Does Cognition Translate? Predictions, Plot, and World Literature

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Abstract: Comparative literature and cognitive literary studies both consider literature as a worldwide phenomenon. The move toward world literature in comparative literature made salient the issue of reading some texts in translation, and world literature turned its attention to whether texts are entirely translatable and how center and periphery in the “world republic of literature” are organized around languages that are predominantly translated (or translated into). This article proposes that cognitive literary studies and comparative literature could enter into conversation around the topic of language differences and translation. For cognitive literary studies, the approaches of predictive processing and embodied cognition have in recent years developed the conceptual means to include these differences in our discussions without falling back on the Sapir-Whorf hypothesis. Language shapes thought, but it does so in a flexible exchange between verbal markers and language-created contexts. The author models this exchange for literary texts by means of salient verbal markers that indicate plot events and outlines possible shared avenues of future research for cognitive literary studies and comparative literature along these lines. The examples discussed are the Finnish national epic *Kalevala*, its French and English translations, and the contemporary novel *Sankarit* by Johanna Sinisalo.

Keywords: translation, cognitive literary studies, predictive processing, plot, *Kalevala*, Johanna Sinisalo

Comparative literature and cognitive literary studies share a global perspective on literature. In the last decades, comparative literature has ventured beyond the European canon and into the system of world literature, where transnational streams of literary texts are investigated.

Cognitive literary studies sees in principle all of literature as its domain, since thoughts and emotions are features involved in texts from any language or country. While the global perspective of comparative literature has constantly grappled with whether and how texts can be translated, cognitive literary studies has stayed clear of the issue of language differences and drawn on a general, universal sense of “literature.” In establishing a point of connection between cognitive literary studies and comparative literature, I revisit the issue of language differences and translation. My particular interest here lies in how language-specific aspects of literature contribute to the abstraction of plot and how they travel in translation. From my discussion of

plot, I then develop a preliminary proposal for an approach to cognitive literary studies that is attentive to language differences and thus might enter into dialogue with comparative literature.

Universals, Translation, and World Literature

The Finnish epic *Kalevala*, collected by Elias Lönnrot in eastern Finland in the first half of the nineteenth century and published in 1835–36 (*Old Kalevala*) and in a revised version in 1849 (*New Kalevala*), easily makes the cut for Finland's contribution to world literature. It is perhaps the Finnish literary text that most readers outside of Finland know, ahead of classics like Aleksis Kivi's *Seven Brothers* (*Seitsemän veljestä*; 1870) and Väinö Linna's *Unknown Soldier* (*Tuntematon sotilas*; 1954) and contemporary favorites like works by Sofi Oksanen and Arto Paasilinna.¹ The stories around the culture hero Väinämöinen, the hunt for the magic mill Sampo, and the tragic fates of Aino, Lemminkäinen, and Kullervo have shaped Finnish national identity and have been translated in many different languages.

To my knowledge, cognitive literary studies have not yet analyzed *Kalevala* to any significant extent. Such studies could easily be imagined, though. Embodied approaches could make much of the implied and actual movements when Väinämöinen sings his rival Joukahainen into the ground; social cognition and theory of mind could address the different competitions throughout the poem, and cognitive stylistics could shed light on the ways in which songs and direct speech intersect. Patrick Colm Hogan (2011: 212) briefly mentions the song of Kullervo as an example of the sexual plot, that is, physical love without attachment, and then as an example of the revenge plot (228), when he discusses “narrative universals” and how they appear to emerge from emotional patterns.²

Both cognitive literary studies and comparative literature can make an argument about *Kalevala*, related to shared cognitive processes or the condition of having entered world

literature. An interesting link between these two lines of argument arises, however, when we consider the issue of translation.

Before Kullervo can become an example in Hogan's *Affective Narratology* (2011), *Kalevala* needs to gain sufficient prominence in the international world of letters for a translator to undertake the massive work of turning it into English, German, French, and so forth, and for a publisher to print and promote it. Pascale Casanova (2004, 2015) and Gisèle Sapiro (2010), taking a sociological perspective on world literature, underline that the question of who gets translated and who does not depends on the power relationships among different languages in the "republic of world literature" (Casanova 2004). In the mid-nineteenth century the stock of texts that might contribute to the national identity of peoples that were hitherto dominated by a colonial language (such as Swedish in Finland) was riding high, and this arguably increased the probability that *Kalevala* would get translated into languages of the center, gaining what Casanova calls *authorization* from the capital.³

