TRANSLATION AND COGNITION: CASES OF ASYMMETRY. AN EDITORIAL

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Abstract
This editorial outlines the theoretical and methodological underpinnings of the current special issue, signalling some of the practical implications of the problems investigated. As the title of the collection highlights the convergence of "translation" and "cognition", emphasis is here first placed on what "cognitive" can be taken to stand for in translation-centred research. I then discuss the other identifying idea of the issue – that of asymmetry – i.e. the observation that conceptual-semantic content is variably partitioned as it gets coded in different languages. Special attention is paid to cross-linguistic conventionalisation misalignment which requires sensitisation to translation scenarios where the symmetry of the source and target structures is only illusory.

Keywords: asymmetric structuring of content, cognitive translation research, Cognitive Linguistics, translation process research

1. Which "cognitive" perspective?

The studies comprising this special issue could be uniformly referred to as "cognitive". But while such a characterisation is fairly safe, it might not be satisfactorily informative as what exactly "cognitive" is taken to mean is likely to remain underspecified, even if we narrow it down to translation inquiry. At the same time, the term is increasingly often used to categorise translation research, and possibly to postulate the emergence of an exciting subsection of Translation Studies.

For instance, in an article published in 2002 Kubiński talks about a "cognitive theory of translation". Hejwowski (2004) describes his theory of translation as "cognitive-communicative" while Halverson (2010) refers to "cognitive translation studies" and Muñoz Martín (2010) outlines what he calls "cognitive translatology". A volume edited by O'Brien (2011) is titled "Cognitive Explorations of Translation" and the author refers to "Cognitive Aspects of Translation" in the title of one of her papers (O'Brien 2015). In turn, Rojo and Ibarretxe-Antuñano (2013a) discuss "Cognitive Translation Theory" a fairly recent book centred on translation and interpreting co-edited by Schweiter and Ferreira (2015) brings up in the title "psycholinguistic and cognitive

inquiries". A question to be raised is about the degree to which what is meant by "cognitive" across the many uses and authors does in fact overlap. To try to answer the question we could use Risku's (2012) observation that the objective of "cognitive scientific approaches to translation" is to "understand and explain the workings of translators' minds". This sort of a broad formulation could likely serve as a common denominator of all the types of research that we could accommodate in the category of "cognitive" translation research. The difference between the different approaches would then be in how directly they are interested in the translator's mind, or what vantage point and research methods they select. In this introductory text I argue for two major ways of understanding "cognitive" in the context of translation investigations.

First, one common use of the term in the setting of Translation Studies, is to refer to the interest in the translator's cognitive function as manifested in process research (Hansen, 1999, 2003; Tirkkonen-Condit and Jääskeläinen, 2000; Alves, 2003; Mees, Alves and Göpferich, 2009; Alvstad, Hild, and Tiselius, 2011; Ehrensberger-Dow, Göpferich and O'Brien, 2015; Whyatt, 2016; Muñoz Martín, 2016). Process-oriented studies use a range of tools to produce accounts of the translator's cognitive operations based on data coming from think-aloud protocols, screencasting, key-logging, eye-tracking, galvanic skin response analysis, heart rate monitoring, EEG or pupillometry (cf. e.g. O'Brien, 2015). With the emphasis that process research lays on the method, the translator's cognitive processes can also be productively and systematically investigated by taking a product-oriented approach. In that case, the results of the translator's cognitive processes, the target text, is examined to isolate regularities indicative of cognitive patterning at the stage of target text production.

