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### Towards a Methodological Approach for Frame Identification and Analysis in Translation

#### Summary

Frame analysis is a relatively new methodological approach which shows how people understand activities or situations. It originated in sociology and its application to translation has not been considered practically or theoretically yet, though the advantages may be manifold. Consisting of two main parts, this paper presents a methodology for frame identification and analysis, and suggests this be applied to the translation of pragmatic texts. The first part presents the concepts of frame and frame analysis as they appear in literature and as they are interpreted in this paper for translation purposes. The second part focuses on the exemplification of a methodological framework which includes the integration of frames into the translation process. It is shown that by using frames, translators can obtain the cognitive image of the text, create various versions of the source text in the target language, and use translation strategies consistently and transparently.

# Key words: frame analysis, information universe, translation process, translation methodology

# Metodološki pristop k okvirni identifikaciji in analizi pri prevajanju

### Povzetek

Okvirna analiza kot razmeroma nov metodološki pristop pojasnjuje, kako ljudje umevajo dejavnosti in razmere. Izvira iz sociologije, njena vloga pri prevajanju pa doslej še ni bila praktično ali teoretično obdelana kljub njenim mnogoterim prednostim. Članek v prvem delu predstavi koncepte okvira in okvirne analize v luči obstoječe literature in jih nato aplicira na potrebe prevajanja. V drugem delu pa s primeri podkrepi metodološki pristop v smislu vključevanja okvirov v proces prevajanja. Raziskava dokaže, da si lahko prevajalci s pomočjo okvirov ustvarijo kognitivno sliko besedila, predstavljajo različne oblike izhodiščnega besedila v ciljnem jeziku ter dosledno in nazorno uporabljajo prevajalske strategije.

Ključne besede: okvirna analiza, univerzalna informacija, proces prevajanja, prevodna metodologija

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### 1. Introduction

According to recent claims and desiderata in translation studies, the more translators know about the structure and the dynamics of discourse, the more readily and accurately they can translate both the content and the spirit of a text (Nida 1997, 42). Similarly, international research projects highlight directions of research which aim at helping translators make reasonable and consistent decisions as to the relevance and reliability of source text features in the target text (Gerzymisch-Arbogast 2005, 7). In line with such voices and based on a deficit analysis whose results were published recently (Dejica 2009), I have created a model for source text analysis (Dejica 2006, 103–10) which analyses the Information Universe (IU) constituents, i.e., information carriers in texts, from various perspectives: atomistic, hol-atomistic, and holistic (Gerzymisch-Arbogast 2006). Its main aim is to facilitate text understanding and, implicitly, translation.

In my interpretation of the text perspectives (Dejica 2008, 77–91), the atomistic perspective implies identification and analysis of salient individual IU constituents in texts, whereas the hol-atomistic perspective implies the analysis of all possible relations at text level between IU constituents, such as cognitive, semantic, lexico-grammatical and syntactic. Finally, the holistic analysis implies identification, establishment and analysis of various possible cultural or generic relations above text level, which are established between such constituents and other relevant constituents from different IUs.

The current paper deals with the presentation of one type of analysis suggested to be performed from a hol-atomistic perspective during the translation process, i.e. the analysis of cognitive relations, which can be represented in texts in the form of information frames. In the first part, the concepts of frame and frame analysis are presented as they appear in the literature and as they are seen in this paper. In the second part, a suggested methodology for frame identification, analysis and application to translation is illustrated. The methodology is explained and exemplified on a pragmatic, i.e., non-literary, text. The last part resumes the consideration of the advantages of using the model.

### 2. The concept of frame

Very broadly, the term "cognition" is used to define the act of knowing, or knowledge. Sociologists and psychologists have shown that people organize and store their knowledge of the world as fixed data structures, one such form being the *frame* (Goffman 1974, Charniak 1976, König 2007).

The concept of frame is basically synonymous to Goffman (1974), who was the pioneer in frame identification and analysis from a sociological perspective. The excerpt below illustrates Goffman's (1974) idea of frame as it appears in *Frame Analysis – An Essay on the Organization of* Experience, his well-acclaimed and, at the same time, very controversial book (Lemert 1997, xii):



It has been argued that a strip of activity will be perceived by its participants in terms of the rules or premises of a primary framework, whether social or natural, and that activity so perceived provides the model for two basic kinds of transformation - keying and fabrication. It has also been argued that these frameworks are not merely a matter of mind but correspond in some sense to the way in which an aspect of the activity itself is organized - especially activity directly involving social agents. Organizational premises are involved, and these are something cognition somehow arrives at, not something cognition creates or generates. Given their understanding of what it is that is going on, individuals fit their actions to this understanding and ordinarily find that the ongoing world supports this fitting. These organizational premises - sustained both in the mind and in activity - I call the frame of the activity. (Goffman 1974, 247)