Translators themselves also need to make a range of choices, for example, whether to keep the particular meter of *Kalevala* or to turn the entire oral poem into a prose narrative, and whether to translate particular Finnish terms or to let them stand in the Finnish. Consider the verses from Kullervo's death song, when the perspective shifts and the sword that Kullervo had been addressing suddenly responds:

Miekka mietti miehen mielen

Arvasi uron pakinan

Vastasi sanalla tuolla. (*Kalevala* 2015, 36:327–29)

This is translated in the Oxford World Classics edition of *Kalevala* as

The sword followed the man's drift

It guessed the fellow's chatter

And answered with this word. (Bosley 1989: 495)

The translator, Keith Bosley, chose to stay close to the convention that content from the first line of a verse is repeated with different words in the second line. However, he did not attempt to reproduce the initial rhyme in the first line (*miekka mietti miehen mielen*), even though Old English epics, like *Beowulf*, share this feature with *Kalevala*.

The French translator L. Léouzon Le Duc (1867: 367), on the other hand, chooses to present the passage in prose: “Le glaive pressentit le dessein de l’homme, il comprit la question du héros, et il lui répondit.” Even though the meter and rhyme are lost in the French, it is closer to the original in other respects. In the French, Kullervo is dubbed a *héros*, more like the Finnish *uros* (which refers to a rather manly and almost brutish protagonist), whereas the English *fellow* gets a lighter quality, especially when combined with *chatter*.

In comparative literature, a significant debate has arisen around languages and their importance as boundaries and conduits of literary text. David Damrosch (2009) argues that it is necessary to read in translation, since translations make a much greater variety of texts available to readers than such readers’ language capacities could feasibly allow. Translation makes literature as world literature available: “Read intelligently, an excellent translation can be seen as an expansive transformation of the original, a concrete manifestation of cultural exchange, and a new stage in a work’s life as it moves from its first home out into the world” (66). In particular, the French translation of *Kalevala* could be described along these lines.

There are, however, dissenting voices. In particular, Emily Apter (2013) stresses moments of untranslatability when concepts in one language apparently cannot be translated into another language without loss of accuracy, feel, and sharpness. We have already seen the

slippery semantic ground around *uros*, *héros*, and *fellow* in the *Kalevala* translations. Kullervo's epithet *sinisukka* is perhaps an even better example. The term literally translates to "bluestocking" but has no feminist meaning in the Finnish, where it refers to a "fine boy." The term itself cannot be translated literally into English, but that does not necessarily mean that it is untranslatable. Lawrence Venuti (2016) criticizes Apter and argues that, in practice, translators have an entire range of well-established strategies to deal with such problems. Indeed, as Apter herself also acknowledges, texts that are difficult to translate provoke frequent translation attempts. Language itself comes to feature in discussions of world literature through their "knowledge repertoires" (Saussy 2017) and through the recognition that some literary texts are already "born translated," either because authors translate their own writing or because they already write in order to be translated (Walkowitz 2015).

The different *Kalevalas* might offer an intriguing case study for world literature and the ways in which cultural capital moves from an early French translation that attempts to make *Kalevala* accessible, to a much later English translation in the Oxford World Classics series that attempts to maintain some feeling of reading a "prehistoric epic" (as the blurb has it) while nevertheless working toward semantic ease. The French translator Le Duc also produced novelistic works such as *L'Odyssée galante d'une princesse russe* (1879), and therefore might have chosen to present his *Kalevala* in a mode more similar to the tradition of adventure literature. Depending on which translation you use, Kullervo is conceived in rather different tones as a chattering *fellow* or a gallant *héros*, and arguably, this inflects how you understand the plot of his tale. While it is easy to make a case for the differences in tone, and for the respective assimilation and differentiation strategies of these *Kalevala* translations, how can we make such an analysis relevant for the encounter between world literature and cognitive literary study?

