LACUS

FORUM

XXXVII

Communication and Cognition:
Multidisciplinary Perspectives

McMaster
University

LACUS Forum 37 Referees

Barbara Bacz
David C. Bennett
Lucas van Buuren
Douglas W. Coleman
Kara VanDam

❧

Patrick Duffley
Connie Eble
Sheila Embleton
John Hewson
ShinJa Hwang

❧

Michael Kliffer
Sydney M. Lamb
Alan K. Melby
Robert Orr
Alex Sévigny

❧

H. Stephen Straight
William J. Sullivan
Patricia Casey Sutcliffe
Bernard Sypniewski
Sarah Tsiang

❧

LACUS FORUM XXXVII

COMMUNICATION AND COGNITION: MULTIDISCIPLINARY PERSPECTIVES

EDITED BY

Michael D. Kliffer
Alex Sévigny
Patricia Casey Sutcliffe
William J. Sullivan
Daniel S. Mailman

IX

❧

Meaning &
Translation

❧

A HARD SCIENCE LINGUISTICS VIEW OF TRANSLATION

Lara BURAZER
University of Ljubljana

Douglas W. Coleman
University of Toledo

Abstract. The present study deals with the specific aspects of translation of texts between two languages and two cultures, the source and target cultures. The task of translation is a complex one, and it includes discussion not only of possible dictionary translation equivalents but also the workings behind the so called task of decoding and re-encoding from one language to another. This involves the discussion of expectations triggered in the source text reader and the task of the translator to match the expectations triggered in the target text reader. This can be done by anticipating the expectations of the target audience, which is based on previous experience of translators with the particular text genres. These complex subtasks are presented within the HSL (Hard Science Linguistics) model of the task of translation.

Keywords: Translation Studies, Human Linguistics, Hard-Science Linguistics, Sociolinguistic Aspects, Reader Expectations, Expectation Procedures

Languages: English, Slovene

IN A TRADITIONAL VIEW, the role of a translator is to decode the language of a text and then re-encode it into another language. Although this view is still widely held in practice in the field of translation, it is well-known to be deficient, as it leaves out important aspects of social and psychological effect. This paper will discuss some of the key issues and then through an example under study will present an overview of a Hard-Science Linguistics (HSL) approach to translation.

1. SOME CURRENT RESEARCH BACKGROUND. There is a research project underway (Burazer in progress) dealing with the sociolinguistic aspects of translation and the way in which and the extent to which they influence the quality of translation. The interim results of the investigation into the translation of a piece of a legal document from English into Slovene have shown roughly that if we compare the quality of translation of a legal text of a translation studies student (TS student) to that of a law student, TS students will show a higher level of proficiency in micro level language skills such as the use of grammar and vocabulary, while law students will show more skill on the macro linguistic level such as the overall use of register (appropriate to legal texts) and overall meaning of the text.

One such example[1] shows that legal students were much less reluctant to use repetition of a certain expression within the same sentence than TS students. TS students were more concerned with the overall text form than with translating the actual

---

[1] The example is taken from a short text, a confidentiality clause in an employment contract. The text was used in the experiment to which we refer throughout the paper (Burazer, doctoral dissertation, in progress).

meaning. Therefore, being concerned with the actual text effect on the target reader, they used reference words instead of repetition: instead of repeating [MANAGER] several times, they used the reference [NJEGA] (in English [HIM]/[HIS]), for instance.[2] This makes sense, since legal experts need to be aware of the possible consequences of texts or text errors in terms of meaning interpretation, therefore they need to be as careful as possible in expressing meaning in as straightforward a manner as possible. They need to make sure that there are no ambiguities.

2. THE MEANING OF A TEXT. According to Stolze (2001:301), a translator translates what s/he understands, whether it be right or wrong, therefore we cannot speak of the source and target texts any more, but rather about a single text or message as understood by the translator as a reader. There is no stable meaning in texts that can be transferred, as if from one language to another. The meaning of texts is heavily dependent on the individual reader, his or her background knowledge, and the framework of previous experience that the text to be interpreted within.

