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Griebel, Cornelia

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Fuzzy concepts in translators' minds: A cognitive-translational approach to tackling the difficulties of legal translation

Cornelia Griebel - University of Geneva

1. Introductory remarks

Legal translation is fundamentally different from specialized translation in other domains. The reason is that legal texts—except texts from supranational law—are firmly anchored in their national legal system, which, for its part, is subject to the social order and the specific cultural values of that nation. Nevertheless, while communication between legal experts often ends at their national borders (Pommer 2006, 17), legal translators have to look beyond national and legal boundaries and bridge the gap between legal orders and different legal arguments and interpretation of the everyday reality. It is generally known that, on the one hand, professional legal translators have to be familiar with their own legal order, legal language, and legal reasoning and, on the other, with the legal orders and legal discourses of their respective working languages. They have to be aware of the fundamental divergences between legal concepts, legal practices, and texts, as well as their implications and difficulties for translation.

Typically, research in the field of legal translation studies has concentrated on legal text, lexis, legal and institutional issues, legal semantics and legal

language issues, or professional aspects of legal translation (to name just a few, see Borja Albi and Ramos 2013; Prieto Ramos 2014a; Prieto Ramos 2014b; Sandrini 1999; Šarčević 1997; Wiesmann 2004). Likewise, cognitive approaches in this field are based on legal linguistics, legal semantics, and/or the translation product (e.g., Engberg 2009a; Engberg 2009b; Engberg 2012; Simonnæs 2012).¹

So far, little attention has been paid to the cognitive processes implicated in the understanding and translation of legal texts. Nonetheless, the comprehension of these texts demands substantial cognitive effort, especially for the legal nonexpert. Throughout the reading process, mental representations of the legal and extralegal text content have to be constructed. As part of an ongoing learning process, knowledge is acquired and has to be incorporated and schematized in the semantic memory of the individual. Only after successful integration of this knowledge into the long-term memory, it can be activated and instantiated in actual communication or, in the case of this article, in actual text reception.

In contrast to the abovementioned text-based cognitive approaches in legal translation studies, the theoretical framework presented here uses theoretical models and empirical evidence from research in cognitive science and psycholinguistics. Nevertheless, these approaches focus mainly on comprehension processes in general communication situations of everyday life (for an introduction see, e.g., Anderson 2007; Rickheit, Weiss, and

Eikmeyer 2010; Schwarz-Friesel 2008), but do not take into account neither expert communication nor translational issues. Thus, in order to explain comprehension of highly specialized content, on the one hand, and translational aspects underlying and controlling the reading process, on the other, these general approaches have to be adapted.

The cognitive-translational model presented in this article attempts to identify and illustrate the processes and challenges of legal text comprehension by adapting general approaches from the neighbouring discipline of cognitive linguistics to the issues of comprehension within the translation legal expert utterances. Therefore, it should not only be considered as a theoretical explanation of the difficulties of legal text understanding, but also as a basis for further reflection in process-oriented (legal) translation studies as well as legal translation training.

The article is divided into three parts. The first explains the general theoretical models of mental organization of word knowledge and speech comprehension developed in cognitive and psycholinguistics. In the second part these general models are adapted to the understanding of legal text comprehension, focusing on the mental representation of highly abstract legal language and legal arguing. Finally, the conclusion discusses the use of the model, taking into account the particular position of the legal translator within the communication process.

2. Cognitive processes during reading

What processes are in place during speech comprehension? Text comprehension (and more in general speech comprehension) comprises various subprocesses, starting from the lexical decoding of the words to the semantic processing of the whole sentence or text and the intention of the sender of the utterance. Psycholinguistic and cognitive linguistic approaches focus on the different subprocesses of reading and understanding.

This section first describes how the organization of lexical knowledge in the long-term memory can be modeled. Then, a comprehensive psycholinguistic model of general speech comprehension is presented, which will form the basis for a cognitive-translational model of legal text understanding.

2.1 Storage and retrieval of concepts in long-term memory

How is information stored and organized in memory? In psycholinguistics and cognitive linguistics this question has led to different approaches.² The most common approach postulates a word storage, or *mental lexicon*, containing the phonological and graphemic, lexematic, and lemmatic attributes of each word entry. Levelt defines the mental lexicon as “a passive store of declarative knowledge about words” (Levelt 1998 [1989], 185). This basic lexicon is supposed to be connected to a *conceptual system* containing the elementary, prototypical features of the word entry and which is, again, connected to larger, interlinked units of world or encyclopedic

knowledge.³ These encyclopedic units form part of the semantic memory and are assumed to be organized as networks or clusters of features—for example, as *mental schemata* with *slots* and *fillers* (Anderson 2007, 188)—or as larger *mental modals* consisting of concepts and interrelations (Johnson-Laird 1983). Furthermore, they not only consist of schematized representations of static referents but also include so-called *scripts* (Anderson 2007, 195), which are schematized representations of a course of events—for example, visiting a restaurant.

In other words, in the semantic memory, which is part of the long-term memory, schematized representations of extralinguistic entities or referents are built. In addition to this storage of schematized declarative knowledge, Baddeley et al. propose an *episodic memory* that contains our personal experience and “underpins the capacity to remember specific single episodes or events” (2010, 11). It is therefore often called *autobiographic memory* (Rickheit, Weiss, and Eikmeyer 2010, 36; Schwarz-Friesel 2008, 107). The representations stored in both parts of the long-term memory are then recalled and instantiated in the actual communication situation.