Predictions, Language, and Cognitive Literary Study

Even though many areas of cognitive literary studies, such as cognitive poetics and cognitive stylistics (Semino and Culpeper 2002; Stockwell 2002; Brône and Vandaele 2009), build on linguistics, attention to language differences is rare in the field. The models of linguistics that cognitive poetics and cognitive stylistics draw on, however, are not the only possible way to discuss language from a cognitive perspective. Recent moves in psychology have come to think of cognition as a predictive phenomenon. The approach, named *predictive processing*, proposes that perception, emotion, and thought unfold along a feedback loop between predictions and the ways in which we constantly revise them in our exchange with the environment.⁴

Language is a much-discussed example for these predictive processes (see Dehaene 2012). As we learn a language, we learn regularities and patterns that inform the preconscious and unvoiced predictions underlying later language use. When you read a sentence like this, you can predict, within a reasonable margin of error, the next couple of words that are likely to follow on the basis of the semantic and syntactic principles of English. The words *margin of* already make you predict, on grounds of semantics, that the next word is going to be *error* and, on grounds of syntax, a noun or noun phrase. If I were to write *within a reasonable margarine of error*, presenting you with a prediction error, you would need to decide whether you have a case of malapropism, an autocorrection gone wrong, or a regrettable lack of spelling skill on my part. Fluency in English in the predictive processing account would mean that you get your predictions about this language right, and the better you get at a foreign language, the more easily and effortlessly you predict the words likely to follow. What I have described here are general principles of language according to predictive processing. However, it should be readily

apparent that the predictive patterns for English do not transfer to Finnish; different languages require distinct knowledges of predictive patterns.

The predictive patterns related to different languages are not irrelevant variants, but as Gary Lupyan (2012a, 2012b) and Andy Clark (2008) argue, they also shape thought in different ways. The mind is understood to extend into the material, social, and linguistic environment. In the account of the extended mind, we think through the pen in our hand, with our partners in conversation, and, perhaps, through the very sentences we utter. Language is understood as a mode of scaffolding thought. Language points toward particular aspects of the world by giving words to objects, experiences, and concepts, and it thereby parses our perception of and communication about the world in particular ways. The traditional image is that language emerges from the rich soil of thought. The philosopher Clark (2008), however, suggests that it might be the case that language, like the floating roots of a mangrove tree, catches, shapes, and accumulates thought and thereby builds its own context. Thought and language become inextricably entwined. The linguist Lupyan (2012a, 2012b) argues for a theory of language-augmented thought. According to this model, words make real-world phenomena easier to perceive and to recall. It appears to be the case, for example, that verbal cues (such as the word *barking*) lead us to think of a concept faster than a nonverbal cue (such as the sound of a dog barking) (see Lupyan 2012b).

Lupyan and Clark then deploy predictive processing to further model thought augmentation through language. Words that we learn provide us, in the parlance of predictive processing, with top-down predictions regarding the things we perceive, experience, and think about. The verbal cue *barking* highlights a particular element, providing a verbal marker within the continuity of our auditory perception. Words thereby parse perception and lay fast tracks into

our conceptual knowledge. These top-down predictions that come from words are specific to different languages, of course.

In classical cognitive linguistics, words do not affect the working of other cognitive systems, such as perception, memory, and attention (for a much-cited statement, see Pinker 1994), and cognitive literary studies therefore was justified to consider them independently from language. The predictive-processing perspective I have outlined above changes this, because it conceives of a feedback loop between bottom-up perceptive stream and top-down predictions in verbal markers. When we speak, listen, or talk to ourselves, language creates an auditory environment. The perspective from predictive processing and the extended mind now proposes that language itself not only scaffolds thought but also creates an “artificial context” (Lupyan and Clark 2015: 282–83), a kind of conceptual environment to match the auditory. In this artificial context, words can direct our attention or affect our perception, and language can to some extent “program” the mind by manipulating sensory experience (Lupyan and Bergen 2016). Language, then, clearly interconnects with general and specific cognitive capacities.

Not only perception and attention but also emotion has been conceptually linked to language in this framework, and thereby another core point of interest for cognitive literary studies comes to be language connected and language specific. Lisa Feldman Barrett (2017) proposes that words invite the formation of emotion concepts and that these emotion concepts, by providing the kind of attention-guiding and perception-shaping predictions mentioned above, then enable us to understand inner bodily states in terms of meaningful emotions.⁵ She discusses several examples of emotion words from different languages that lead the speakers of these languages to categorize their bodily experience differently:

Emotion words are not about emotional facts in the world that are stored like static files in your brain. They reflect the varied emotional meanings you construct from mere physical signals in the world using your emotion knowledge. You acquired that knowledge, in part, from the collective knowledge contained in the brains of those who cared for you, talked to you, and helped to create your social world.