In the same vein, Charniak (1976) defines frame as

A static data structure about one stereotyped topic, such as shopping at the supermarket, taking a bath, or piggy banks. Each frame is primarily made up of many statements about the frame topic, called "frame statements" (henceforth abbreviated to FS). These statements are expressed in a suitable semantic representation, although I will simply express them in ordinary English in this paper. (Charniak 1976, 42)

In more basic terms and more recently, König (2007) provides his own interpretation of frames based on Goffman's definition. Thus, according to him,

Frames are basic cognitive structures which guide the perception and representation of reality. On the whole, frames are not consciously manufactured but are unconsciously adopted in the course of communicative processes. On a very banal level, frames structure which parts of reality become noticed. (König 2007)

König's definition is accompanied by an exemplification of a frame in a real life situation, quoted below:

For example, a group of persons lined up in an orderly fashion at the side of a road might evoke the frame "bus queue" in a passer-by. This particular frame structures perception in the way that attention is paid to the orderly arrangement of people in a line, which is one indicator of the "bus queue frame" and might have actually triggered it. The frame also directs attention to other latent frame elements, such as a bus stop sign. At the same time, it deflects attention from clothing style, body shape, or communications among the presumed prospective bus passengers. (König 2007)

To put it broadly, from these definitions and exemplifications, frames can be considered as data or information structures which gather typical individuals, actions and activities, i.e. constituents in general, in a situation. Basically, examples of frames could be limitless, e.g., *university-frame, car-frame, computer frame*, etc.

These frames are static representations showing *what* constituents are associated, i.e., a *university frame* may consist of *students, lecturers, classes, learning material,* etc. As for *how* these constituents are associated, frames are seen as being made up as recognizable structures of relevancies. *What* and *how* constituents are associated in a frame is accounted for cognitively, based on contextual factors and on each individual's knowledge background.

In the last decades, frame analysis has evolved as a discipline in its own rights, being mostly used

in communication studies. The evolution of *frame analysis* is explained by Lemert (1997), who admits that at first,

Sociologists never quite knew what to make of *Frame Analysis* (1974) and other later works implicated in Goffman's own linguistic turn, while it is precisely *Frame Analysis* and *Forms of Talk* (1981) that drew the most attention outside the field. (Lemert 1997, XV)

To my knowledge, its application to translation and its integration into translation studies, 'outside the field' as Lemert (1997) puts it, have not been yet considered practically or methodologically. It is my belief that both translators and translation scholars could benefit from the exploration of this inter-disciplinary, yet virgin ground.

Since frame identification is usually based on intuitive grounds and on general background knowledge, and since recognizable structures of relevancies could be accounted for differently by different translators, I consider that in relation to translation, frame identification and its subsequent analysis should be reconsidered so that translators may approach them objectively and consensually. The suggested approach to frame identification and analysis presented here combines pragmatic identification of information and hol-atomistic analysis (Dejica 2008, 77–91). It is meant to offer translators a clear cognitive image of the text in the form of an information frame, which can be used to serve various translation purposes. The suggested approach consists of a series of steps which are integrated into a translation process and exemplified in Part 3 of this article.

In relation to translation, I consider that every text displays two different types of frames: a generic frame, conceptual in nature, and an information frame, which is the materialization in the text of the conceptual frame.

Every translator, if more or less experienced, has what I call his/her own generic image of the text to be translated. The generic image consists of a series of genre specificities (Bhatia 1993, Swales 1993), i.e., textual structure and organization, thematic progression, word order, modes, content, etc. These generic or genre specificities are not seen or made explicit by the writer, but known by the translator from his/her experience or training. For example, in the case of a project proposal, the generic frame is formed of the project aims, historical development of the organization, sustainability of the project, budget, etc. The budget section is richer in figures than the development section (which means less or no text to be translated), and so on. I call this image the *generic frame* of the text. It is conceptual in nature and setting it up and visualizing it takes place before the actual reading of the text, usually from the background information the translation might (or should) have on particular genres, or from preliminary discussions with the client.

The *information frame* or *information universe frame* is in my conception a materialization in the text of the generic frame; it is a static representation which presents a situation, process, product, etc., and which consists of various Information Universe constituents (Dejica 2006, 103–10), which are as different as are texts. Hence the multitude of information frames which can be identified and analysed for each different text. If usually the generic frame of a text is only one for each genre (it may display variations in the case of sub-genres), its materialization is different in different texts. In other words, the project proposal as a genre usually has the



same structure, degree of specificity, etc., but different informational content, i.e. it may refer to ways of improving the environment, saving energy, preserving nature, etc., materialized in an information frame specific for each proposal.