Second, a compatible if narrower sense in which translation research can be conceived of as "cognitive" would be when it draws on Cognitive Linguistics (CL) which might be defined as "a modern school[1] of linguistic thought and practice (…) investigating the relationship between human language, the mind and socio-physical experience (Evans, Zinken and Bergen, 2007: 2). It is important to keep in mind the premise of CL that "language is all about meaning" (Geeraerts, 2006: 3) which need not be a commitment held by "cognitive linguistics", i.e. approaches that generally see language as a mental phenomenon. In CL, then, meaning, can be described as "perspectival", "dynamic and flexible", "encyclopedic and non-autonomous" as well as "based on usage and experience" (Geeraerts, 2006: 4-6). To give a rough outline of what CL is particularly centred on, the following thematic foci can be enumerated (Geeraerts and Cuyckens, 2007: 4):

[1] For instance Evans and Green (2006: 3) point out CL can be thought of as a "movement" or an "enterprise" and Geeraerts and Cuyckens (2007: 4) see it as "a flexible framework" and "a cluster of many partially overlapping approaches rather than a single well-defined theory".

> "the structural characteristics of natural language categorization (such as prototypicality, systematic polysemy, cognitive models, mental imagery, and metaphor); the functional principles of linguistic organization (such as iconicity and naturalness); the conceptual interface between syntax and semantics (…); the experiential and pragmatic background of language-in-use; and the relationship between language and thought, including questions about relativism and conceptual universals."

The line of research that sees the convergence of CL and Translation Studies would therefore be about using constructs outlined in Cognitive Linguistics, and/or drawing on CL principles, to shed light on translation phenomena (cf. Tabakowska, 1993, Mandelblit, 1995, Ibarretxe-Antuñano, 2003, Hejwowski, 2004, Lewandowska-Tomaszczyk, 2010, Boas, 2013, Deckert, 2013, Samaniego Fernández, 2013, Rojo and Ibarretxe-Antuñano, 2013, Burmakova and Marugina, 2014, Massey, 2016). At the same time, one has to bear in mind that translation analyses cross-pollinate with contrastive analyses that fit into CL (e.g. Slobin et al., 2014) as findings of, for instance, typological nature will be a vast source of implications for translation.

Naturally, it is an unproductive oversimplification to argue that the two dimension of the notion "cognitive" are discreet and mutually exclusive. Rather, it is common for the two to dimensions of "cognitive" to be present in a single research paper on translation. Still, it is useful to keep the ambiguity of the very term in mind when describing and categorizing translation research. Interestingly, Muñoz Martín (2013) presupposes that it is not by default that "cognitive translatology" incorporates CL. This presupposition is also voiced in a summary of the volume edited by Rojo and Ibarretxe-Antuñano (2013), found on the publisher's website (https://www.degruyter.com/view/product/186336), where it is stated that "cognitive linguistics can expand further on cognitive translation studies".

2. Asymmetric structuring of conceptual content across languages

This collection of articles draws on the premise, featuring quite prominently in CL as discussed above, that languages structure conceptual content asymmetrically, or that language pairs display variable degrees of commensurabilty (Lakoff, 1987; Lewandowska-Tomaszczyk, 1987, 2010). As a result, interlingual translation involves "(re)calibration" aimed at optimisation of conceptual analogousness (cf. Lewandowska-Tomaszczyk, 2010: 22) where an expression in one language covers a different portion of conceptual-semantic material than in another language.

Cases of cross-language asymmetry are commonly encountered in translation. While some of such mismatches are prominent in specialised and terminology-laden contexts, mismatches are ample also in the most everyday communicative settings. One such case will be the forms of address as they

function in English and then languages like German or Polish. The notorious translation quandary, whether we talk about Audiovisual Translation, literary translation, or interpreting, is how to render the English form "you" (cf. Szarkowska, 2013). In languages such as English there is relatively high schematicity, and therefore interpretational leeway, while in Polish or German the translator might have to provide a more specific variant (one of the formal variants – "Mr.", "Mrs", "Mr. and Mrs" – or a more informal friendly variant) with all the interpersonal and social implications that the choice carries. Similarly, translation problems may occur with gender and its rendering from English to Polish. For instance, an English expression such as "I went" will be schematic in that respect compared to viable Polish renditions in which the speaker's sex will conventionally be coded.