Emotions are not reactions *to* the world; they are your constructions *of* the world. (104)

Anil Seth (2014: 567) argues, on the same grounds, that based on the regularities we develop from predictions about our bodily states, an “embodied self” emerges, namely, the kind of bodily state “most likely to be you.”

Language-augmented thought stretches across the entire spectrum of cognitive and affective engagements. Let me illustrate with an example the relevance that this proposal from predictive processing has for matters of translation. Books about particular Nordic embodied selves are selling very well at the moment, in particular for Danish *hygge* (coziness). **{Au: provide translation, as you do for *sisu*?}** Finland has rather belatedly joined the publishing wave with books on *sisu* (a state of stubborn courage often hailed as a core Finnish personality trait) and *kalsarikänni* (Rantanen 2018). *Kalsarikännit* is the ritual of getting drunk in your underwear as you unwind in the evenings. *Kalsarit* are the underwear, and *känni* is the state of intoxication. Miska Rantanen (2018) translates this term in the singular as “pantsdrunk,” which works well enough for speakers of US English. However, when you put *kalsarikänni* in the plural, as is commonly the case, *kalsarikännit* evokes the fact that parties and occasions for going out are conventionally rendered in the plural in Finnish, as in *juhlat* (party, celebration). With *kalsarikännit* you ironically make it an occasion by yourself, a twist which would be hard to reproduce with the English translation. However, just through this explanation, your

conceptual repertoire has already been extended. If you then read the book on *kalsarikännit* or create such an occasion for yourself in Finland, you will develop a thick set of top-down predictions that relate to the word. A translator might let the Finnish word stand or use the English neologism *pantsdrunk*, and rely on the *realia* of the literary narrative (Leppihalme 2011), the culture-bound elements in a text, to allow readers to glean the predictions necessary to embed the word.

Translation studies prompts us to take the next step in this argument. Venuti (2016) points out that the relevant unit of translation is often not the individual word, which usually appears to be untranslatable, but the sentence, the paragraph, and sometimes the text itself. The perspective from predictive processing works along exactly this kind of trade-off between the individual word and the linguistic context of sentences and *realia* in which it is embedded. The Finnish word *kalsarikännit*, taken by itself, works as a verbal marker that lays a conceptual shortcut once you know it. In a longer prose text, a “larger unit of translation,” (Venuti 2016: 189) readers can glean the predictions that come with familiar words, or indeed, it might reconfigure these predictions.

The links between words and the predictions that they provide for our perception of and thinking about the world are not fixed. Indeed, throughout our lives we learn new words in our own languages and from other languages that expand and adjust our repertoires of concepts, even though our first languages themselves prefigure a certain range of predictions. The predictive processing perspective on language and thought therefore does not correspond to the Sapir-Whorf hypothesis (or, rather, its foreshortened interpretations). As Daniel Casasanto (2008) points out in “Who’s Afraid of the Big Bad Whorf?,” the claim that language shapes our thoughts (which is held in predictive processing) is not the same as the claim that we think in

language (which is usually imputed to be Whorf's stance). It seems quite likely that thought does not coincide with language, but this does not mean that language would not have an effect on the ways in which we think. Through the processes of parsing, attending, and categorizing, language can still impact thought. There is controversy around the extent to which language shapes thought; however, it appears that different languages and their conceptual systems can prime our attention in different ways.

The perspective I have outlined here does not lock speakers of a language in their own conceptual world, as would a strict version of linguistic relativity (such as the Sapir-Whorf hypothesis). It rather shows how language enables us to pay attention to different aspects of our experience and to conceptualize it. Arguably, language in literature also works along these lines, even though its emphasis, specificity, and room for ambiguity will differ from everyday language use. Indeed, we might think of literary texts as a “designed sensory flow” that constantly challenges and adjusts the top-down predictions we carry through our linguistic, cultural, and literary knowledge (see Kukkonen, 2020). What does such a perspective on language in cognitive approaches to literature mean for the issue of translation and world literature?