If we refer to the example of the use of reference instead of repeating [MANAGER] cited in the previous section, we can argue that in HSL terms the previous or background experience of the students tested produced specific expectation procedures which led to specific translation choices in the process of translation. The students were not always guided by linguistic or legal restraints – the kind of information taught at schools – which led to translation error.

These same experiences also influence triggering of our expectation procedures as readers and result in either finding the text acceptable (that is compatible with our expectations) or not. The assessors selected showed preference for their field of expertise, which means that language experts paid more attention to language and not so much to the sense and meaning of the translation. On the other hand, legal experts showed more concern for the meaning of the translated texts (mostly appropriateness of vocabulary use and meaning) than the form and grammar of texts.

We can conclude that previous experience with texts as well as other general sociolinguistic experience affects the formation of expectation procedures which are then triggered in the process of translation and result in certain translation choices. On the other hand, previous experiences play an important role in text evaluation as well, therefore the level of translation quality is basically a subjective category, tied to the individual's specific expectation procedures.

Interestingly enough, judged by professional linguists and legal experts on the level of general text acceptability, the TS students scored higher than the legal students tested, even with the group of legal experts. This might be credited to the accidental

---

[2] Here, [MANAGER], [HIM], and [HIS] represent channel parts in the source English text, [NJEGA], a channel part in the target Slovene text. In HSL a channel is a model of the physical energy flow or means of energy flow within a communicative interaction (Yngve 1996: 128). A channel part is a model of the functional part played by the energy flow or means of energy flow. For convenience of analysis, we break the energy flow into smaller components such as those listed immediately above.

excellence of the randomly chosen students, or perhaps to the quality of instruction at the TS department in both areas – linguistic and legal.

3. FRAMES IN ARTIFICIAL INTELLIGENCE (AI). Authors such as Minsky (1974) and Wilks (1973), whose efforts were in the area of AI, or what has also been called cognitive science, tried to come up with a plausible explanation of the workings of the human brain. Although they drew conclusions based on the reasoning of the results arrived at in their experimental computer research, some of the reasoning could be applied to the explanation of the workings of the human brain.

One such reasoning is that people interpret texts (or all the input from the environment, for that matter) within so-called frames, which are represented in our brains as some sort of blueprints of previous experience. As readers we therefore interpret the text before us on the basis of previous experience. We expect there to be, for instance, an introduction, providing all the necessary data for following the content of the text, the body of the text, providing most of the information, and a conclusion, providing some general insight into what was written before. Just the way we accommodate everything else around us on a daily basis: for instance, when we enter an apartment, we expect to find rooms, in each room we expect to find furniture (stove and fridge in the kitchen, sofa in the living room, tub and sink in the bathroom, and so on).

Yet the meaning of a text can be much more easily represented within the frame of HSL, which offers orthoconcepts and expectation procedures to model the complexities of human understanding in the form of linkages (as illustrated by (1) – (5) below; see Yngve 1996: 263-64, 283-86; Sypniewski in press; see also Coleman 2004).

4. LINKAGES IN HARD-SCIENCE LINGUISTICS AS THEY RELATE TO TRANSLATION. A translator first needs to identify a linkage type in the source text, identify the relevant orthoconcepts present in a reader, anticipate the expectation procedures triggered, and then anticipate the translation solutions which will trigger similar expectation procedures in target readers.

In a (HSL) framework (Yngve 1996), we can model the linkage involving an author of a text, the text itself, and a reader as (1).

(1)   [Original] = [Original Author] + [L1 Text] + [L1 Reader]

Here, [Original] represents the physical system that includes the author, the original text in the first language (L1), and the L1 reader. The text is modeled as the channel [L1 Text] and the role parts as [Original Author] and [L1 Reader]. [L1 Text], [Original Author], and [L1 Reader] thus are models of physical subsystems of the communicative interaction as a whole.

We propose the following HSL model of translation. It consists of a set of interrelated linkages.

The translator is also a reader of the book, that is, he is in the role part [Reader1] in the linkage shown in (1), above. But, he is also an observer of the effect that reading the text has on himself. We can describe this via an observing linkage, as in (2).

(2)   [Obs Reaction to Original] = [Observer of Original] + [Original]

As (2) shows, an observing linkage models only two subsystems: the observer and the communicative interaction being observed.