### 3. Frames and translation: a methodology

Translation is seen here as "an activity which transfers into a target text – with a specific purpose in mind – the writer's intention expressed in a source text" (Dejica 2009a, 131). I use 'transfer' with a double connotation: that found in Shuttleworth and Cowie (1997) and Hatim and Munday (2004) to imply that I see translation as process, and that found in Nida and Taber (1969) and Gerzymisch-Arbogast (2005) to refer to the second phase of the translation process, i.e., that of transfer, where the 'material' analysed in the reception phase is transferred into the mind of the translator and compared for translation purposes. Reception, transfer and reproduction are the three phases of translation on which the following suggested methodology for approaching cognitive relations, and implicitly information frames, is based. The approach to frame identification and analysis for the translation of pragmatic texts suggested here is thus a multi-phase process which combines pragmatic identification of information and hol-atomistic analysis, and which consists of a series of phases and steps. For exemplification and analysis, I will use the Ptolemy Project text (below), a sample of a pragmatic text taken from an extended project description:

#### **Project Ptolemy Objectives**

The project aims to develop techniques supporting heterogeneous modelling, including both formal "meta-models" and a software laboratory for experimenting with heterogeneous modelling. In this context, it will explore methods based on dataflow and process networks, discrete-event systems, synchronous/reactive languages, finite-state machines, and communicating sequential processes. It will make contributions ranging from fundamental semantics to synthesis of embedded software and custom hardware.

(Ptolemy Project, http://ptolemy.berkeley.edu/objectives.htm, May 25, 2006)

• *Phase 1. Reception.* The first translation phase, synonymous to text understanding, implies the following sequence of steps:

#### Step 1. Establishment of the generic frame of the text

As explained before, the generic frame is conceptual in nature and consists of all the knowledge a translator has on a particular genre. The specialized educational background and the practical experience of the translator are essential in establishing this conceptual frame. In this respect, familiarity with results of empirical studies on genre specificities can definitely be a plus, even though such studies are relatively few and their results are not standardized. The application of genre analysis to translation is also a relatively new inter-disciplinary approach, which is recommended by many voices (Trosborg 2000).

Step 2. Identification of the Information Universe constituents.

All the constituents expressed in the source text form what I call the Information Universe of the

text (Dejica 2006, 103–10). I use the term 'universe' as in the natural sciences, where it stands for the sum of everything that exists in the cosmos. Just as in science, in this approach, universe stands for the sum of all the information that exists in a text. The IU constituents are carriers of information which structurally can be divided into a two-part information system, which in my approach is formed of Themes and Rhemes.

For the identification of Themes and Rhemes, I suggest the use of a pragmatic Theme-Rheme (PTR) model. As the name implies, the model uses pragmatic parameters for the identification of information constituents, i.e. Themes and Rhemes, such as shared background knowledge of the sender and receiver, scope of attention, etc. The model and its application are described in detail in a series of publications (Dejica 2006, 2008, 2009a) and resuming them here would exceed the aim and length of the paper. For the sake of the subsequent presentation, I present here only the results of the analysis, in the form of identified Themes and Rhemes:

- 1. Theme given information: *the project*
- 2. Rhemes new information: (i.e. the objectives proper): development of techniques supporting heterogeneous modelling, including both formal "meta-models" and a software laboratory for experimenting with heterogeneous modelling; exploration of methods based on dataflow and process networks, discrete-event systems, synchronous/reactive languages, finite-state machines, and communicating sequential processes; making contributions ranging from fundamental semantics to synthesis of embedded software and custom hardware.

### Step 3. Hol-atomistic analysis of the Information Universe constituents.

By visualizing the identified IU constituents, the translator draws hol-atomistic cognitive relations between the rhematic information constituents and materializes them in the form of a frame, which in the selected example is a *computer frame*. The *computer frame* is not named explicitly in the text but is deduced from the sum of all the rhematic information in the IU: *heterogeneous modelling*, *dataflow*, *process networks*, *discrete-event systems*, *synchronous/reactive languages*, *finitestate machines*, *communicating sequential processes*, *embedded software*, and *custom hardware*.

### Step 4. Narrowing the Hol-atomistic analysis.

This step could be performed as part of Step 3, but for reasons of clarity I treat it separately; during this step, the translator basically narrows the analysis by drawing structural cognitive relations between the elements of the previously identified IU frame (IUF) with the aim of finding possible secondary meaning categories within the frame. Such possible secondary meaning categories, subordinated to a main IU frame, can be classified into secondary frames or sub-frames (SF). In the Ptolemy Project example, there are two such SFs, i.e., the hardware and software components of the computer frame: *hardware frame (networks, systems, machines) and software frame (modelling, dataflow, languages, processes, software)*.

