1. The Inferential Model of Translation

This paper views translation first and foremost as a means of cross-language communication. The communication theory on which it builds is relevance theory, as developed by Sperber and Wilson since the mid-1980s. The account it attempts to give of translation is intrinsically competence-oriented: starting “from the observation that human beings have the remarkable ability of telling in one language what was first told in another language” (Gutt 2000:205), it seeks to find out what this ability consists in and how it works. Assuming that this competence rests in the human mind, the orientation of this research is cognitive. Furthermore, if translation takes place in the human mind, it is of paramount importance that the translator understands how it works. Indeed, the better one understands the mental faculties and processes involved, the better the chances of achieving successful communication via translation will be.

1.1 Inferential act of communication

Since there is no space to present relevance theory here in any detail, its central idea will be outlined and illustrated with an example. A couple of concepts needed for the main points of this paper will also be introduced.

In a nutshell, according to this framework, a communicator starts out with an intention to convey a body of thought to his audience. To this end, he produces a stimulus from which the audience is meant to infer not only that the communicator has such an intention but also what that intention is.

Some time ago, there was an advertisement by Greenpeace in German newspapers which showed a satellite photograph of the earth, with the two following lines of text across it:

Die Erde ist eine Scheibe
und Umweltschutz ist überflüssig.

„The earth is flat and protection of the environment is unnecessary”. Is what the text of this stimulus says what the advertisers intended to convey? For anybody who knows anything about Greenpeace it is clear that the intended meaning is entirely different. In fact, it ridicules and thereby sets aside the linguistically expressed meaning. This, then, is a clear instance of verbal communication where the intended meaning actually contradicts the linguistically encoded meaning. Of course, this immediately raises a question: if the intended meaning is so different from the linguistically encoded one – how does one figure it out?

A quick answer might be, “Well, this is an instance of irony; it intends to convey the opposite of what it says on the surface.” Unfortunately, this reply rather begs the question. Given that

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1 Pre-publication draft of article published in E. Fleischmann, P.A. Schmitt and G. Wotjak (eds)

2 In this paper, the 3rd pers. sg. pronoun is used as default form. This is done for ease of exposition, with no intention to reflect on gender issues.
the advertisement does not come labeled “irony”, the question still remains: how do readers discover that ironical intention?

The crucial point is, of course, that the readers are expected to use information already available to them. Thus most people today are aware that the flat-earth idea is anachronistic and that its assertion today invites ridicule. This realization provides the mindset for interpreting the second half of the utterance: considering the protection of the environment unnecessary is as anachronistic and ridiculous as holding the flat-earth view today.

Knowledge about Greenpeace as an environmental protection agency further supports this interpretation.

This brings out the central point of the relevance-theoretic approach to communication and translation: while linguistic coding does play an important role in verbal communication, it is not the decisive factor in the interpretation process. As in this instance, clearly encoded information can be overruled by thought processes, that is, by inferential processes, that rely on other information available to the audience.

1.2. Mutual cognitive environment and context

If this is correct, then for communication to succeed it is of great importance that the audience uses the right, that is, the communicator-intended information for the inferential processing. In this case, crucial pieces of information stored in memory are that the flat-earth theory is anachronistic and that Greenpeace fights for the protection of the environment.

From the communicator’s end, therefore, some very important assumptions are being made: a) that the audience will have these pieces of information available, b) that they will be able to figure out that they should use them for interpreting this advertisement. A person either lacking these pieces of information or failing to use them could badly misunderstand the advertisement. Thus a member of the “International Flat Earth Research Society” might be tempted to take the advertisement at face value, as supporting their own view. (We shall return to this point below.)

In relevance theory, the sum-total of information available to an individual at a point in time is called his cognitive environment. It includes any information accessible to that individual from memory, perception or inferential thought processes (cf. Sperber and Wilson 1995:39f). Hence, assumption a) concerns the cognitive environment of the audience: the information needed for understanding the advertisement correctly must be part of the audience’s cognitive environment.