When the translator begins the task of outputting a translation into a target language text, he becomes a proxy for the original author. We model this as the additional linkage in (3).

(3)   [Translation] = [Proxy Author] + [TL Text] + [TL Reader]

In (3), the translator actually fulfills *two* role parts in the same linkage, both [Proxy Author] and [TL Reader]. He then observes his reaction to the translation. This we model as a second observing linkage (4).

(4)   [Obs Reaction to Translation] = [Observer of Translation] + [Translation]

The translator tries to match his/her reactions to [TL Text] in [Translation] to his/her reactions of [L1 Text] in [Original].

There also arises a need for a third observing linkage as in (5):

(5)   [Obs Reactions] = [Translation Evaluator] + [Obs Reaction to Original] +
       [Obs Reaction to Translation]

Suppose the translator experiences a certain reaction as a result of reading the original; we describe his awareness of this as arising out of his observation in [Obs Reaction to Original] as (6).

(6)   [Observer of Original]<[L1 Reader]<X>>

When he reads the translation of his own creation, he experiences a certain effect. We describe his awareness of this as arising out of his observation in [Obs Translation] as (7).

(7)   [Observer of Translation]<[TL Reader]<Y>>

We describe how s/he evaluates these two effects in his/her role part as an observer of [Obs Reaction to Original] and [Obs Reaction to Translation]. This is why we need (5).

However, the translator also has an understanding of other readers of the original text and of a *potential* reader of the translation. The translator may never have actually observed anyone reading the original text and no linkage yet exists involving the reader of the translation. Thus we can also represent some properties of the translator as an evaluator in terms of orthoconcepts of other readers of the original and the potential readers, via the notation in (6) – (7).

The translator thus has a complex set of role parts in a group of interlocking linkages: as a reader in [Original] and [Translation], an observer in both [Obs Reaction to Original] and [Obs Reaction to Translation], as a proxy author in [Translation], and as an evaluator in [Obs Reactions].

The events represented in the above linkages do not comprise a simple linear sequence. Rather, in the initial stage, all four linkages asynchronously alternate back and forth — until the translator finds that his resulting properties in [L1 Reader] and [TL Reader] are in a state of near equilibrium.

The translator is the ideal subject of observation for the effects of texts on readers, because he acts as a reader and author at the same time. What the above model also shows is the synchronizing of properties between the author, the translator, and the readership.

The translator as a reader of the source text has the insight into what properties have been triggered in his plex[3] during or after reading the source text. He then, as shown in the above model, needs to find a solution for triggering a corresponding set of properties triggered in the reader by the target text. In order to do that, he also needs to identify the readership norms of the target readers.

A lot of discussion has been going on in TS concerning expectations of readers (Limon 2004, Baker 1998). Some have to do with text genre conventions (also Swales 1990, Toury 1999), others with readers' background knowledge on the subject, yet others with the socio-political situation in the target culture, and the like. Some aspects of translation and translation choices are even tied to the translator's reputation: some people can get away with more things than others. Another important aspect is represented by the instructions or wishes of the one who commissioned the translation (see also Vermeer 1996). The customer is always right principle does not escape the translation business (the reference here is to non-literary translation, of course). Sometimes the translator has to adhere to the customer's instructions for a particular solution in order to comply with their wishes and get paid.

All of the above factors contribute to triggering expectation procedures that the translator needs to match in the effect of the target text. Since we are dealing with two languages and two cultures, there is only a slim possibility that the meanings of the two texts are going to match precisely. This is difficult to achieve even between two persons, let alone between two large communities or even cultures (see Gutt 1991, Kintsch 1988).

5. THE TS AND LAW STUDENTS' TRANSLATION OF [MANAGER]. The short text referred to in this paper is the confidentiality clause of an employment contract. Here is an excerpt containing 'manager':

> "The Manager shall be obligated to keep confidential all information of which he becomes aware during his work for the Company, which relates to or is connected with the Company's business, particularly with respect to business and trade secrets."