### *Step 5.* Resuming the Hol-atomistic analysis.

Once the main IUF and its possible SFs are identified, the translator resumes the process (Steps 3 and 4) so as to identify other possible IUFs and SFs. This is a very useful step since smaller



frames, usually not identified at first sight, may be discovered and established as well. Usually short texts can display two or three information frames. In the analysed example, one more IUF can be identified, i.e. a *research-frame*, from the sum of the processes used to put the computer-frame into practice: *techniques, modelling, laboratory, experimenting,* and *exploration*.

*Step 6.* Visualizing the identified information frames.

In this last step of Phase 1, once all the possible IUFs and SFs have been identified (Steps 3-5), the translator draws superordinate and subordinate relations between them and completes thus the cognitive image of the text to be translated. In the Project Ptolemy example, the Information Universe frames together with the sub-frames can be represented as a network of relations as follows:



*Fig. 1.* Visualisation of structural cognitive relations between the Information Universe constituents (source text).

• *Phase 2. Transfer.* In the second translation phase, based on the previous analysis, the translator decides upon a final Information Universe frame which will be used for creating the target text in Phase 3.

Step 7. Establishing the Information Universe frame in the target text.

This is a decisive step in the translation process. When establishing the IU frame to be used in the creation of the target text, the translator must take into account the translation situation which may consist of a series of factors, such as the writer's intention, the translation purpose, the target audience, the target language peculiarities, and the client's requirement. Sometimes, some of these factors can be established prior to starting the process upon preliminary discussions with the client. If the client does not have any specific requirements, based on the other factors, the translator can now decide whether the target text will be source- or target-language oriented, i.e., whether it will preserve the flavour of the original or whether it will be adapted to the target language specificities.

Step 8. Building the final frame using translation strategies.

Once the translator has reached a decision and the translation situation is clear, s/he builds the final frame using the most adequate translation strategies (Leppihalme 1997, Newmark 1988, Delisle 1999, Chesterman 2008). For exemplification purposes and assuming that the target language is Romanian, based on the source-text frame visualized in Step 6, the following two possible target-text frames can be obtained to suit two different translation situations:

a. Translation situation 1: source-language oriented text



Fig. 2. Visualisation of structural cognitive relations between the information universe constituents in the target text (source-language oriented; language pair: English-Romanian).

b. Translation situation 2: target-language oriented text



*Fig. 3.* Visualisation of structural cognitive relations between the information universe constituents in the target text (target-language oriented; language pair: English-Romanian).



In the two translation situations presented above, different translation strategies were used to render the same frame constituents from English into Romanian. In the first situation, to create a source-language oriented text, one which preserves the flavour of the original, borrowing, loan (Vinay and Darbelnet 1995) or foreignization (Venuti 1998) were the predominant strategies used; in the second one, to create a target-language oriented text, practically a text where the frame constituents would be identical to those normally used in the target language by a native speaker/writer, domestication (Venuti 1998) or calque (Vinay and Darbelnet 1995) were considered to be the most appropriate translation strategies. In Figs. 2 and 3 above, the application of these strategies is highlighted with bold characters.

• Phase 3. Reproduction. In the last phase of the translation process the target text is created.

### Step 9. Translation

The translator translates now the text using the final frame established in Step 8. This is relatively a rather easy step, but one which should be used in conjunction with other analyses of the source text, i.e., atomistic, hol-atomistic and holistic (Dejica 2008, 77–91).

### 4. Conclusion

Applying information frames to translation is not sufficient as a key to felicitous translation. Their application should be used in conjunction with the other suggested analyses, i.e. semantic, lexico-grammatical, syntactic, cultural and generic, meant to be performed from the three different atomistic, hol-atomistic and holisitc perspectives.

Some more words of caution are in order. In practice, due to this rather complex methodological approach, identifying, analysing and re-creating information frames may be sometimes considered to slow down the translation process and eventually may prove not to be cost-effective. Moreover, their application would not be suitable for extensive texts, for the very same reasons.

However, information frames may prove extremely helpful in the case of short problematic texts, highly specialised texts, or those rich in terminological content. In this case, their contribution to translation is undeniable: applied from a hol-atomistic perspective, information frames are extremely helpful for visualizing cognitive relations in texts, which ultimately leads to text understanding. Other major advantages of using information frames for the translation of pragmatic texts include but are not limited to the possibility of (1) creating source- or target-oriented versions of the original text, all different, yet all 'correct' depending on the translation situation, (2) using translation strategies consistently and transparently throughout the entire text, and (3) applying them to any other language pairs, either for professional or didactic purposes.

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