However, for communication to succeed, it is not enough that this information is accessible to the audience – but, as assumption b) states, it must actually be used by them for the interpretation of the text. In relevance-theoretic terms, this information must not only be part of the cognitive environment, but must also be selected from it as context – which is the subset of information necessary to interpret a particular text correctly (cf. Sperber and Wilson 1995:15ff).

How does an audience determine whether a particular piece of information in their cognitive environment is to be selected as context? According to relevance theory, a piece of information will be taken as part of the intended context if it is the most accessible information that yields an adequately relevant interpretation, or more technically, if it leads to adequate contextual effects without requiring unnecessary processing effort (cf. Sperber and Wilson 1995: 142-151).

Taking the need for selecting the right contextual information into account, an act of communication can be diagrammed in relevance-theoretic terms as follows (Fig. 1):
On the left, there is the communicator with his informative intention. To share this intention with the audience (on the right), the communicator produces a stimulus, which could be verbal and/or non-verbal; observing this stimulus, identifying and using contextual information from within the mutual cognitive environment — such as their knowledge about the shape of the earth — the audience infers (indicated here by the curly bracket) the thoughts which the communicator intended to get across. The linguistically encoded meaning does play an important role in the comprehension process, but there is no a priori reason why it should equal the intended meaning.

However, matters are not always as straightforward as this. In order to identify the speaker-intended interpretation, the audience are not entitled to simply go by its own cognitive environment, but rather by the information the communicator would expect to have in common with them. In relevance theory, this set of information is referred to as a mutual cognitive environment.

For example, a member of the “Flat-earth Society” might be tempted to interpret the advertisement as a straightforward assertion - in line with his own beliefs. However, if he realised that members of Greenpeace generally neither believe in the flat-earth theory nor consider protection of the environment unnecessary, he would not be entitled to treat the advertisement as a straightforward assertion. To correctly understand the advertisement, he would need to adopt the beliefs assumed by the Greenpeace advertiser.

Thus, in situations where communicator and audience do not share a mutual cognitive environment, called secondary communication situations in Gutt (2000), additional
sophistication is needed for communication to succeed. More precisely, the additional sophistication needed is the human beings capacity of metarepresentation. People are able not only to think of or represent in their mind states of affairs in the world; rather, in addition they are capable of thinking how other people represent those states of affairs in their minds - even if their own thoughts are different. Thinking about what someone else thinks is an instance of metarepresentation, defined in relevance theory as follows:

A metarepresentation is a representation of a representation: a higher-order representation with a lower-order representation embedded within it.

(Wilson 2000:411)

This capacity is one not often paid attention to, but it is by no means to be taken for granted. Experiments have shown that, for example, children under the age of three years, are severely restricted in their metarepresentational capability (Rosenthal 2000:276-277). What is important here, is that this capability plays a central role in human communication; in order to assess their mutual cognitive environment, communicator and audience must be able to represent each others’ thoughts, that is, they must be able to metarepresent. Figure 2 diagrams an act of inferential communication, including the capability of metarepresentation.

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Sperber 1994 calls this the strategy of “sophisticated optimism” of utterance interpretation.
1.3 Translation and configurations of cognitive environments

Translation typically, though not necessarily, brings into contact people with different cognitive environments and therefore metarepresentation is one of the crucial challenges facing translators. Thus, very often the translator cannot simply use his own cognitive environment when trying to understand the original; rather he has to metarepresent to himself the mutual cognitive environment shared between the original communicator and original audience. Otherwise, a secondary communication situation will result, prone to lead to misinterpretation (cf. Gutt 2000:76).

However, metarepresentation may be required not only for correctly understanding the original; the whole point of translation is to communicate with receptors - who again may have a cognitive environment different from that of the translator. If the translator’s efforts are to succeed, he needs to be aware of their cognitive environment, too, that is, he needs to metarepresent it. Figure 3 sketches this situation of double metarepresentation.

