

On Translatability of an Intensional Function within Computer-Assisted Literary Translation

Tereza Šplíchalová
Masaryk University, Brno, Czechia

Abstract. This paper discusses literary translation against the backdrop of digital humanities and explores the applicability of a computer-assisted approach to detection, re-creation, and translatability of an intensional function. Using Sketch Engine as the main tool, a single-novel parallel corpus is set up, containing an English novel and its Czech translation, and a series of computations is performed so as to reveal potentially useful narratological and linguistic data. The results are interpreted through the lens of fictional worlds theories, arguing that with the intention of successfully rendering a fictional world available to readers of another language, its intensional structure needs to be considered in the process of translation. Accordingly, this paper uses the proposed corpus-aided model to detail the distribution of a naming function in both, the source and target text, and suggests what adjustments might have been made in order to preserve the intensional trace.

Keywords: *computer-assisted literary translation, single-novel corpus, fictional worlds theories, intensional structure, the naming function*

1. Introduction

First and foremost, it should be noted that while this paper indeed proceeds from a multi-faceted theoretical background anchored in many established disciplines, it does not aim to encompass them in their entirety. The main objective of this paper is to introduce an interdisciplinary approach to the translation of fictional worlds, or, more precisely, to the translation of their intensional structures. The idea of bringing together translation studies and narratology is not, by any means, meant to be presented as revolutionary, since many have already explored this area from various viewpoints (e.g., Boase-Beier, 2020; Hermans, 1996; Slater, 2011), but rather as a matter that deserves some further attention. From the vast array of narratological concepts and frameworks that might be of interest to translation scholars, this paper focuses solely on fictional worlds theories, a framework that has already been discussed within the context of translation studies (Kamenická, 2007; Lojonen, 2009), but remains relatively under-researched. Interestingly, those who have already ventured into this cross-disciplinary area oftentimes proceed from the same theoretical basis and build upon the notions of fictional semantics formulated by Lubomír Doležel (1998). This paper, too, follows the same train of thought and investigates the translatability of Doležel's intensional functions.

Methodology-wise, this paper makes use of tools and techniques that have emerged as literary translation has begun to accommodate computer-assisted workflows. Overall, the translation industry has undoubtedly been revolutionised by digitalisation, but literary translation remains relatively unaffected by this

development, standing its ground as a bastion of minimal technological involvement. Within academia, this has not passed unnoticed, and studies focused on different facets of this phenomenon are increasing in number (Rothwell & Svoboda, 2019; Youdale, 2019; Kenny & Winters, 2020; Kolb, 2021), collectively asserting that while machines might not take over just yet, literary translation is expected to make greater use of computer assistance in near future. The same consensus was reached at the first conference dedicated to Computer-Assisted Literary Translation, held in Swansea, UK, in May 2021, where the contributors introduced many ways of successfully integrating technology within literary translation processes, ranging from MT systems, CAT platforms or corpus-aided models. This paper joins the ranks of the latter and proposes a corpus-aided model intended to explore the intensional structure of a single novel and its translation. The premise is that effective data management and/or visualisation can be instrumental in revealing information that would otherwise be unperceivable to the naked eye, and can thus provide a literary translator with useful narratological and stylistic data. Due to its short scope, this paper narrows its focus down to one intensional function only, the naming function, and does not aim to provide a comprehensive stylistic analysis. The main objective is to demonstrate the usability of the proposed model and put forward the idea that fictional worlds theories can have a rightful place in literary translation studies.

2. Theoretical background

Nowadays, fictional worlds theories represent a synthesis of key concepts and frameworks developed by literary theorists such as Marie-Laure Ryan, Ruth Ronen, Umberto Eco, Thomas Pavel and Lubomír Doležel. The theories themselves are rooted in possible worlds theory and loosely inspired by late 20th century philosophers and logicians (Ryan, 2012). The shared foundation, however, does not warrant for the unanimity of thought and the way key concepts are adapted differs from author to author. Hence, it needs to be clarified that this paper makes use of the foundations laid by Lubomír Doležel, who approaches the entire framework as a theoretical tool for the investigation of literature. One of his most significant contributions to the fictional worlds theories is the division between extensional and intensional structures of fictional worlds (SemiotiX, par. 13). It is based on a seemingly simple idea that fictional worlds, being purely semantic entities, consist of extensional and intensional structures, forming a two-fold structure not dissimilar to Gottlob Frege's *sense* and *reference*. The extensional structure refers to the semantic elements that are explicitly or implicitly given and can be, since they are not tied to the exact wording of the world-constructing text, subjected to paraphrase, and transferred into extensional representations (Doležel, 1998, pp. 138-9). In comparison, the intensional structure is far more elusive. It is connected to the texture of a text—the very form of expression—and is unfit to absorb any potential changes, retellings, or interpretations (Doležel, 1998, p. 138).