Returning to the conceptualization of extralinguistic entities, Anderson proposes a conceptual hierarchy consisting of three levels (2007, 184).⁴

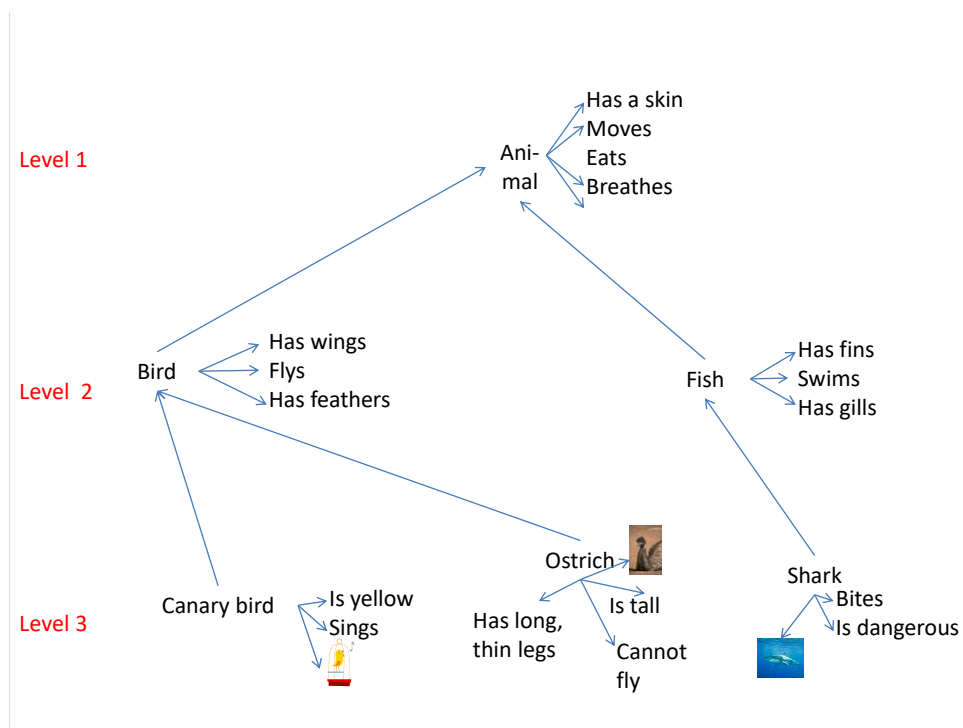


Figure 1. Conceptual hierarchy, adapted from Anderson (2007; translation my own).

Figure 1 shows that on each level the entries have an increased degree of abstraction compared to the entries on the next lower level. On the third level the concrete specimen of a category is represented. The recall of this specimen also triggers the activation of the connected conceptual attributes (e.g., canary bird → can sing, has yellow feathers, can fly, has two legs with claws, etc.). Some of these conceptual attributes are represented in verbal form, others are connected to an image, and still others are auditory. This third level permits the recall of mental images. The next level, level 2, represents the next higher level of abstraction but always allows for the

recall of visual representations. Nevertheless, conceptualization on this level requires access to a concrete specimen on the lower level. In other words, the word *bird* would be visualized by the representation of a special or prototypical specimen of a bird, like a canary (rather than, say, a penguin). The first level refers to the highest degree of abstraction. Mental imagery linked to the entries on this level requires the recall of concrete entries on the second and third levels. The next higher level would be the conceptual level of *creature*, which could only be conceptualized in verbal form and would require access to the visual and sensorial representations on the lower levels (see Griebel 2013, 25). Regarding the concept attributes on the different levels, all attributes of the higher levels also apply for all concepts on the lower levels, whereas the conceptual attributes on the lowest levels are only valid for this specimen of the category.

One important issue—particularly with regard to the legal context—is the mental representation of abstract words without any concrete extralinguistic referent. It is assumed that abstract concepts like *religion*, *truth*, or *law* are represented in the memory in the form of verbal structures (for details see Griebel 2013, 63–74); they are not immediately linked to a mental image and therefore have to be instantiated by activating a network of larger encyclopedic units. Only by activating those encyclopedic units can the recipient simultaneously recall visually represented concepts with concrete extralinguistic referents like *church*, *priest*, etc. (see also Paivio 2007, 46).

Furthermore, empirical studies have shown that concepts with concrete extralinguistic referents are memorized more stably and can be better recalled than abstract concepts. Thus, mental imagery seems to be a secure anchor for memorization as well as improves memorization (see Paivio 2007, 58–79; Anderson 2007, 169). This will be important when discussing the mental representation of legal terms in section 3.2.

2.2 Cognitive speech processing

Obviously, language processing isn't a matter of processing isolated words but of understanding complex utterances embedded in a specific communication situation. The sender and the recipient form part of this communication event. During the entire communication process—in this case, during reading a text—knowledge stored in the long-term memory is instantiated and new information is integrated and interlinked in the memory. Moreover, presuppositions about the content and the structure of the text and the intention of the sender are built before starting to read and control the reading process.

The psycholinguists Rickheit, Sichelschmidt, and Strohner (2002, 112) propose the following basic model of the cognitive processes involved in reading a text or understanding an utterance in general.