Act of inferential communication with metarepresentation

Figure 2
Other situations may be easier for the translator, for example, if he shares a mutual cognitive environment with the receptor audience. In fact, the relationships between the cognitive environments of original communicator (C₀), translator (T) and receptor audience (Aᵣ) allow - in principle - five distinct configurations, as shown in Figure 4. The darker shading indicates the mutual cognitive environment.⁴

**Configuration 1: Translator and receptor audience share a mutual cognitive environment, but it is different from the one assumed for the original.**

This situation arises, for example, where a person translates for members of his own language community and the communication is about a subject matter for which receptors and translator would come up with the same background information, which is, however, not that anticipated by the original author.

**Configuration 2: Original communicator and translator have a mutual cognitive environment, but the receptors are not part of it.**

Such cases arise, for example, where a bilingual member of the source language community translates for a member of a different culture and the communication requires contextual information not shared by the target audience.

⁴ Any normal two human beings mutually share at least some assumptions, however minimal they may be. This fact is indicated in Figure 4 by the dotted areas.
Configuration 3: Original communicator and receptors have a mutual cognitive environment, but the translator is not part of it.

A typical example would be when a non-expert is asked to translate a communication taking place between experts of the same field who do not share a common language.

Configuration 4: No mutual cognitive environment is shared by any of the three parties concerned - original communicator, translator and receptors.

This configuration constitutes the worst-case scenario – none of the participants involved in the cross-language communication act share a mutual cognitive environment. This case is encountered in situations where an outsider to both the original and the receptor community attempts to translate literature into the receptor language. Examples may be found in the Two-Thirds-World, e.g. in the translation of educational materials or Bible translation.

Configuration 5: Original communicator, translator and receptors all share a mutual cognitive environment.

A typical example would be an international group of experts in a particular field, say biochemistry, one of whom masters more than one language and translates for some other participants who do not understand the language of discussion. The participants would be aware that they all share the scientific expertise necessary to understand each other, in other words, all would see themselves as sharing a mutual cognitive environment, in the relevance-theoretic sense. This situation is the translator’s ideal - no differences in cognitive environments to be overcome, no need for metarepresentational gymnastics.
Configurations of mutual cognitive environments in translation
Figure 4
2. Exploration of configuration 1

Since space does not allow treating each of these configurations in detail here, the remainder of this paper will focus on the first constellation, illustrating from an example the significance of metarepresentation. As mentioned above, in this configuration, shown in Figure 5 in more detail, “Translator and receptor share a mutual cognitive environment with each other, but not with the original communicator.”

Under these conditions, to adequately comprehend the original, the translator needs to reconstruct and metarepresent to himself the context and interpretation intended by the original communicator (Figure 6).

On the production side, the translator can largely rely on his intuitions about relevance – except that differences between the original and the receptor environment may again need to be taken into account, either by helping the receptors adjust their own cognitive environment, or by adapting the resemblance relations accordingly. However, to take either of these steps, the translator would need to first to identify the differences between the background knowledge of the original and the receptor audiences, a task which again requires metarepresentation.
In the following example, the production side will be kept in mind, but the primary focus will be on the comprehension side.

The example is taken from the translation of Hemingway’s *The sun also rises* into Spanish by Joaquín Adsuar (Hemingway 1993b). Not speaking Spanish myself, I shall follow the analysis provided by Gabriel Rodriguez (forthcoming).

In the passage in question, Brett and Jake look from the city wall of Pamplona toward a mountain: “Up on the top of the mountain we saw the lights of the fort” (Hemingway 1993a: 152). Adsuar’s translation reads: “En su cumbre [la de la montaña] vimos las luces del Castillo” (Hemingway 1993b:214). Thus, the translator renders the English *fort* by *castillo* “castle”. However, the reference is actually to the *Fuerte de San Cristobal* which is, as Rodriguez points out, “a military fort on top of the *Monte San Cristobal*, in front of Pamplona” (Rodriguez forthcoming:8).