Before discussing how this conceptual framework translates into translation studies, a note needs to be made on the account of a translator's motivation: This paper operates on the author-oriented end of the continuum and presumes that

the goal of a translator is to re-create a fictional world in its utmost fidelity to the original, be it to the detriment of the translator's visibility. In the aftermath, it means that both, extensional and intensional structure, should be transferred in the process of translation. Extensional representations seem to be solvable on word-level and can, for instance, pose a challenge if an occasional need to accommodate a culture-specific item arises. As for the intensional structure, the "insurmountable heuristic obstacle" (1998, p. 138), Doležel proposes to surmount it using intensional functions, governing "the global morphology of texture, its formative principles [and] stylistic regularities" (p. 139). An intensional function thus represents "a global regularity of texture that affects the structuring of fictional worlds" (1998, p. 139); after all, it is at the level of intension where aesthetically effective meaning is achieved (1998, p. 139).

Out of the three intensional functions Doležel himself identified, the naming function appears to have the most straight-forward impact on literary translation. It displays regularity by implementing different means of singular reference, such as proper names or definite descriptions, while the former carries zero intension and the intension of the latter varies depending on the particular verbal form (Doležel, 1998, p. 140). The proposed relevance to translation goals is fairly unadorned: If there is a stylistic regularity operating within the source text (ST), the world-creating target text (TT) should aim to re-create said regularity or operationalize some other stylistic means in order to communicate the aesthetic meaning formerly present in ST. In case of a fully operational naming function, TT would be expected to follow the distribution of singular references and introduce a 'symmetric' system to be employed in the target language. Nonetheless, I acknowledge that the feasibility of said proposition is largely dependent on available linguistic means and particularities of specific language pairs, and will thus move on from vague generalisations to a specific circumstance. Hence, the language pair utilised in this paper is English (ST) and Czech (TT). Despite the predominantly analytical nature of the English language paired with Czech, a language of a predominantly synthetic nature, the realisation of the above-mentioned proposition and its implementation in the process of translation shall not be thwarted. The naming conventions are similar enough to accommodate for various means of reference and the differences in the expression of a subject, such as the frequent occurrence of verbal subjectless sentences in Czech, for instance, can be compensated for.

3. Corpus and methodology

The cornerstone of the proposed model is the intention to treat a narrative text as a small-scale corpus, thus allowing to run a series of computations to extrapolate potentially useful data. If combined with qualitative methods, such as semantic analysis and close reading, this set-up can be instrumental in identifying regularities that might be carrying intensional meaning. The usability of a single-novel corpus has already been argued for (Youdale, 2019), showing that the integration of a reliable text-processing tool in the translation process has the capacity to enhance the translator's competence. By looking into an already

published translation, the direct effect on translators' competence cannot be taken into account and is thus approached as a what-if scenario.

The narrative text used to create the single-novel corpus is Cormac McCarthy's *The Road* (2006) and its Czech translation *Cesta* (2008). Having both copies obtained in an e-version, the texts were then manually pre-processed and both textual files, the full-text ST and the full-text TT, stripped of any additional typographical characters (such as hyphens used for splitting words at the end of the line). The texts were then aligned, using an aligner by Wordfast PlusTools, and loaded into Sketch Engine, making use of an automatic POS tagging and automatic lemmatisation and tokenisation, resulting in a searchable parallel corpus of 58,721 ST words and 55,535 TT words. A sequence of computations was then performed, using the n-gram tool as a locator to pinpoint general areas of interest and a series of frequency wordlists to obtain comparable data. After this general survey, individual definite descriptions for the two main fictional entities were derived ("man", "father", "papa" for Entity 1 and "boy", "child", "son" for Entity 2) and their behaviour explored with the aid of the integrated word sketch tool. This yielded some insight into the distribution of the naming function, limited to the two fictional entities in ST, which was then compared to its Czech counterpart. To facilitate comprehension, the results are interpreted with the aid of componential analysis and the illustrative TT excerpts supplied with interlinear glosses.