Kullervo's Knife and *Kalevala*'s Rhyme: On the Translatability of Plot

The plot of a literary narrative might appear a long way from concerns of translation and language. But what if we were to consider the possibility that predictive processing might depend on probabilistic predictions that resemble the predictions we make in understanding plots? Readers' predictions, as they arise from the words and the sentences, contribute to the large predictive links we call *plot*, while in turn, the plot markers (i.e., verbal cues indicating plot events) provide orientation for readers' inferences as the narrative progresses. The designed

sensory flow of the text, in other words, teaches readers how it should be read, and the predictions involved here have a language-specific dimension. Recall that Hogan describes Kullervo's tale on the one hand as a sexual plot (referring to Kullervo's sexual relationship with a woman he meets in the woods and who turns out to be his sister) and on the other hand as a revenge plot (referring to Kullervo's revenge on his uncle Untamo for killing his family, even as it turns out that they are alive and well). There is another way for looking at the plot of Kullervo's story, though. We can think of plot events as prediction errors, that is, unexpected events that lead readers to reconfigure their predictions for how the story will continue. The major plot events yield a trajectory of reconfigured predictions, that is, moments at which readers' emotional investments also change. For example, while Kullervo discovering that his family is still alive is a prediction error that makes a happy outcome more likely, the following prediction error that the woman he just slept with is in fact his sister makes a tragic outcome more likely (and, in fact, sets Kullervo on the path to suicide). The configuration of a plot in the model of predictive processing is a complex constellation of these epistemic (what is likely to happen) and emotional (what we want to happen) probabilities (see Kukkonen 2014).

Plot events are moments that change the predictions and probabilities in a narrative. They are not only salient in this respect but also often marked in the language of the narrative. In modern novels this may happen through shifts in focalization (see Kukkonen, 2020). In *Kalevala*, readers' attention is pointed toward plot events through particular verbal markers. For instance, it is striking how often blades are mentioned when major plot events occur. Kullervo decides to break his bondage to Ilmarinen when his father's knife breaks on the stone bread that Ilmarinen's wife had given him. When Kullervo finds out that the woman he just slept with is his sister, he cuts the links to his horses with a knife, and when he has killed his uncle Untamo, he

decides to take his own life, talking to his sword (the passage discussed earlier). The blade is clearly the focal point of Kullervo's emotional engagements, and it arguably signals plot events to readers. These are the moments when Kullervo snaps.

The blades amount to more than a traditional motif, however. Throughout reading the Kullervo cycle, readers learn to assign a particular conceptual and emotional relevance and meaning to the blades.⁶ It starts to prime readers' attention, prepares particular top-down predictions, and generally marks moments of highly emotional involvements. Just as I have introduced the word *kalsarikännit* to you earlier, so have you learned about the relevance of the blade in *Kalevala*, and so would you have learned about it easily and unobtrusively while reading the narrative itself. The blade plays a role in all three versions of *Kalevala* discussed. In Le Duc's (1867: 342) French prose version, Kullervo mentions the broken knife three times to Ilmarinen's wife: "Mon couteau s'est ébrèché contre la pierre, il s'est brisé contre le rocher, le couteau, seul héritage que j'ai reçu de mon père, le couteau qui appartenu à ma famille." In the Finnish, it is mentioned twice:

Ve'in veitseni kivehen,
Karahutin kalliohon
—Ainoan isoni veitsen,
Sukukuntani kuraksen. (*Kalevala* 2015, 33: 235-38)

In the English, we have again three mentions:

I took my knife to the stone
And upon the rock
Scrunched my matchless father's knife
My kinsfolk's dagger! (Bosley 1989: 465)

It is at this moment that Kullervo's relationship to his family is broken properly. The repetition ("father's knife" and "kinfolk's dagger") establishes the relevant parallelisms. The breaking of the family relationship happens to "Kullervo, son of Kalervo" because of a stone in his bread, but it is Kullervo himself who wields and breaks the knife. With the breaking of the knife, Kullervo thinks his family finally gone, even though he finds his father, Kalervo, and his mother and siblings alive in the next song of the poem.

The second appearance of the knife occurs at the moment when he realizes that he has ravished his sister and that a return to his family is impossible. The knife links the first episode to the second, and arguably, it allows readers to make sense of the connection between the two events by linking their changing probabilities (even though they will probably not articulate this) and moving seamlessly through a narrative that stretches across two very different plot prototypes in Hogan's account. The blades in Kullervo's story refer back to earlier moments that similarly work as plot events, and they arguably draw readers' attention to the changing relevance of the blade as the plot develops.