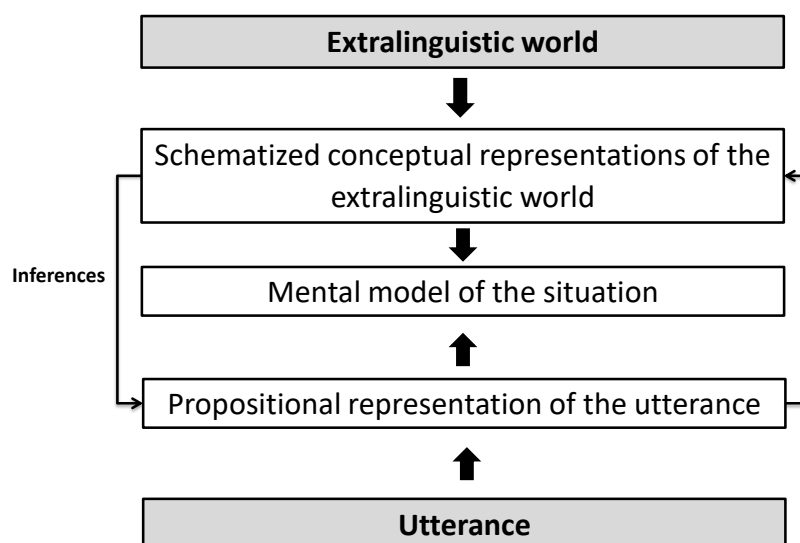


Figure 2. Model of language comprehension (Rickheit, Sichelschmidt, and Strohnner 2002, 112).

The authors describe their model as an integrative approach to language processing, combining both bottom-up and top-down cognitive processes. This means the cognitive processing of an utterance is, on the one hand, driven by the utterance (i.e., the text actually read—bottom-up) and, on the other hand, by activating and instantiating knowledge about the extralinguistic world stored in the long-term memory (Rickheit, Sichelschmidt, and Strohnner 2002).

The utterance constitutes the bottom of the model. Concerning the processing of the utterance, Rickheit, Sichelschmidt, and Strohner (2002, 109) refer to the propositional model of text processing proposed by Kintsch and van Dijk (1978; 1983). In their strictly bottom-up-driven approach, Kintsch and von Dijk assume that the comprehender transfers the text into a mental syntax consisting of micropropositions. In a cyclical process consisting of subprocesses of integration and deletion, those micropropositions are integrated into increasingly abstract macropropositions containing only the information relevant for the processing of the text. Throughout this cyclical construction process, the comprehender forms, step by step, a *semantic text base* that contains the text's central information (Kintsch and van Dijk 1978).

At the same time, the reader activates his knowledge about the extralinguistic world stored in his semantic memory (top-down processing) in order to facilitate comprehension and/or enrich text information by drawing inferences. Even before starting the reading process *sensu stricto*, presuppositions are formed about the intention of the sender (Rickheit and Strohner 1999; Sanford and Garrod 1998), while at the same time a known text schema is activated that controls the comprehension process on a macrostructural level (see Kintsch and van Dijk 1978).

Whereas the propositional level is a text-based, elementaristic mental representation of the utterance, the mental model of the text situation and of

the extratextual communication situation, figuring in the middle of the model of text processing (see Figure 2), can be defined as the holistic representation of the intended message (see Rickheit, Weiss, and Eikmeyer 2010). This holistic representation is built by drawing inferences throughout the reading process. These inferences are drawn both by extracting new information from the text (see Figure 2, arrow on the right side of the model) and by recalling and instantiating memorized knowledge (arrow on the left) to enrich the propositional text base.

Whether bottom-up– or top-down–driven processes dominate the reception notably depends on how strongly the recipient himself is embedded in the communication situation (Rickheit, Weiss, and Eikmeyer 2010), as well as how familiar he is with the subject of the text. In other words, the higher the degree of familiarity with the subject of the text and the communication situation, the more the recipient will be able to draw enriching inferences by activating his knowledge. The less the subject is known, the more the understanding of the text will depend on the processes at the micro- and macropropositional levels. Thus, it is evident how much the successful understanding of a text depends on the linguistic and extralinguistic knowledge of the reader and on successful inference processes.

3. Cognitive approach to the translation-oriented understanding of legal texts

Based on the perspective of cognitive semantics, this section now examines the understanding of legal texts. How does the reader (or the reader-translator) construct the legal and extralegal meaning of the source text in order to be able to translate it to the target language? What processes allow him to infer, from the text to be translated, the legal and extralegal information presented in the text, explicitly or implicitly, to establish connections between the law case explicated in the expert utterance and the real world, as well as to memorize and activate knowledge in the (legal) languages and legal contexts involved? “As one cannot translate what has not been understood, interpretation as a means of understanding is therefore of the utmost importance in translation studies” (Simonnæs 2013, 150). From a cognitive point of view, this statement can also be inverted. Understanding, in terms of activating memorized knowledge and building a mental model of the information given by the utterance, is a means of interpreting the communication situation in which the utterance is embedded, the situation set forth in the utterance, and, consequently, the extralinguistic world to which the utterance refers.

3.1 Modeling legal text comprehension

How can the general approach presented in section 2.2 be applied to the comprehension of legal texts characterized by a high degree of complexity, specialization, and abstraction? We will illustrate the reception of legal texts with the following model of legal text comprehension (Figure 3). In this adaption of the model by Rickheit, Sichelschmidt, and Strohner (2002), the general components of the original will be differentiated in order to encompass all the issues of legal text understanding.