4. Results

The initial corpus-survey confirmed that the ST naming function is fully operative. In general, a regularity can occur when an author assigns a number of singular references consistently, provided the individual references carry linguistic meaning that is, at least at the lexical level, perceivably stratified. By default, the conceptual meaning of these definite descriptions, or lexemes, is represented by a set of nearly identical distinctive features, as the lexemes refer to the same fictional entity. Thus, the stratification happens at the level of associative meaning. For instance, the operators for the lexemes used to refer to the two main characters of *The Road*, not having any proper names assigned, would be [human], [adult] and [male]. The binary notation would look as follows:

Entity 1	}	<i>man</i>	>	[+ human]	[+ adult]	[+ male]
		<i>father</i>	>	[+ human]	[+ adult]	[+ male]
		<i>papa</i>	>	[+ human]	[+ adult]	[+ male]
Entity 2	}	<i>boy</i>	>	[+ human]	[- adult]	[+ male]
		<i>son</i>	>	[+ human]	[± adult]	[+ male]
		<i>child</i>	>	[+ human]	[- adult]	[± male]

All lexemes share the feature [+ human] and, save for “child”, the feature [+ male]. The neutral values of [\pm adult] and [\pm male], i.e., for “son” and “child” respectively, do not eliminate the positive value, meaning the conceptual meaning of the three lexemes referring to Entity 2 is still nearly identical. However, the neutral feature [\pm male] for “child” turned out to be quite troublesome. One way to justify its significance within ST and the call for its preservation in TT is to refer to yet another concept introduced by Doležel, the so-called *fictional encyclopaedia*. In essence, the fictional encyclopaedia represents “knowledge about a possible world constructed by a fictional text” (Doležel, 1998, p. 177) that provides the reader with just enough information that they need at a given time. As the reader proceeds with reading, they adjust or discard fictional facts that might have been refuted by a newly discovered piece of information. The resulting structure functions as a notional map the reader receives and uses to reconstruct the meaning of the fictional text. Should these fictional facts be re-arranged or changed in translation, the intensional mapping of the TT fictional world would change as well. Provided one wishes to keep the intensional structure as intact as possible, this phenomenon of ‘revealing a potential secret earlier than intended’ is highly undesirable, but not uncommon. In many cases, the translators find themselves in a peculiar position that requires complementary (re)constructions of a given text – after all, a translator acts as both, the reader and the text-composer (Doležel, 1998, p. 177).

An interesting situation occurs when a translator cannot, or decides not to, distinguish between these two roles. Having already learnt all the fictional facts when processing ST, translators are, at one point, inevitably endowed with the complete knowledge of the fictional world and possess a fictional encyclopaedia in its entirety. An author-oriented translator would likely strive to discard what they have just learned so as to mediate the experience to their readers of another language, all without spoiling any surprises or crucial moments. However, the corpus-aided venture into the naming function shows that the same premise can be applied to much smaller, less ground-shattering instances. To illustrate, let’s start with the opening lines of *The Road*, where both fictional entities are first introduced into their fictional world:

ST: When he woke in the woods in the dark and the cold of the night he'd reach out to touch the **child** sleeping beside him.

TT: Probudil se v lese za noci, do tmy a zimy, a dotkl se **dítěte**, které spalo vedle něho. (and touched **the child**)

Both highlighted lexemes, the ST “child” and the TT “dítě”, carry the same conceptual meaning that operates with [+ human], [– adult] and [\pm male]. Consider, however, sentence 6:

ST: In the dream from which he'd wakened he had wandered in a cave where the **child** led him by the hand.

TT: Ve snu, z něhož se právě probudil, byl v jeskyni, do které ho **chlapec** zavedl za ruku. [where **the boy** led him by the hand]

In TT, the operator [\pm male] changes to [+ male] and reveals the gender of the child sooner than intended. Sentence 6 belongs to the introductory paragraph, where the ST Entity 2 appears only as a somewhat conceptual *child* in order to better accommodate for a featured dream sequence. In ST, the gender of the child is revealed later, in sentence 18, hence outside the introductory paragraph. By limiting the operant to [+ male] only, the translator misplaces a fictional fact and shows certain disregard for the emerging naming function, despite a relatively easy remedy.

