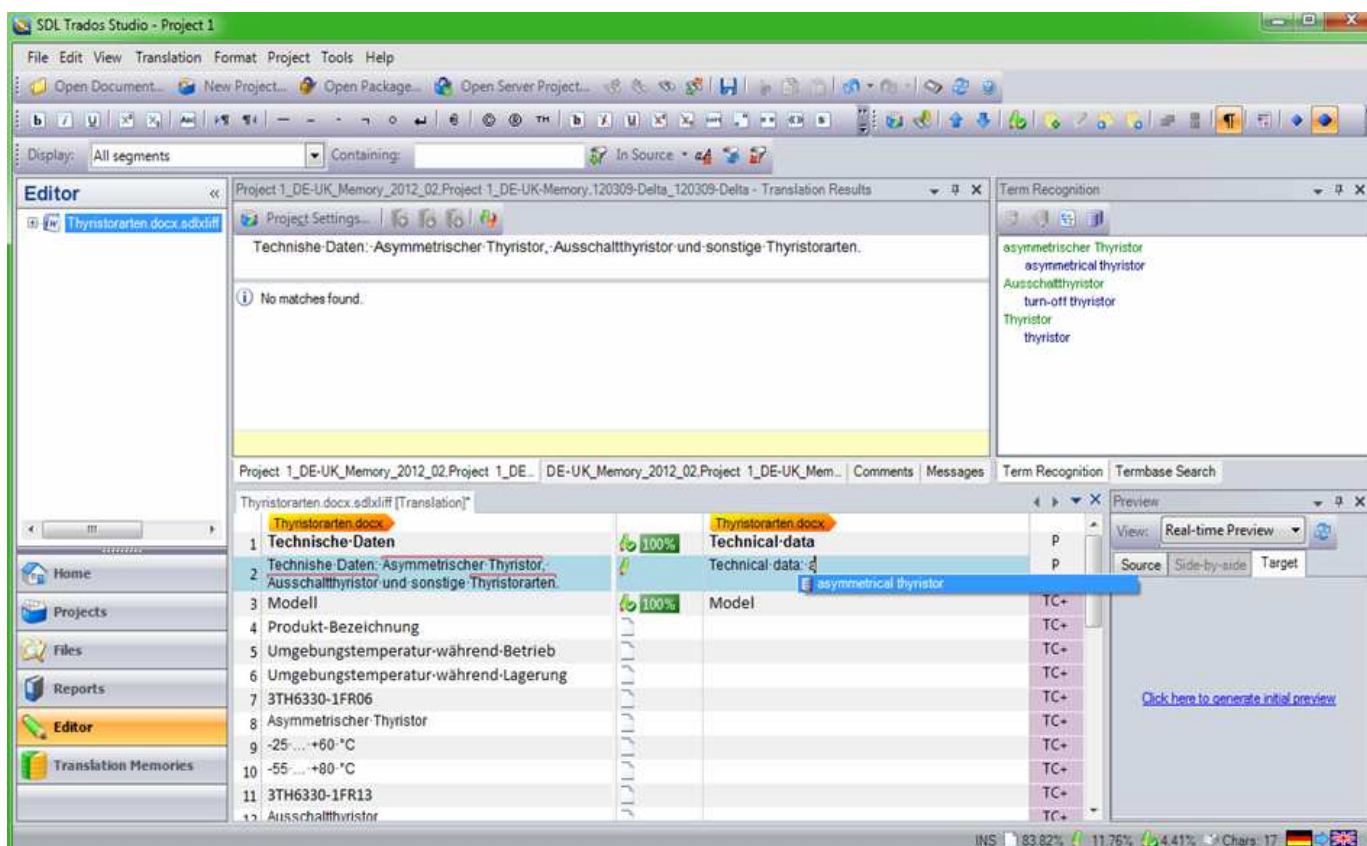
[6] Transit NXT, Trados, Across, DéjàVu, Wordfast, MemoQ are the most prominent trannslation memories.
[7] http://foxdocs.biz/BetweenTranslations/add-term-to-termbase-in-trados-studio/.

Figure Two: A Screenshot of Word Fast[8]

As can be seen in these figures, translators when translating the documents into another language, they do not see the whole text but sentence units in a restricted context and since these units are listed by the program in a paradigmatic way, the way their translations are done is also *paradigmatic* or *non-linear* (emphasis intentional).

In the light of this information, the translation activity or practice, especially in the case of technology based texts can be asserted to have started moving from its linear dimension to non-linear dimension. And the process goes on fast. This situation can be thought as a kind of revolution brought by the digital age affecting the way translation is done as well as the workstations of translators. From this point on, it is therefore expected from translators to deal with translation technologies more than in the past if they want to catch up with up to date translation industry or, a new term localization industry. Apart from the figures above, there are many more translation memory tools or so called translation technologies confirming the idea discussed in this paper. Last but not least, the training programs of translation departments must also take into account these points. So, translation trainers have important responsibilities.

3. Conclusion

The 21st century when globalizing effects are mostly felt, brought breakthrough revolutions and improvements in societies in many areas, one of which is the computer technologies. As put forward in the study, computer technologies have also affected the translation profession in that they enabled translator's traditional and mostly quality based workstations to be replaced by the state of art technologies. From this point on, translators have given up using a physical dictionary, a pencil and a typewriter requiring too much time. Instead, they are now using technologies like translation memory tools collecting a huge amount of knowledge in their databases and facilitating the translation process. These technologies also expand day by day and cloud based translation tools are now also popular.

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[8] https://www.wordfast.net/wiki/File:Panels.png

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