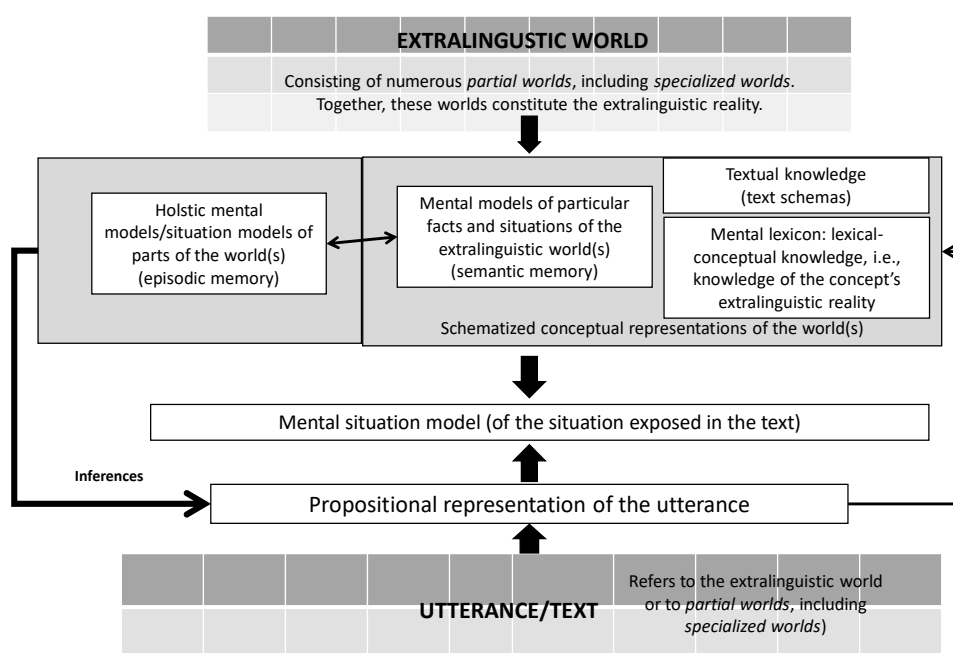


Figure 3. Model of legal text comprehension (Griebel 2013).

Just as in the model developed by Rickheit, Sichelschmidt, and Strohner (2002; see Figure 2), the legal text constitutes the basis of the reception process. The utterance refers to the extralinguistic world of the sender; ideally his world corresponds to the world of the recipient so that the latter can construct a mental model of the situation exposed in the text.

At the top of the model is the extralinguistic reality, as in the original model. This reality is a very individual universe consisting of many partial worlds, among them the worlds of the specialization of every person.

The mental constituents involved in the cognitive processing of the utterance are, again, located in the center of the model. As mentioned before, episodic memory contains our personal experience and specific single episodes or events. Episodic memory is closely linked to semantic memory, which contains schematized declarative knowledge. Schematized representations are recalled and instantiated in order to be applied to the actual communication and text situation (Schwarz-Friesel 2008, 107). These schemas not only refer to mental representations of extralinguistic facts but also comprise text models in terms of schematized textual macrostructures (e.g., of prototypical contracts, court judgements, or notarial deeds). They allow the construction of presuppositions controlling future text understanding.⁵

Returning to the top of the model, the extralinguistic world has to be described in more detail. In contrast to the general idea of extralinguistic

reality, the legal world is not a concrete one but, rather, a legal–linguistic world that covers the everyday reality like a veil. The model of legal text comprehension has to take into account the two dimensions of the extralinguistic or extratextual world: that of the legal world, characterized by abstraction from and preparation of the reality, and that of the concrete extralinguistic reality, which underlies the constructed world of law. In order to reduce complexity, Figure 4 contains only parts of the general model presented in Figure 3.

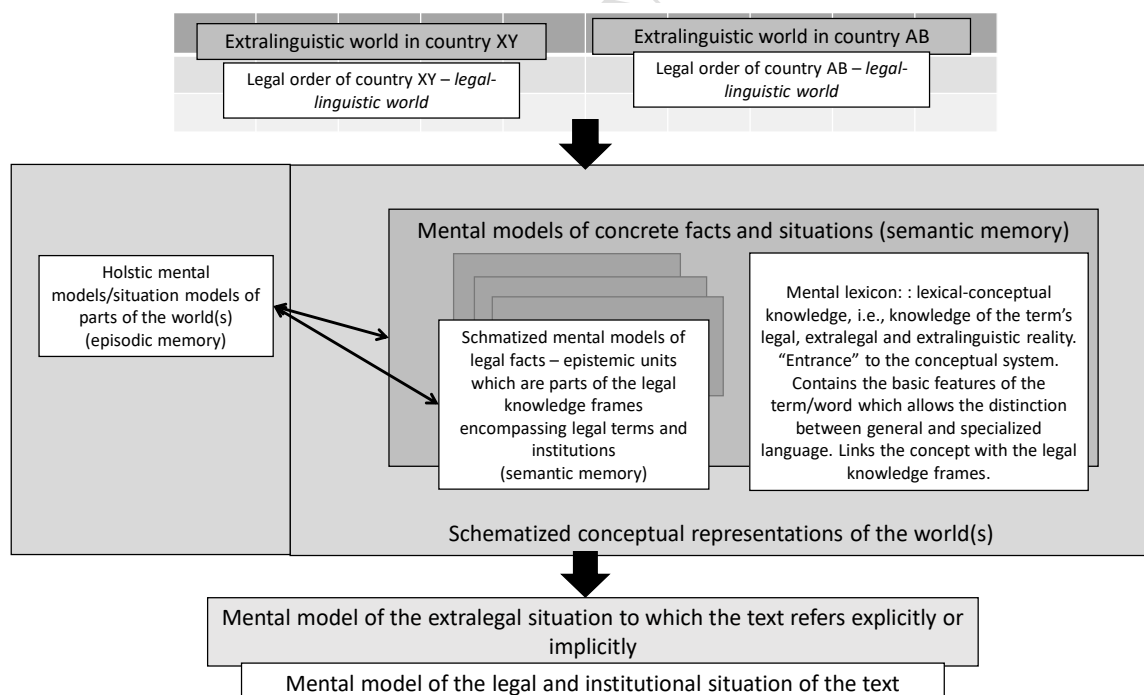


Figure 4. Model of legal text comprehension integrating the legally shaped world and the concrete extralinguistic world.