Now this difference may have been a mere oversight, a “slip of the pen” on the translator’s part, as it were. In that case, not much more needs to be said. However, given that Spanish has the word *fuerte*, which resembles the original *fort* much more closely than *castillo*, the slip-of-the-pen explanation does not seem very likely. An intentional change made by the translator...
seems more probable. On this assumption it seems worth taking a closer look at the intended meanings of both original and translation.

First of all, as far as the English original is concerned, the wording straightforwardly suggests that what Hemingway intended to communicate was that the lights Brett and Jake saw belonged to a fort. If Hemingway had intended to communicate that they belonged to a castle, he would no doubt have chosen the word castle. Thus, one could reconstruct Hemingway’s intention as follows: “Hemingway intended [the readers to understand that [the building Jake and Brett saw was a fort]].” (The square brackets here show levels of metarepresentational embedding.)

By contrast, Adsuar’s translation clearly shows that he intended to communicate that what Brett and Jake saw were the lights of a castle; Hence, it is evident that “Adsuar intended [the readers to understand that [the building Jake and Brett saw was a castle]].” If this reasoning is correct, why did the translator intend to communicate something demonstrably different from the original author?

Rodriguez suggests the following explanation: “In this case it is probable that the context the translator brings to bear is his experience of a number of castles on top of mountains, which are so typical of Spain...” (forthcoming:9). Furthermore, “the translator might have thought that the American writer did not know very well the difference between a castle and a fort” (forthcoming:9), and so the Adsuar ended up “correcting” the text. In other words, the translator here was relying on his own cognitive environment, that is, his own beliefs, rather than recognising or respecting the cognitive environment clearly envisaged by the original author - which also happens to be the factually correct one, as it turns out.

One interesting point here is that differences in cognitive environment do not necessarily coincide with differences in language, or even culture. With respect to general cultural knowledge, the Spanish translator was at an advantage: the setting of the novel is his own country. However, with regard to Pamplona and its surroundings, his knowledge turned out to be less accurate than Hemingway’s, leading him to his mistranslation.

Now, what if the translator had been factually right - what if the building had actually been a castle, not a fort? Would the rendering castillo have been justified then? After all - the translator’s rendering would have been in better agreement with the facts, whereas the original would have been factually wrong.

To adequately answer this question, one needs to consider that by nature translation adds a layer of metarepresentation to the original: the translator is not presenting a story of his own, but by declaring his work to be a translation of Hemingway’s The sun also rises, he is committing himself to pass on not his own, but Hemingway’s ideas of what took place. Thus, in his work the translator’s focus is not on directly representing states of affairs, but on representing how the original author represented those states of affairs - hence the translation itself is part of an act of metarepresentation.

Once this additional level of metarepresentation is made explicit, the problem with Adsuar’s rendering becomes quite apparent: by choosing the rendering castillo rather than fuerte, the translator could not reasonably have intended [the readers to understand that [Hemingway intended his readers to understand that [the building Jake and Brett saw was a fort]]. It rather seems that at this point Adsuar’s intention operated only at the representational level, conveying what Adsuar believed to be the true state of affairs, setting aside the commitment to metarepresenting Hemingway’s own intentions.  

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5 In the discussion following the presentation of this paper in Leipzig, some Spanish participants suggested that Adsuar’s rendering was motivated not only by the fact that the building perhaps resembled a castle more than a fort, but also by the fact that the Spanish fuerte would have given the wrong connotation to the Spanish audience of a fort like one finds in American Western movies. Rodriguez, who is a native of Pamplona, comments on these objections as follows: “As for the question of the fort I disagree with my Spanish
This simple example brings out the important fact that acts of communication that involve metarepresentation, such as translation, can be examined along two distinct dimensions; along one dimension, one can examine a relation of truth: is the (lowest level) representation true of the state of affairs? Along the other dimension, one can examine whether the next level of representation accurately metarepresents that representation, that is, whether or not it is faithful to it. Consider in the following grid (Table 1):