Such cases of incompatibility surface on different levels of linguistic organisation (e.g. lexically, syntactically) and are diverse in character, ranging from coding of motion, quantification, temporality, or colour to the variable partitioning with respect to linguistic representation of evaluation or emotions. Vitally, as is demonstrated by the papers in this issue, asymmetric linguistic structuring of conceptual material can be investigated in various discursive contexts and against an array of cognitive linguistics constructs.

As far as motivation behind asymmetric structuring is concerned, the widely debated case of Eskimo words for "snow" (cf. e.g. Pullum, 1991; Krupnik, 2010), as originally postulated by Boas (1911), is used as a point of departure by Regier et al. (2016) to opine that there are in fact environmental factors that shape semantic categories and result in cross-linguistic misalignment between such categories. Regier et al. (2016) discuss findings that compellingly support the "effective communication" hypothesis where effectiveness is defined as the resultant of informativeness, precision and effort minimisation. In that vein, drawing on the tradition of modeling language structure the result of two-fold competition between pressures (Zipf, 1949; Givón, 1979; Piantadosi et al., 2012), Kirby et al. (2015) examine language structure as shaped by the competing forces of compressibility and expressivity that interact in the process of cultural evolution. For a language to be compressible is to strive for "optimisation of a repertoire of signals such that the energetic cost of unambiguously conveying any meaning is minimized" (Kirby et al., 2015: 88). Expressivity, in turn, is understood as the degree to which a language makes it possible for a user to "discriminate an intended referent from possible alternative referents in a context" (Kirby et al., 2015: 88).

2.1. The cases of "apparent symmetry"

It has to be noted that asymmetry is not merely about the presence of particular items or constructions in one language and their absence in another. It is also critically about their status. A noteworthy type of scenario is where both the languages have what appears to be analogous elements to be used by the

translator but they are not genuine analogues because, for instance, they differently function in the source and target networks of associations.

One of the parameters that have to be considered when gauging the analogousness of a candidate target variant against the source text and which rather holistically accounts for the diverse types of cross-language (in)compatibility is their degrees of conventionalisation. The construct can be broadly defined as the degree to which "specific expressions and abstracted schemas" (Langacker, 2009: 2) are established in a speech community, or – to be precise are recognised to be established (Langacker, 2007: 425). Conventionalisation is then differentiated from entrenchment, with the former being a property of a community and the latter being individualised, i.e. a matter of particular language users. The distinction is sustained in the model proposed by Schmid (2015) which integrates many avenues of linguistics research including Cognitive Linguistics (e.g. Langacker, 1988; Barlow and Kemmer, 2000), formulaicity (e.g. Wray, 2008), neurobiology of language (e.g. Pulvermüller, 2013) and sociolonguistics (e.g Eckert, 2000) to argue for a tripartite distinction between: usage, entrenchment and conventionalisation. An important premise behind the model is that it is over-reductive to see conventionalisation as mere distributed entrenchment for they are qualitatively different, the former being social and the latter being psychological, they deal with different types of entities and are influenced by different forces (Schmid, 2015: 10-11).

Entrenchment is about "routinization and schematization of associations" (Schmid, 2015: 11) while routinisation and schematisation can be defined as "cognitive and neural effects of the activation of repeated identical or at least similar patterns of associations". "Routinisation" is then taken to stand for the phenomenon of associations growing stronger and more automated while "schematization" consists in isolating the shared content across first-order associations to derive second-order associations (Schmid, 2015: 13). Conventionalisation, in turn, can be generally described as "continuous mutual coordination and matching of communicative knowledge and practices, subject to the exigencies of the entrenchment processes taking place in individual minds" (Schmid, 2015: 10) and can be more precisely characterised in terms of four distinct stages in which its degree grows: the initial "innovation", followed by "co-adaptation", "diffusion" and "normation".