As mentioned above, the *legal world* differs substantially from the real-life extralinguistic world, as it is a constructed world generally shaped by the linguistically fixed legal order that defines the rules for the actions of the individual subject to the law, social life, and functioning. Thus, while texts, as defined by Rickheit, Sichelschmidt, and Strohner (2002), refer, in general, to extralinguistic facts in terms of a concrete, perceptible world, legal texts refer—at least partly, though often primarily—to a legal and legal-linguistic world, being only indirectly connected with extralinguistic referents. Therefore, when drawing inferences from semantic memory, those schematized conceptual representations are not only models of extralinguistic facts but, again, models of linguistically fixed, legally constructed facts that refer only secondly and indirectly to an extralinguistic world—an extralegal world (see Griebel 2013, 152–160).

Hence, due to the high degree of abstraction of legal language and terminology, it is not surprising that memorization and recall of legal knowledge require high cognitive effort. We are only able to build stable and instantiable schematized models in long-term memory if those concepts are cross-linked to other concepts with concrete extralinguistic referents. In other words, the memorization also takes place on two levels in the extralinguistic world: the legal and legalized abstract world and, behind this abstract universe of law, the everyday reality that is covered and shaped by law. Abstraction is the result of the work of legal experts. Especially in the

code-based German and French civil law systems, the work of legal experts consists of the preparation of everyday reality in order to construct legally evaluable facts that can be subsumed under legal provisions. In the opposite case, the case of legislation, lawmakers strive for a high degree of abstraction and generalization in order to guarantee that a provision is applicable to the maximum number of real-life cases. In both cases, the recipient of the legal text, in our case the legal translator, must establish the link between the extralinguistic and extralegal world and the utterance of the legal expert. Often, nonexperts—including students in legal translation classes—discern the concrete, real-life situation only as a shadow behind the legal formulations.

3.2 Mental representation of legal lexis

Mental representation of legal terms and organization of declarative legal knowledge form part of the semantic memory (see Figure 3). Regarding the abstract legal lexis, on which level do we have to place concepts like *homicide*, *negligence*, or *offence* in the conceptual hierarchy presented in Figure 1? It seems obvious that most legal terms have to be located on a higher level than those presented in Anderson's hierarchy. The mental representation of such legal abstracts seems only possible by connecting them to concrete legal acts on lower levels of abstraction. Even a *rental contract*, as a concrete specimen of a *contract* in general, is located on a

higher level of abstraction than *bird* or *animal* and, thus, requires extensive and interrelated networks of verbally represented concepts and mental images, as well as scripts, in order to be comprehended in all its dimensions.

A special form of networks or agglomerations of legal knowledge has been described by Busse (1992; 1999; 2005), who calls them *juristische Wissensrahmen*—*frames of legal knowledge*. Busse defines these legal knowledge frames as structured complexes of concepts and intertextual relations relevant for comprehending a legal term (Busse 1992, 37). Hence, before translating a legal term or phraseologism, the translator must comprehend the extension and the intension of the term, as well as the function the term fulfills in the respective legal order (Wiesmann 2004, 40). The construction of the full meaning of a legal term, the constitution of an extensive frame of legal knowledge including both intertextual relations to—and likewise interrelated with—norm texts, jurisprudence, and academic writings, as well as (and primarily) relations to the concrete everyday reality, is one of the major obstacles of the (future) legal translator. In contrast, while the legal layperson defines terms on the basis of a common understanding, the lexical and textual comprehension of the legal expert is driven, firstly, by those structured frames of legal knowledge and, secondly, on a second and implicit level, by referring the legal context to the extralinguistic world.

Figure 5 illustrates this cognitive process of conceptual delineation between the common and the legal concept with the example of the lexical entry *murder*.⁶

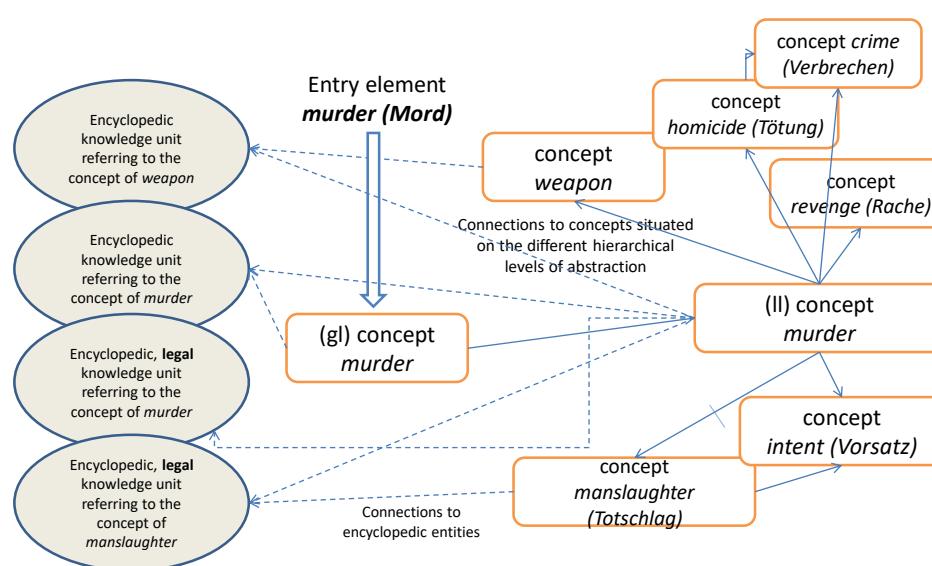


Figure 5. Cognitive representation of the abstract legal term *murder* (see Griebel 2013, 73; “gl”—general language; “ll”—legal language)