The fact that whenever Kullervo snaps there are blades involved is striking, but it does not presuppose that such central plot concepts necessarily refer to sharp and dangerous objects. Johanna Sinisalo ([2003] 2015) introduces a very different plot marker in the novel *Sankarit*, her version of *Kalevala*. In *Sankarit* the mythical heroes of *Kalevala* are reimagined in the present day through the personas of rock stars. Sinisalo assumes a basic familiarity of her readers with the characters and narrative of *Kalevala* (though, arguably, this does not exceed the familiarity of most Finns with *Kalevala*). The magic smith Seppo Ilmarinen is readily recognizable in the character Ile Aerosmith, Väinämöinen in Vesa Kuningas, and Joukahainen in his rival Joakim. *Sankarit*, like *Kalevala*, is patterned by the songs of the heroes. For the issue of plot, however, it

is the rhyme of *Kalevala* itself that serves as a marker. When in Sinisalo's *Sankarit* Kullervo's uncle Untamo destroys the family (by building a skiing resort on their land), the paragraph begins: "Kaivinkone kirnuu kuoppaa kiviseen maahan, se on kirkkaankeltainen kirppu Unnastunturin taivaaseen ulottuvan töyrään varjossa" (277; The digger churns holes into the stony ground, it is a bright yellow flea in the shadow of the banks of Unnastunturi hill that stretch into the sky).

In her prose narrative Sinisalo reproduces typical features of *Kalevala*, both the initial rhyme and the repetition of the first line in the second. The wife of Ilmarinen begins her contradictory relationship with Kullervo with the following line: "Tytti Pohjola-Ilmarinen katsoo Karelia [= Kullervo in *Sankarit*] ja hänen käsivarsiensa karvat pörhistyvät pystyyn, kurkuu kuivuu voimattomasta vihasta" (289; Ilmarinen's wife looks at Kullervo and the hairs on her arm stand on end, the throat dries from powerless rage). And when the passage begins where Kullervo realizes that he slept with his sister (and she commits suicide), Sinisalo writes: "[I]kkunalaudalla kasteessa näkyy paljaan jalan jättämä juova, ja jossakin yhdeksän kerrosta alempana, hämäryyden verhoamana, hämöttää harmaan ja valkoisen kirjavalla kivetyksellä epämääräisen muotoinen vääntynyt kuvio; se muistuttaa niitä outoja olentoja, joita Karel piirsi pienenä puotipaperit täyteen" (315-16; On the window sill in the dew the track of a naked foot could be seen, and there below, nine stories farther down and obscured by the gloom, an irregularly shaped and twisted figure is barely visible on the gray and white speckled pavement; it resembles the strange creatures that Kullervo drew all over the wrapping paper). Such instances of initial rhyme can be found elsewhere in Finnish prose, too, for example, in Aleksis Kivi's *Seven Brothers* (1870). But Sinisalo does not use it to create lyrical impressions. Throughout *Sankarit*, the narrator and the protagonists (we also find this in direct speech)

themselves signal plot events when the narrative approaches the model of *Kalevala* by reproducing the particular initial rhyme in the prose. We have here a stylistic device different from Kullervo's blade, which nevertheless marks plot events, their emotional involvements, and conceptual relevance.

With Kullervo's knife and Sinisalo's rhymes, the narratives create their own artificial contexts, as Lupyan and Clark (2015) would have it. The word or the stylistic device serves as a marker; they scaffold readers' pursuit of the plot as they make their way through the linguistic environment of these texts. The probability design of the text develops readers' understanding progressively. When the knife appears for the second time or when Sinisalo launches into *Kalevala* verse, readers learn that these linguistic features relate to plot events. Just like you got to know *kalsarikännit* from my explanations, so do readers of *Kalevala* and *Sankarit* learn about the conceptual structure of the plot from the artificial context of language that these literary texts build. We have to place a question mark after the notion that plots are universal and not relevant for translation if we start considering these texts from the point of view of predictive processing. Words or stylistic devices in the text mark the points at which plot events occur; they guide attention and facilitate between the concrete flow of the text and the abstraction of the plot configuration. If we start paying attention to these points of transfer between text and plot, we might well find plot markers that make plot a matter of translation, too.

Indeed, words in a foreign language draw attention to and might highlight related plot events even more strongly. Readers do not necessarily have to understand the words for them to work as plot markers, but there tend to be conceptual connections between plot markers and the plot that require such knowledge. If Kullervo snaps when his knife comes into play or if *Sankarit*'s plot aligns with *Kalevala* when the verse appears, plot markers arguably work more

effectively when readers know what they mean. Texts, however, do not leave readers alone with this task, and translators arguably can work with the artificial context of larger stretches of text when they need to translate plot. From this point of view, plots are not narrative universals but an important component of a cognitive approach that takes language differences into account.