In the instance cited, [MANAGER] was translated by the majority of TS students tested as [MANAGER], also with alternative spellings [MENEDŽER]/ [MANADŽER], or as [DIREKTOR], while the law students showed a much wider scope of vocabulary use in this instance and therefore produced translation choices such as [MANAGER] (again with alternative spellings [MENEDŽER]/[MANADŽER]), [DIREKTOR], [UPRAVNIK], [UPRAVITELJ], [RAVNATELJ], [VODJA], [DELOVODJA]. Here, note that [MANAGER] is a channel part component in the

---

[3] Yngve (1996:171) defines plex as "the structure of a communicating individual represented as a long list of procedures all interrelated by their categorial and conditional properties in a complex dynamic network."

English text (a functional part of [L1 Text] in the linkage [Original]). [MANAGER], [DIREKTOR], [UPRAVNIK], [UPRAVITELJ], [RAVNATELJ], [VODJA], and [DELOVODJA] are channel part components in the Slovene text (functional parts of [TL Text] in the linkage [Translation]. See Table 1.[4,5]

Law Students (LS)	Translation Studies Students (TSS)
[**VODSTVENI DELAVEC** SE ZAVEZUJE]	[**DIREKTOR** SE OBVEZUJE]
[**MENEDŽERJI** SO ZAVEZANI]	[**DIREKTOR** JE OBVEZAN]
[**POSLOVODJA** SE ZAVEZUJE]	[**DIREKTOR** JE ZAVEZAN]
[**DELOVODJA** JE ZAVEZAN]	[**MENEDŽER** SE ZAVEZUJE]
[**ZASTOPNIK** JE DOLŽAN]	[**DIREKTOR** SE ZAVEZUJE]
[**ČLAN UPRAVE** JE ZAVEZAN]	[**MANADŽER** MORA]

Table 1. *Translations of [the manager shall be obligated].*

Presented below are some of the instances of translations of the students tested, with commentary on and explanation of whether their translation choices for 'manager' were appropriate. Appropriateness has been determined by criteria based on observable use in legal documents as well as choices offered in specialized dictionaries.

In the case cited, the possible acceptable translation solutions would be [MANAGER] (also with alternative spelling [MENEDŽER]/[MANADŽER]) or [DIREKTOR], while [UPRAVNIK], [UPRAVITELJ], [RAVNATELJ] and [VODJA] would not be appropriate in the particular context of employment contract ([UPRAVITELJ] and [UPRAVNIK] are more appropriately used in the context of building management, [RAVNATELJ] is exclusively used in educational contexts, while [VODJA] is a general expression, a hypernym of sorts, corresponding to English LEADER or HEAD, which would not fit in this context either).

> ***Menedžerji*** *so zavezani k ohranitvi zaupnosti vseh informacij, ki so jih izvedeli v času dela pri podjetju za katerega delajo in so povezani z delom tega podjetja, še posebej pri poslovnih in prodajnih skrivnostih.* APPROPRIATE (LS)

> ***Vodstveni delavec*** *se zavezuje, da bo ohranil tajne vse informacije, za katere bo izvedel v času delovnega razmerja.* LESS APPROPRIATE because it's more general (LS)

> ***Poslovodja*** *se zavezuje kot zaupne ohraniti vse informacije, do katerih bo prišel med delom za podjetje, ki se nanašajo ali so povezane z delovanjem podjetja, še posebej poslovne in trgovske skrivnosti.* INAPPROPRIATE because '*poslovodja*' would be used in a low management position only, such as 'store manager' (LS)

> ***Delovodja*** *je zavezan k varovanju vseh, med delom pridobljenih podatkov, ki se povezujejo z njegovim delom v podjetju.* INAPPROPRIATE because '*delovodja*'

---

[4] There are several acceptable possibilities of spelling 'manager 'in Slovene: one is the same as the English original manager, another imitates Slovene pronunciation menedžer, a third possibility is a cross-breed between the original English spelling and Slovene pronunciation manadžer. Menedžer is regarded a Slovene expression, although a borrowing, while the two alternative spellings, manadžer and manager, are regarded as foreign expressions.