Processed by the legal layperson, the entry element *murder* will primarily activate the general concept of a murder. This concept may be also linked to scripts of known or prototypical scenarios for a murder. Nevertheless, during the reception and translation of a legal text, the reader must also recall the legal conceptualization of *murder*, itself connected to other

concepts and encyclopedic units of knowledge. At the same time, the concept is delineated to other, related legal concepts or facts, like *manslaughter*. Furthermore, broader legal knowledge frames englobing large agglomerations of intertextual knowledge about the interrelation between statutory texts, interpretation by courts, commentaries, and academic writings have to be activated. Ultimately, the expert reader is aware of the development of law, including the semantic modification of legal terms resulting from the development of law by jurisprudence and doctrine, as well as by social changes themselves (e.g., modifying the definition of legal and social institutions like *family*, *marriage*, etc.). In addition to that, the legal expert has the required procedural and metatextual knowledge to build these intertextual relations, to find the sources of law, and to bridge the gap between the abstract and the concrete (and vice versa). These stages of conceptualization and delineation have to be executed by the legal translator—to a lesser extent with regard to legal interpretation but to a greater extent regarding the rendering of the legal meaning in the target text.

4. Concluding remarks

This article has shown a different view on the difficulties of legal translation and on the individual cognitive processes involved in legal text

comprehension. With this aim, psycholinguistic models of memorization and mental organization of linguistic knowledge and speech (i.e., text comprehension) were presented in the first section. In the second section these general models were applied to the special issues of the institutionalized legal communication and, namely, to the cognitive challenges a translator has to face in order to understand an expert utterance in all its legal, legal-linguistic, and factual dimensions.

Most of the issues could only be outlined here. In particular, it hasn't been possible to take into account research on the bilingual mental lexicon (see, e.g., Kroll and Stewart 1994; Ameel et al. 2009) or on speech production processes, a substantial part of the translation process. Nevertheless, the cognitive-translational model set forth in this article can be applied to many other aspects of legal translation—as well as to comprehension processes in translation in general.

To conclude this article, I want to stress an important aspect of the translation-oriented comprehension process. Within legal communication, the translator plays a key role whenever expert communication crosses the border of one's own legal order. Furthermore, most legal texts are addressed to various recipients: They are read and applied by legal experts, and at the same time—and without losing their high specialization—they are read by legal laypersons who are subject to them. In most cases, except for international law, the source text to be translated is addressed to legal

experts and/or laypersons situated within the same legal order. For both groups of recipients, the purpose of the text can be performative or informative (Wiesmann 2004, 60). Thus, even before reading the text, the recipient will construct presuppositions about the underlying communication situation. This situational knowledge facilitates the understanding of the text. But, in which position is the reader-translator situated within the communication process? How does the reader-translator construct a mental model of the text situation (i.e., the communication situation)?

In contrast to the actual recipients of the source text and of the target text to be produced, the legal translator is situated at the periphery or even outside the initial communication situation. He doesn't read the text for his own use but, rather, for the needs of other communication participants (Reinart 2009, 495). That is, the reader-translator has to comprehend the text situation with regard to the legal frame as well as to the facts. In addition to his linguistic, legal-linguistic, legal, metatextual, and procedural knowledge, the translator needs to have metacognitive knowledge that allows him to be aware of and deal with his position at the periphery or outside the actual communication situation. And although this marginal position applies to all translators, the legal translator has to face major challenges. In view of the superposition of the institutional and the everyday reality in legal texts, the reader-translator must be able to place himself in the communication situation within a

foreign-source legal order and to discern the extralegal reality behind the text in order to render this two-level communication situation in the language of the target legal order. In a certain way, he must be able to tear the veil covering the foreign legal situation as well as the everyday reality that the legal layperson sees from afar behind a strongly institutionalized discourse.

Finally, taking into account the complex and multilayered knowledge of legal translators, the cognitive-translational approach proposes a new perspective on legal translator training. Over the last 15 years within the field of legal translation studies increasing emphasis has also been given to legal translation training. With the objective of developing and improving specialized translation training, taking into consideration the particular challenges of legal translation, different conceptual focuses have been set. The methodological and thematic propositions range from a holistic methodological approach to legal translation training, proposed by Prieto Ramos (2014c), to special focuses like the use of tools and resources (Wiesmann 2007), translating in multilingual legal orders (Dullion 2014), hermeneutic understanding in legal translation (Simonnæs 2012), and the combination of legal translation and comparative law (Dullion 2015; Engberg 2013), to mention just a few.

As teaching experience in legal translation training classes shows, very often students are not able to infer, from the text to be translated, the legal

and extralegal information explicitly or implicitly present in the text; to establish connections between the law case explicated in the expert utterance and the real world; or to memorize and activate knowledge in the (legal) languages and legal contexts involved. According to Cornu (2005, 209), for the nonexpert, the high degree of abstraction is one of the most visible and, at the same time, one of the most blinding features of legal discourse. In this regard, the theoretical model presented here should be considered as a supplementary approach to tackling the difficulties of legal translation learners from a cognitive perspective. It can contribute to the generation of new teaching concepts for legal translation training, focusing more on the frame of reference of the legal expert, who shifts his gaze back and forth between the institutionalized legal text and the everyday reality.

Notes

¹ In a very interesting approach, Engberg (2009b; 2012) discusses the relation between common or collective knowledge and meaning and individual construction of meaning from the perspective of (legal) linguistic semantics. In contrast, the theoretical model presented in this article is based on the assumption that a common meaning agreed upon at a collective level is a prerequisite for the construction of meaning on an individual level.