<table>
<thead>
<tr>
<th>Representation</th>
<th>Metarepresentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>true</td>
<td>Faithful</td>
</tr>
<tr>
<td>false</td>
<td>Faithful</td>
</tr>
<tr>
<td></td>
<td>unfaithful</td>
</tr>
<tr>
<td></td>
<td>unfaithful</td>
</tr>
</tbody>
</table>

Table 1

As this grid shows these two dimensions of evaluation are truly independent of each other. Thus, a translation that is representationally true is not necessarily metarepresentationally faithful, nor does a metarepresentationally faithful translation have to be factually true. There are, of course, instances where the positive values of both dimensions meet - that is where the translation is both faithful and factually true, but this is by no means necessarily so. Thus, a translation of, for example, Georg Stahl’s book *The true treatise of medicine* (1708) is not a lesser quality translation because it is known today that the phlogiston theory is factually wrong.

Thus in acts of metarepresentational communication the metarepresentational dimension takes precedence over the representational one, so that the following modified diagram might give a more appropriate picture (Table 2):

<table>
<thead>
<tr>
<th>Metarepresentation</th>
<th>Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>faithful</td>
<td>true</td>
</tr>
<tr>
<td></td>
<td>false</td>
</tr>
<tr>
<td>unfaithful</td>
<td>true</td>
</tr>
<tr>
<td></td>
<td>false</td>
</tr>
</tbody>
</table>

Table 2

If the analysis given above of Adsuar’s rendering is correct, then it is first of all metarepresentationally unfaithful; beyond that it is also appears to be representationally false, thus showing negative values along both dimensions.

Lastly, this example also shows that, from a communicative point of view, it is indeed important to define context in cognitive terms rather than in terms of external factors, such as situations or surrounding text (co-text). What someone intends to communicate depends

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colleagues because: 1) If the Spanish *fuerte* evokes the forts of the Westerns, so does the original *fort*. Spanish readers know that in Spain we do not have the kind of forts that appear in the Westerns. So the interpretation which is consistent with the principle of relevance is that Hemingway is talking about some sort of military premises. 2) In any case, the actual thing is more the kind of thing you see in the Westerns than a castle. The main difference is that it is made of stone, whereas in the Westerns they are made of wood. 3) People in Pamplona refer to it as the *fuerte* (I have never heard people call it *castillo*) and that is why, probably, Hemingway called it fort; he had a very good ear for expressions and ways of saying, as it is reflected in the distortions of the English syntax that are so remarkable in *For whom the bell tolls*. He makes the Spanish characters speak English with Spanish syntax and expressions; a very interesting case of literary dialect (and something that is impossible to translate).” (personal communication)
primarily on his cognitive environment - which may or may not be in line with the external environment.

3 Conclusion: a challenge to translation competence

In recent years, the scope of discussions about translation competence, has been widened to go beyond language control, including a wide variety of factors outside of language proper. This is a very encouraging development. However, for these developments to yield adequate results, the psychological modalities on which translation builds must be clearly understood. Thus the primary concern of translators is not the representation of states of affairs, but the metarepresentation of bodies of thought. Accordingly, the translator’s attention must concentrate on the cognitive environment of the parties concerned, not just on external contextual factors. As seen in the overview (Figure 4), in principle each of the three parties involved in translation can have a different cognitive environment: the original communicator, the translator, and the audience. This paper has addressed only one of the five possible constellations presented in the overview, and even there it was possible to only scratch the surface. However, one point should have become clear: as soon as one recognises the need to deal with different cognitive environments, it becomes clear that metarepresentational skills must be a core component of translation competence.

References

Rodríguez Paso, José Gabriel (forthcoming): “Contextual mismatches in the translation into Spanish of Ernest Hemingway’s *The sun also rises.*” *Hermeneus. Revista de la Facultad de Traducción e Interpretación de Soria,* num. 4.

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6 On the status of “covert translation” see ch. 3 of Gutt 2000.