A Cognitive Approach to World Literature through a Cognitive Approach to Translation

The way I seek to combine world literature and cognitive approaches goes through language difference and textual traditions rather than through narrative universals. The perspective from predictive processing will not lead to a certain number of plot prototypes that can be surveyed and compared; the number of potential markers of plot events (and the configurations that emerge from them) is as infinite as the number of potential narratives. What I propose is to draw attention to the moments when plots configure and when readers' emotional involvement is heightened to do particular conceptual work in translation (or not, depending on the decision of the translator). My own translations of Sinisalo's text elide the rhymes, but it is not inconceivable that a more gifted translator could retain them in the English.

The present article is only a preliminary proposal, for a number of reasons. First, a cognitive account of language differences has not yet been integrated in cognitive approaches to literature. Drawing on work in predictive processing, I have begun to sketch an alternative account where language differences really make a difference, but a lot of work remains to be done. Second, the relationship among predictions, prediction errors, and the plots of literary narratives needs to be developed in much more detail. Elsewhere I have worked toward a general account of such probability designs, the tensions between creating and breaking readers' expectations (Kukkonen, 2020). In this article, I have merely highlighted how plots can relate to

issues of translation. Third, cognitive translation studies has not been brought into contact with cognitive literary studies. It appears to me, though, that cognitive processes of translators, such as metacognition and uncertainty management, expert processes and bilingualism (which are a mainstay of discussion in cognitive translation studies; Shreve and Angelone 2010), could enter into an interesting dialogue with cognitive literary studies. Moreover, Sandra L. Halverson's (2003: 218) account of linguistic features that typically appear in translated texts and the "gravitational pull" of highly salient lexical and semantic structures in language could be discussed through predictive processing. In these final paragraphs, I attempt to outline what insights and impulses such a cognitive approach literary translation could provide for world literature.

Literature, Rebecca Walkowitz (2015) argues, is "born translated" because some writers are polyglot (her examples are the usual suspects: Coetzee, Beckett, etc.). One might extend Walkowitz's argument to literary language itself as born translated in the sense that the markers of plot events can refer to salient concepts and stylistic devices from other authors and other languages. In the case of Sinisalo, this translation happens across the historically different uses of Finnish as a literary language from Lönnrot's *Kalevala* in the nineteenth century to Sinisalo's novel in the twenty-first century.⁷ Plot markers could be a way to identify salient concepts imported by authors who themselves might not be polyglot.

More generally relevant, a cognitive literary translation studies would need to account for (1) strategies of domestication and alienation (rendering foreign), (2) concepts and contexts, and (3) the relationship between textual strategies and the power dynamics of the world republic of letters. Lawrence Venuti (1995) distinguishes between translational strategies of domestication and foreignization. The *Kalevala* translation in French would be an example where the Finnish

epic is familiarized for French readers in the second half of the nineteenth century. The *Kalevala* translation in English, in turn, would be an example where the text is made strange and its foreignness is foregrounded for the Oxford World Classics series. Such domestication and foreignization can unfold through all levels of the text. From the point of view of predictive processing, a cognitive translation studies could investigate whether the translation draws on familiar cultural patterns of prediction or introduces readers to new prediction patterns, and which expository modes are deployed. Are these new predictive patterns linked to particular concepts from other languages? Are they placed at prominent plot points, thus drawing the attention of readers to how they are engrained to the shape of the narrative? Or are they tied to the idiosyncratic speech of a character? Through these distinctions, a cognitive translation studies could arrive at an account of familiarized/foregrounded foreignness in the conceptual shape of the narrative versus familiarized/foregrounded foreignness that pertains to particular characters, while the narrator maintains a different stance.

Translational norms, that is, the regularities that pattern regimes and practices of translation, have been a center of debate in translation studies between culturally oriented and linguistically oriented approaches (see Vandaele, forthcoming). The French and English translations of *Kalevala* already indicate a profound difference of translational norms. Gideon Toury (1995) and Itamar Even-Zohar (1990) have done important work on translational norms through discussions of diverse textual features, but they have not explored the relevance of plot. It appears to me, however, that plot, especially because of its importance for the narrative's conceptualization, could contribute to the understanding of how translations develop their own norms.