² See, e.g., Engelkamp and Rummer 1999; Rummer and Engelkamp 2006; Levelt 1998 (1989); or the dual coding theory (DCT) by Paivio (2007), assuming a system of interconnected *logogens* and *imagens*.

³ See Strohner (1990, 98) who criticizes the assumption of a separate lexicon with an atomistic architecture and proposes a larger conceptual network linking concept features to larger encyclopedic units.

⁴ In its basic structure, this hierarchy corresponds to the hierarchical classification of folk genera in E. Rosch's (1976) prototype theory, also consisting of three levels of prototypicality (see Kleiber 1998, 58).

⁵ The relevance of text models for the comprehension of legal texts is discussed in detail by Griebel (2013, 232–246).

⁶ This example is based on the discussion and the model by Griebel (2013, 72–74), illustrating the conceptualization of the legal term *Mord*, based on the German criminal law.

5. References

- Anderson, John R. 2007. *Kognitive Psychologie*. 6th ed. Berlin: Spektrum Akademischer Verlag.
- Ameel, Eef, Barbara Malt, Gert Storms, and Assche Fons Van. 2009. "Semantic convergence in the bilingual lexicon." In *Journal of Memory and Language* 60 (2): 270–90. doi:10.1016/j.jml.2008.10.001.
- Baddeley, Alan D., Michael W. Eysenck, Michael C. Anderson, and ó. Baddeley-Eysenck-Anderson. 2009. *Memory*. Reprint 2010. Hove: Psychology Press.
- Borja Albi, Anabel, and Fernando P. Ramos, eds. 2013. *Legal Translation in Context: Professional Issues and Prospects*. Vol. 4 of *New trends in translation studies*. New York: Peter Lang.
- Busse, Dietrich. 1992. *Recht als Text: Linguistische Untersuchungen zur Arbeit mit Sprache in einer gesellschaftlichen Institution*. Reihe germanistische Linguistik 131. Tübingen: Niemeyer.
- . 1999. "Die juristische Fachsprache als Institutionensprache am Beispiel von Gesetzen und ihrer Auslegung." In *Handbücher zur Sprach- und Kommunikationswissenschaft: Fachsprachen. Ein internationales Handbuch zur Fachsprachenforschung und Terminologiewissenschaft* (2. Halbband). Edited by Lothar Hoffmann, Hartwig Kalverkämper, and

- Herbert E. Wiegand. 1st ed., 1382–91 2. Halbband. s.l. Mouton de Gruyter.
- 2005. “Ist die Anwendung von Rechtstexten ein Fall von Kommunikation? Rechtslinguistische Überlegungen zur Institutionalität der Arbeit mit Texten im Recht.” In *Recht vermitteln: Strukturen, Formen und Medien der Kommunikation im Recht*. Vol. 3, edited by Kent D. Lerch, 23–54. Berlin: de Gruyter.
- Cornu, Gérard. 2005. *Linguistique juridique*. 3rd ed. Domat droit privé. Paris: Montchrestien.
- Dijk, Teun A. v., and Walter Kintsch. 1983. *Strategies of discourse comprehension*. San Diego: Academic Press.
- Dullion, Valérie. 2014. “Traduire les textes juridiques dans un contexte de plurilinguisme officiel: Quelle formation pour quelles compétences spécifiques ?” In *Meta* 59 (3): 636. doi:10.7202/1028661ar.
- 2015. “Droit comparé pour traducteurs: De la théorie à la didactique de la traduction juridique.” In *International Journal for the Semiotics of Law* 28, no. 1: 91–106. doi:10.1007/s11196-014-9360-2.
- Engberg, Jan. 2009a “Assessing the Dynamic Character of Legal Terms.” In *Fachsprache* 31, no. 3-4: 126–38.

- 2009b. “Individual Conceptual Structure and Legal Experts’ Efficient Communication.” In *International Journal for the Semiotics of Law* 22, no. 2: 223–43. doi:10.1007/s11196-009-9104-x.
- 2012. “Word Meaning and the Problem of a Globalized Legal Order.” In *The Oxford Handbook of Language and Law*, edited by Lawrence M. Solan and Peter M. Tiersma, 175–86. Oxford University Press.
<http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199572120.001.0001/oxfordhb-9780199572120-e-13>. Accessed November 09, 2015.
- 2013. “Comparative Law for Translation: The Key to Successful Mediation between Legal Systems”. In Borja Albi and Ramos, *Legal Translation in Context*, 9–25.
- Engelkamp, Johannes, and Ralf Rummer. 1999. “Die Architektur des mentalen Lexikons.” In *Sprachrezeption*, edited by Angela D. Friederici, Niels Birbaumer, and Carl F. Graumann, 155–201. Göttingen: Hogrefe Verl. für Psychologie.
- Gernsbacher, Morton A., and Mark Faust. 1991. “The Role of Suppression in Sentence Comprehension.” In *Understanding Word and Sentence*, edited by G. B. Simpson. 1. Aufl., 97–128. North-Holland. Elsevier textbooks.