[5] There were other translation alternatives produced by TS students, such as [VODJA], [POSLOVNEŽ], both with a more general reference, and others. But the majority used [DIREKTOR] or [MANAGER].

is used in the construction business in the sense of 'in charge of a group of workers at a construction site' (LS)

Menedžer *se zavezuje, da bo varoval zaupnost vseh informacij, ki jih pridobi med svojim delom za družbo in ki se povezujejo ali so povezane s posli družbe, posebej glede poslovnih in poklicnih skrivnosti*. APPROPRIATE (TSS)

Manager *je dolžan, da obravnava vse informacije, ki jih je pridobil v teku svojega mandata v tem podjetju, zaupno*. APPROPRIATE, but less so for the Slovene linguists because of the English spelling (TSS)

Manager *je zadolžen za ohranjanje zaupnosti informacij, s katerimi se seznani v času, ko dela za podjetje in ki se navezujejo ali so povezane s poslovanjem podjetja*. APPROPRIATE but same as previous (TSS)

Direktor *se zavezuje, da bo zadržal zase vse skrivnostne informacije, s katerimi se srečuje v času dela za podjetje in ki se navezujejo oziroma so povezane s poslovanjem podjetja, še posebno z upoštevanjem poslovnih in trgovinskih skrivnosti*. APPROPRIATE (TSS)

Direktor *se obvezuje, da ne bo izdal nobenih podatkov, do katerih bo imel dostop med svojim delom pri podjetju, in ki se navezujejo ali so povezane s poslovanjem podjetja, posebno s poslovnimi in poklicnimi skrivnostmi*. APPROPRIATE (TSS)

Menedžer *se zavezuje, da bo varoval zaupnost vseh informacij, ki jih pridobi med svojim delom za družbo in ki se povezujejo ali so povezane s posli družbe, posebej glede poslovnih in poklicnih skrivnosti*. APPROPRIATE (TSS)

In the case of detecting the channel part [MANAGER] in the original English text, a set of possibilities is triggered and in the state of readiness to produce output to one of the following channel parts in the Slovene translation: [MANAGER] (also with alternative spelling [MENEDŽER]/[MANADŽER]), [DIREKTOR], [UPRAVNIK], [UPRAVITELJ], [RAVNATELJ], or [VODJA] (and possibly others which were not used in the translations produced by the students tested). These are all possible translations of English [MANAGER] into Slovene, but not all are appropriate to the context, register and co-text of the target text in question. They differ in their specific context as well as frequency of use.

In [Translation] the translator as proxy author needs to make a decision, a translation choice, and then in the role of the observer of the translation in [Obs Reaction to Translation] must monitor its appropriateness.

Asynchronously, the translator's role as the observer in [Obs Reaction to Original] and [Obs Reaction to Translation] alternates to allow him to monitor the appropriateness of the translation decision on the level of the synchronization of the expectation procedures triggered by both the source and target texts. We describe how he does this in [Obs Reactions].

When the state of near equilibrium has been reached, the [Obs Reactions] becomes disengaged.

Now consider translating the channel part [MANAGER] from English into Slovene. We hypothesize that law students have in general more experience with reading legal texts and are therefore exposed to a greater variety of legal expressions

which might in part or in full coincide with the translation of [MANAGER]. The TS students, presumably having less experience with legal texts, adhered to the more obvious choices and do not show willingness to take risks with less frequent possible translation equivalents for [MANAGER].

In this particular example, the previous experiences of the students tested proved less of an advantage, although this might not always be the case. This sort of creativity more often than not proves to be a positive one, but in the case of legal documents it might be a safer path to stick to the most frequent possibilities.

(8)   [law student]<select translation for [MANAGER]> =
        <context/employment contract> x <detect/[MANAGER]> x <?> ::
        <output/[DIREKTOR]>,
        <context/employment contract> x <detect/[MANAGER]> x <?> ::
        <output/[MENEDŽER]>,
        <context/employment contract> x <detect/[MANAGER]> x <?> ::
        <output/[MANADŽER]>,
        <context/building management> x <detect/[MANAGER]> x <??> ::
        <output/[UPRAVNIK]>,
        <context/building management> x <detect/[MANAGER]> x <??> ::
        <output/[UPRAVITELJ]>,
        <context/education> x <detect/[MANAGER]> x <?> ::
        <output/[RAVNATELJ]>,
        <context/???> x <detect/[MANAGER]> x <?> ::
        <output/[VODJA]>

In (8), we give a selection procedure (Yngve 1996:255-57) as a property of [law student]: [law student]<select translation for [MANAGER]>. A selection procedure consists of a series of setting procedures, separated by commas. The setting procedures have mutually-exclusive input conditions, and thus produce different outputs based on the input conditions. A double colon (**::**) separates the input conditions from the output. For example, the first setting procedure in <select translation for [MANAGER]> consists of (9).