The discussions around translatability can also be developed through the particular attention to plot markers I propose. The conceptual salience is arguably heightened when untranslated terms serve as plot markers. The question arises whether or not the translator then chooses to create an artificial context in the rest of the text that will make readers understand the relevant predictions connected to the untranslated word. For such cases, one could distinguish between embedded and isolated untranslatables. With embedded untranslatables the rest of the narrative proves some kind of explanatory context for the untranslated word; for isolated untranslatables it does not. Then, following Apter (2013), one could investigate whether embedded untranslatables defuse the disruptiveness or continue to function as a checkpoint of translation. Predictive processing and the account of plot markers could further contextualize these effects. Since plot events are conceptualized as prediction errors that revise readers' expectations, their integration into the rest of the narrative and its artificial context could smooth over the surprise of the prediction error and make the oddness of the untranslated word disappear, or it could emphasize the oddness and underline its salience.

Plot markers and the ways in which they are translated might also provide a way to talk about larger power distributions in the world republic of letters in relation to the dynamics within the texts themselves. Casanova (2004) mainly discusses statements about literature (manifestos, reflections, etc.), but it appears to me that her observations could also be applied to the prestige economy between plot markers, prominent elements of the text, and other aspects of narrative discourse. Taking into account the role that writers and translators play in the articulated field of globalized literature (see Sapiro 2010), we could ask, Are writers from the periphery of the literary field more likely to introduce plot markers that are very culturally specific words? And do writers that write to be translated opt for conceptually more unobtrusive plot markers, while

they might keep culturally specific modes of writing for the discourse of characters? Looking at the inverse direction of translation, will translators from central into peripheral languages keep culturally specific plot markers (given the prestige that might be linked to the source language)? Do these choices reveal explicit strategies of resistance and assimilation, and how do these relate to authors' and translators' self-understanding? And, finally, it would be interesting to investigate how plot markers feature in what Casanova (2015) calls *minor literature*: literature written in a language of the center that nevertheless subverts the values of the center. Are plot markers perhaps the knives that these authors stick into the back of mainstream language, thereby developing their particular mode of literariness?

Does cognition translate? I have approached this question through the issue of how different languages might shape thought differently and how these differences become salient for the study of plot. As I hope I have shown, predictive processing is a cognitive model that is well suited for the purpose. It allows for language differences to make a difference and also accommodates the ways in which literary texts both create and disrupt our expectations and norms. Along the avenues I have outlined above, cognitive literary studies could expand its repertoire and relevance and enter a new interdisciplinary exchange, this time with comparative literature and translation studies.

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Notes

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¹ I take a simple measure of canonicity here, as it is also deployed in Jäschke and Fischer 2016:

the number of different language entries a given text has in Wikipedia. *Kalevala* has entries in

sixty-six languages, *Seitsemän veljestä* in twelve languages, and *Tuntematon sotilas* in ten languages. Sofi Oksanen's 2008 novel *Puhdistus* (*Purge*) also has ten languages, and Arto Paasilinna's most referenced novel is *Jäniksen vuosi* (*The Year of the Hare*), published in 1975, with eleven languages.

² See Hogan's article in this issue for his account of how such narrative universals shape emplotment.

³ Casanova (2004) writes mainly about Paris as the capital of literary prestige and about how translation into French and acknowledgment in French literary circles gave authors "authorization" and "consecration" in the world republic of letters. The case of *Kalevala* is slightly different because it is not a text by an individual artist, cashing in on the artistic autonomy and literary prestige that comes with Parisian approval. However, the patterns appear to be similar. While *Kalevala* was not a success in Finland (the original print run of five hundred copies lasted for more than twelve years; see Karkama 2008: 145), it was relatively quickly translated into Swedish (1841/1864–68), German (1845 in parts), and French (1845/1867) and saw much interest in the European centers.

⁴ For an introduction, see Wiese and Metzinger 2017; for comprehensive treatments from different positions in philosophy of mind, see Hohwy 2013 and Clark 2015.

⁵ Casey Schoenberger's article in this issue highlights other aspects of Barrett's work, in particular her notion of the "body budget" as it applies to performance. For a discussion of the body budget in relation to the reading process, see Kukkonen, forthcoming.

⁶ As research in concepts shows, the learning of concepts is closely linked to emotions (see Ponari, Norbury, and Vigliocci 2017).

⁷ *Kalevala* was originally a set of oral epics collected by Lönnrot on his travels through eastern Finland, but Lönnrot transformed the the dialect-based oral poetry considerably, making it more “literary,” when getting the text ready for publication