- Griebel, Cornelia. 2013. *Rechtsübersetzung und Rechtswissen: Kognitionstranslatologische Überlegungen und empirische Untersuchung des Übersetzungsprozesses*. Forum für Fachsprachen-Forschung Bd. 110. Berlin: Frank & Timme.
- Johnson-Laird, Philip N. 1983. *Mental models: Towards a cognitive science of language, inference, and consciousness*. Cognitive science series 6. Cambridge: Cambridge Univ. Press.
- Kintsch, Walter, and Teun A. van Dijk. 1978. "Toward a Model of Text Comprehension and Production." *Psychological Review* 85, no. 5: 363–94.
- Kleiber, Georges. 1998. *Prototypensemantik: Eine Einführung*. 2., überarb. Aufl. Narr-Studienbücher. Tübingen: Narr.
- Kroll, Judith F., and Erika Stewart. 1994. "Category Interference in Translation and Picture Naming: Evidence for Asymmetric Connections between Bilingual Memory Representations. In " *Journal of Memory and Language* 33: 149–74.
- Levelt, Willem J. M. 1993. "Accessing words in speech production: Stages, processes and representations." In *Lexical access in speech production*, edited by Willem J. M. Levelt, 1–22. Cambridge, Mass.: Blackwell.
- 1998. *Speaking: From Intention to Articulation*. 1989. Reprint, Cambridge, Mass.: MIT Press.

- Paivio, Allan. 2007. *Mind and its evolution: A dual coding theoretical approach*. Mahwah, N.J. L. Erlbaum Associates.
- Pommer, Sieglinde. 2006. *Rechtsübersetzung und Rechtsvergleichung: Translatologische Fragen zur Interdisziplinarität*. Europäische Hochschulschriften Reihe 21, Linguistik 290. Frankfurt am Main: Lang.
- Prieto Ramos, Fernando. 2014a. "International and supranational law in translation: from multilingual lawmaking to adjudication." In *The Translator* 20, no. 3: 313–31. doi:10.1080/13556509.2014.904080.
- 2014b. "Legal Translation Studies as Interdiscipline: Scope and Evolution." *Meta* 59, no. 2: 260. doi:10.7202/1027475ar.
- 2014c. "Parameters for Problem-Solving in Legal Translation: Implications for Legal Lexicography and Institutional Terminology Management." In *The Ashgate Handbook of Legal Translation*, edited by Le Cheng, King K. Sin, and Anne Wagner, 121–34. Law, language and communication. Surrey, England: Ashgate Publishing Limited.
- Reinart, Sylvia. 2009. *Kulturspezifität in der Fachübersetzung: Die Bedeutung der Kulturkompetenz bei der Translation fachsprachlicher und fachbezogener Texte*. Forum für Fachsprachen-Forschung 88. Berlin: Frank & Timme.
- Rickheit, Gert, and Hans Strohner. 1999. "Textverarbeitung: Von der Proposition zur Situation." In *Sprachrezeption*, ed. by Friederici, A.,

- Birbaumer, N., and Graumann, C. F., 271–306. Göttingen: Hogrefe Verlag für Psychologie.
- Rickheit, Gert, Lorenz Sichelschmidt, and Hans Strohner. 2002. *Psycholinguistik: [die Wissenschaft vom sprachlichen Verhalten und Erleben]*. Stauffenburg Einführungen 7. Tübingen: Stauffenburg-Verlag.
- Rickheit, Gert, Sabine Weiss, and Hans-Jürgen Eikmeyer. 2010. *Kognitive Linguistik: Theorien, Modelle, Methoden*. 1. Aufl. UTB Sprachwissenschaft, Kognitionswissenschaft 3408. Tübingen: Francke.
- Rummer, Ralf, and Johannes Engelkamp. 2006. “Wortwissen und mentales Lexikon.” In *Handbuch der Allgemeinen Psychologie - Kognition*, edited by Joachim Funke and Peter A. Frensch. 1. Aufl., 592–600. Göttingen: Hogrefe.
- Sandrini, Peter, ed. 1999. *Übersetzen von Rechtstexten: Fachkommunikation im Spannungsfeld zwischen Rechtsordnung und Sprache*. Forum für Fachsprachen-Forschung 54. Tübingen: Narr.
- Sanford, Anthony, and Simon Garrod. 1998. “The Role of Scenario Mapping in Text Comprehension.” In *Discourse Processes* 26: 159–90.
- Šarčević, Susan. 1997. *New approach to legal translation*. TheHague: Kluwer Law Internat..

Schwarz-Friesel, Monika. 2008. *Einführung in die kognitive Linguistik*. 3., vollst. überarb. und erw. Aufl. UTB Sprachwissenschaft 1636. Tübingen: Francke.

Simonnæs, Ingrid. 2012. *Rechtskommunikation national und international im Spannungsfeld von Hermeneutik, Kognition und Pragmatik*. Forum für Fachsprachen-Forschung Bd. 103. Berlin: Frank & Timme.

Simonnæs, Ingrid. 2013. "Legal translation and 'traditional' comparative law – Similarities and differences." In *Linguistica Antverpiensia* 12: 147–60. <https://lans-tts.uantwerpen.be/index.php/LANS-TTS/article/view/230/219>. Accessed March 12, 2015.

Strohner, Hans. 1990. *Textverstehen: Kognitive und Kommunikative Grundlagen der Sprachverarbeitung /// Kognitive und kommunikative Grundlagen der Sprachverarbeitung*. Opladen: Westdt. Verl.

Wiesmann, Eva. 2004. *Rechtsübersetzung und Hilfsmittel zur Translation: Wissenschaftliche Grundlagen und computergestützte Umsetzung eines lexikographischen Konzepts*. Forum für Fachsprachen-Forschung 65. Tübingen: Narr.

———2007. "Didaktik der Rechtsübersetzung: Zur Aufbereitung, Vermittlung und Erarbeitung fachlichen Wissens und zum Umgang mit Hilfsmitteln." In *Italienisch-deutsche Studien zur fachlichen*

Kommunikation, edited by Dorothee Heller and Piergilio Taino. Deutsche
Sprachwissenschaft international Bd. 2. Frankfurt am Main: Lang.