Upon further analysis of the word sketch results, additional patterns came to light, indicating that the definite descriptions in ST might be assigned more diligently than expected. The results suggest that the choice of descriptions largely depends either on the syntactic frame and/or collocative meaning (Entity 1), or the level of investment bordering on the social/affective meaning (Entity 2). Entity 1 is referred to as “the man” in third-person narrative, both in agentive and patientive roles, provided the utterance does not emphasize his relation to Entity 2. In cases where it does, “father” is used, thus occurring only in possessive structures. The third descriptor, “Papa”, occurs in structures where Entity 1 finds himself in the role of an addressee and is addressed by Entity 2. See below:

man The man dropped to his elbows. // The man stopped. // The man looked up.

father He looked at **his** father. // **His** father was asleep. // Was that **your** father?

Papa What is it, Papa? // Can we help him, Papa? // I’m really cold, Papa.

As for Entity 2, the “boy/child/son” descriptions represent a scale with growing prominence of affective meaning. This fictional entity is referred to as “boy” in neutral and descriptive passages, “child” in passages highlighting vulnerability or relationship dynamics and “son” in the most tender moments:

boy The boy turned in the blankets. // The boy nodded.

child He **held** the child and after a while the child stopped **shivering**.
He crossed **half dragging** the child.
He lay in the leaves holding **the trembling** child.

son [He]...wrapped his son in a towel. [recollection of the moment his son was born]

I cant [sic] hold my son dead in my arms.

In most parts, the TT retains the stratification of descriptions for Entity 1 and—save for an occasional case of substitution—succeeds in recreating the intensional meaning. When it comes to Entity 2, however, the descriptions “dítě” [child] and “chlapec” [boy] are used interchangeably. Additionally, a fourth descriptor is introduced, “kluk”, to alternate, seemingly haphazardly, with “chlapec”. Even though the lexeme “kluk” corresponds to the desired [+ human], [- adult], [+ male] operators, its introduction disturbs the regularity of the naming function and thus changes the intension of the TT:

ST: Maybe he understood for the first time that to **the boy** he was himself an alien.

ST: When he got back **the boy** was still asleep.

TT: Možná mu vůbec poprvé došlo, že pro **kluka** je on sám jakýsi mimozemšťan. [the lad]

TT: Když se vrátil, **chlapec** ještě spal. [the boy]

To briefly summarise, there was an opportunity to introduce a tripartite system of definite descriptions corresponding to the one used in TT (i.e., “boy/child/son” x “chlapec/dítě/syn”), but the translator opted for a more varied system of interchangeable references. As a result, the naming function is not operational in TT and the intensional structure is not preserved.

5. Discussion

One of the main objectives of this paper was to discuss the translatability, or, more precisely, transferability of an intensional function. Due to the fairly straightforward nature of the naming function, one can conclude that in case of *The Road*, the translator could have made use of the available linguistic means and introduce the naming function in TT as well. The motivation to do so, however, resides in the assumption that one of the translational goals was to re-create a fictional world in its utmost fidelity, which is admittedly not the most commonly pursued goal in common practice. Further, I acknowledge that literary translation does not happen at the word level. To those familiar with the practices, hunting down individual instances of parts of speech and dismissing the free or semantic translation in favour of formal correspondence might seem as taking somewhat draconic measures designed to limit the very input, liberty, and style of a translator. These self-imposed restrictions are thus approached as desirable only within the bounds of discussing literary translation vis-à-vis fictional worlds theory. The conclusion that the intensional structure has been altered is by no means a comment on the quality of the translation or the performance of the

translator; given all the factors that can influence a translator's strategy, preserving the intensional structuring might not always be the priority.

As for the usability of the proposed model, the corpus-aided setup proved instrumental not only in identifying the potential areas of interest, but mainly in further exploration of individual instances. The word sketch tool provided a comprehensive overview of the linguistic behaviour of selected definite descriptions and illuminated the way the naming function is distributed. In the what-if scenario, presuming the translator were equipped with this tool and the accompanying knowledge, chances are the resulting product would bear the qualities of a better-informed translation. This does not necessarily put forward that the result would be an overall better translation, but alludes to its potential to be so. The computer-assisted model appears to have the capacity to provide the translator with potentially valuable narratological and linguistic data that can, in consequence, shape the way a translation is made. In spirit of finding one's place as a literary translator in a heavily digitalised industry, the ultimate decision what does or does not find its way into the final product should, at least for the foreseeable future, remain in the translators' hands. The takeaway is that computer-assisted models can prove useful in literary translation, and it does not have to be to the detriment of human translators.

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