(9)   <context/employment contract> x <detect/[MANAGER]> x <?> ::
        <output/[DIREKTOR]>.

Three input conditions are specified: (a) that the textual context be an employment contract (<context/employment contract>), (b) that the translator has detected the channel part [MANAGER] in an input channel (<detect/[MANAGER]>), and ? (<?>). These are connected by Boolean AND, represented by "x"; all three conditions must be true in order for the output to be set to true. Thus, if these three conditions are met, the translator outputs the channel part [DIREKTOR]. We represent how he does this with the task procedure <output/[DIREKTOR]>. See Yngve (1996) for more about tasks (esp. 186-88) and task procedures (esp. 264-65).

Each setting procedure in the selection procedure [law student]<select translation for [MANAGER]> works more or less in the same way, but specifies different input conditions and different outputs.

6. CONCLUSION. The task of translation is a complex one, particularly so because it deals with the ever intangible cognitive processes, relevant procedures which take place in human minds. The HSL model offers possibilities for representing the complexities of simultaneous tasks executing during the process of translation by modeling the different tasks of the translation process in separate linkages, by modeling the different simultaneous roles of the translator in various simultaneous linkages and offering the possibilities of managing time in terms of simultaneity and alternating of linkages.

The insight into the importance of managing previous experiences of the people involved and their relevant expectation procedures triggered in the process of translation also opens a new chapter in understanding and explaining the process of translating between different languages and cultures as well as accounting for the translation errors. The latter are not always as straight forward as they may seem, since there are numerous factors at play, such as the socio-cultural context, the socio-political situation, the specific wishes of the commissioner, or even the reputation of the translator, which may or may not deem a translation solution erroneous.

REFERENCES

BAKER, MONA. 1998. *Norms.* Routledge encyclopedia of translation studies, ed. by Mona Baker, 163-65. Oxford: Routledge.

BURAZER, LARA. IN PROGRESS. EMPIRICAL RESEARCH FOR DOCTORAL DISSERTATION.

COLEMAN, DOUGLAS W. 2004. *Linguistic meaning in the physical domain.* LACUS forum 30.331-41.

GUTT, ERNST AUGUST. 1991. *Translation and relevance: cognition and context.* Oxford: Blackwell.

KINTSCH, WALTER. 1988. *The role of knowledge in discourse comprehension: A construction-integration model.* Psychological Review 95.163-182.

LIMON, DAVID. 2004. *The contrastive functional anlaysis of texts in Slovene and English from a translation perspective (Prevodoslovna kontrastivna funkcijska analiza neleposlovnih besedil v slovenščini in angleščini).* Doctoral dissertation, University of Ljubljana, Faculty of Arts, Department of English and American studies.

MINSKY, MARVIN. 1974. *A framework for representing knowledge.* MIT-AI Laboratory Memo 306.

STOLZE, RADEGUNDIS. 2001. *Translating legal texts in the EU.* Perspectives: Studies in Translatology 9 (4).301-311.

SWALES, JOHN M. 1990. *Genre analysis: English in academic and research settings.* Cambridge: Cambridge University Press.

SYPNIEWSKI, BERNARD. IN PRESS. EXPECTATIONS. TO APPEAR IN LACUS FORUM 37.

Toury, Gideon. 1999. *A handful of paragraphs on 'translation' and 'norms'.* In Translation and norms, ed. by Christina Schäffner, 9-31. Phildelphia: Multilingual Matters.

Vermeer, Hans. 1996. *A Scopos theory of translation.* Heidelberg: TEXTconTEXT.

Wilks, Yorick. 1973. *Preference semantics.* Stanford Artificial Intelligence Laboratory Memo AIM-206, Stanford University.

Yngve, Victor H. 1996. *From grammar to science–new foundations for general linguistics.* John Benjamins publishing Company: Amsterdam – Philadelphia.