3. Implications of cross-linguistic asymmetry

The question whether cases of misalignment found between languages point to cognitive misalignment between speakers of those languages notably links back at least to the Whorfian linguistic relativity hypothesis (1939/2000) and has remained subject to debate (Gentner and Goldin-Meadow, 2003) that can now be fuelled with methodologically-grounded claims from both supporters and

opponents (cf. e.g. Pinker, 1994; Casasanto, 2008). While it is not the aim of the current volume to take sides in the debate or to directly contribute to it, one line of argumentation merits mentioning with the leading theme of this special issue in mind. It is that if a language requires the user to code certain types of information – for instance on gender, aspect or agentivity – users of such a language differently allocate attention and might be more likely to remember those types of information or heed a particular aspect of the milieu, compared to users of a language that in analogous contexts does not prototypically code that information, codes it optionally, or codes it in a more coarse-grained manner (e.g. Fausey and Borodistky, 2010, 2011; Winaver et al., 2011; cf. Deutscher, 2010).

With translation in mind, sensitisation to asymmetry has to be an indispensable element of translator training. For example, instances of asymmetric cross-linguistic structuring have been showed to trigger automatic translation behavior (Deckert, 2016, forthcoming) as trainee translators tend to settle for unoptimal target variants dictated by System 1 processing (cf. e.g. Frankish and Evans, 2009; Kahneman, 2011). With cross-linguistic non-alignment, there exist conventionalised interlingual mappings (Deckert 2015) as a result of which one of the available TT variants potentially corresponding to a ST item is automatically favoured – for instance a ST element like "the professor" being reflexively translated as a male professional if the target language requires the information about gender that the source language does not express. In addition to highlighting the potential that cases of asymmetry have to affect translation quality, this shows that employing specimens of interlingual mismatches in translation tasks could uncover socio-culturally embedded stereotypes, as elicited from translators.

4. The current issue: final remarks

The collection is made up of five papers that use a range of methods to examine facets of interlingual asymmetry and shed light on meaning-making in translation. The authors converge in the sense that they all rely on notions developed in CL, as I have attempted to briefly sketch out above. The contribution by Barbara Lewandowska-Tomaszczyk (State University of Applied Sciences in Konin) titled "Partial perception and approximate understanding" discusses a range of pertinent explanatory constructs such as vagueness and resemblance and uses corpus data to provide a comprehensive account of meaning approximation in intralingual and interlingual communication. The paper by Natalia Levshina (Leipzig University) – "A multivariate study of T/V forms in European languages based on a parallel corpus of film subtitles" – employs the technique of conditional inference trees looking into patterns of variation across 10 languages as represented in audiovisual translation samples. The two papers that follow focus on metaphor.

Gary Massey and Maureen Ehrensberger-Dow (Zurich University of Applied Sciences) in the article "Translating conceptual metaphor: the processes of managing interlingual asymmetry" integrate data from product as well as process research to investigate the mechanisms involved in translating complex metaphor and point to patterns that, among others, hold implications for translator training. Metaphor is then zoomed in on by Mario Brdar (University of Osijek) and Rita Brdar-Szabó (Eötvös Loránd University). In their paper "Moving-time and moving-ego metaphors from a translational and a contrastive-linguistic perspective" they analyse two salient types of temporal conceptualisation, the relevant frequency and naturalness asymmetries as well as reasons behind those. In the final paper, "Aiming for cognitive equivalence – mental models as a *tertium comparationis* for translation and empirical semantics", Pawel Sickinger (University of Bonn) links the discussion back to the opening contribution. Here the author proposes a critically revised model of equivalence – one that is conceptually grounded and empirically testable.

The authors explore variable cases of cross-linguistic mismatches and they opt for what we could metaphorically, in CL nomenclature, call different levels of "resolution" or "granularity" in approaching this vast research plane. By showing how patterns of interlingual non-alignment are consequential for the translator's decision-making and the receptor's meaning-construction, the collection of papers informs equivalence frameworks, models of translation strategies, techniques and shifts as well as translation quality assessment, and translation competence, to mention a few. It should be emphasised that in addition to contributing to the body of research in linguistics, translation, and cognitive science in broad terms, the implications of the presented studies are expected to be directly applicable in translator training and, finally, to benefit translators themselves.

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