# Norms, affect and evaluation in the reception of literary translations in multilingual online reading communities

Deriving cognitive-evaluative templates from big data

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This article uses the Digital Opinions on Translated Literature (DIOPTRA-L) corpus to study readers' perceptions of and responses to translation in a naturalistic setting, focusing on the normative constructs or cognitiveevaluative templates they use to conceptualise, evaluate and respond to translations. We answer two main questions: (1) How visible, or salient, is the fact of translation to readers reading a translated literary text, and are there differences in the degree and nature of this visibility for different languages and translation directions? (2) What are the main concepts, and emotional and evaluative parameters that readers use to describe translated literary texts, and are there differences in these concepts and parameters when considered by different translation directionalities and genres? We make use of computational methods, including collocational network analysis, keyword analysis, and sentiment analysis to extract information about the salience of translation, and the networks of emotive and evaluative language that are used around the concept of translation. This forms the basis of our proposals for particular cognitive-evaluative templates.

**Keywords:** translation norms, translation reception, affect, digital humanities, computational analysis, big data

#### 1. Introduction

The final quarter of the twentieth century witnessed a surge of interest in the functioning of translated texts in their contexts of both production and reception

(see Holmes et al 1978; Even-Zohar 1990; Toury 1995). At the time, much of the research centred on the role of translation in cultural systems, the complex role of norms in shaping translational choices, and the effects of such choices at different 'levels' in the recipient system (see Chesterman 1993, 1998). Norms, here, are seen as sociocognitive constructs – mental 'templates' that people acquire through socialisation, and which guide their conceptualisation and evaluation of, and response to, objects and events, and which influence their actions. In translation studies, normative constructs about what constitutes good translation are seen as a factor that shapes both translational choice-making and readers' responses to translation (see Chesterman 1993; Toury 1995; Schäffner 1998; Halverson & Kotze 2022). In the context of this article, focusing on literary translation, we view norms as 'cognitive-evaluative templates' that people rely on when interacting with translated literary texts, and which have conceptual, evaluative, and affective dimensions (see Robinson 2020).<sup>1</sup>

While systems-oriented approaches acknowledge the complex interplay between structure (or system) and agency (or individual), the early work on norms directed the attention primarily to the systemic level of analysis. Towards the turn of the millennium, the focus gradually shifted (or narrowed) to the agents that occupy a central position in the space of production and reception (e.g. publishers, translators, critics, academics) and their role in the consolidation and destabilisation of translation norms, or, framed differently, their role in shaping shared sociocognitive frameworks that are invoked in the conceptualisation and evaluation of translation (see, e.g. Simeoni 1995; Sela-Sheffy 2005; Meylaerts 2008; Milton & Bandia 2009; Yu & Xu 2016; Hu 2020). While studies like these have focused on a range of agents, both individual and institutional, and their roles in the material production, distribution, and critical reception of translated texts, a type of agent that has remained largely overlooked is the reader of the translated text. This is, as Chesterman (1998), Chan (2010), and Kruger & Kruger (2017) point out, a particularly striking lacuna, given the predominance of constructs relating to reader expectations and response in a range of theorisations of translation - constructs that are hampered by "untested assumptions about target audiences, acceptability, and the effects of particular translation strategies on readers" (Kruger & Kruger 2017, 71).

<sup>1.</sup> Robinson (2020) and Halverson & Kotze (2022) argue extensively in favour of rethinking norms as not only conceptual constructs, but fully embodied, embedded, enactive, extended and affective (4EA). Both these papers, however, consider the notion of norms from the perspective of the *translator's* choice-making; here we argue that the same embodied and affective dimensions of norms also hold for *readers* of translators.

Chesterman (1998) makes a distinction between the primary, secondary and tertiary effects of translation. Primary and secondary effects are located at the level of the individual (reflecting changes in cognitive and emotional states, and changes in behaviour, respectively); tertiary effects are located at the level of the society more broadly. While there has been some empirical work on translation reception focusing on primary and secondary effects (see Section 2), hardly any attempt has been made to explore how real readers' responses to translated texts both reflect the predominant expectation norms (or cognitive-evaluative templates) for translation in particular societies and cultural contexts, and, potentially, shape such norms. Yet theorisations of such social expectations about translation abound, often based on case studies, or reception studies of 'professional' readers (like reviewers). For example, Venuti (2008) argues that, within the Anglophone world (or formulated more broadly, in contexts where translation takes places from a minoritised to a majoritised language),<sup>2</sup> translation is shaped by readers' expectation that translation should assimilate itself fully to the linguistic and aesthetic norms of the recipient system, removing all traces of the foreign to seamlessly adjust itself to the normative demand for complete 'fluency' by the measures of the target language. Within this context, the success of a translation is measured by its invisibility: a good translation is one which is not perceived as a translation (Arrojo 1997).

The reason why theoretical proposals like the dominance of the fluency norm in English-language translation have hardly been investigated by drawing on data from real readers is, partially, the result of the relatively limited visibility and accessibility of individual reader responses, evaluations and reviews of translated literature. Real readers, themselves, are invisible in this sense. This raises both methodological difficulties, but this lack of visibility also to some degree limits the potential social impact of such norm articulations. The rise of new digital reading ecologies, however, has radically changed this, on both counts. Online reading communities, or social networking sites, like Goodreads, aggregate and make visible the views and responses of millions of readers from all over the world. This makes the methodological problems tractable (see further discussion in Section 2), but it also means that readers themselves have become much more visible. The quality of a translation is therefore no longer simply measured by judgments passed by specific agents in the field, those that exert authority in the literary field, but also by the readership that play a decisive role in the

<sup>2.</sup> We use the terms 'minoritised' and 'majoritised' to reflect the (variable) power differentials between languages that may obtain in translation. For example, Spanish may be seen as minoritised in translational exchange with English, but majoritised in translational exchange with Catalan or with indigenous languages in Latin America.

(economic) viability of literary products.<sup>3</sup> Goodreads reviews have been used as a rich source of big data to understand readers' backgrounds, motivations, networks, and the impact of books (see, e.g. Dimitrov et al 2015; Hajibayova 2019; Thelwall 2019; Walsh & Antoniak 2021). A handful of studies have also used it to study the responses of readers to literary translations (see, e.g., Liu & Baer 2017; Wang & Humblé 2020; Kotze & van Egdom 2021). Building on the pilot study of Kotze & van Egdom (2021), we have developed the DIOPTRA-L (Digital Opinions on Translated Literature) corpus, a corpus of Goodreads reviews of contemporary literary texts that have been translated from and into the following languages: Afrikaans, Dutch, English, French, German, Italian, Portuguese and Spanish. A variety of genres are represented, and the corpus is searchable by, for example, language pair, author, title and genre (see Section 3.1 for more detail; DIOPTRA-L can be accessed at ianalyzer.hum.uu.nl).

In this paper, we use the DIOPTRA-L corpus to study readers' perceptions of and responses to translation in a naturalistic setting, focusing on the normative constructs or cognitive-evaluative templates they use to conceptualise, evaluate and respond to translations. As already suggested above, the cognitive-evaluative template may be seen as the sociocognitive representation of a translational expectancy norm (see Halverson & Kotze 2022). Based on existing research, we proceed from the assumption that while some aspects of this cognitive-evaluative template will be shared among readers, the particular translation context, directionality, and genre will have an impact in shaping the cognitive-evaluative template. Translational norms are based on shared values and ideas about appropriate and inappropriate, 'good' and 'bad' translation, and are inextricably linked to, and emergent from, a particular context in which a translation is used. It would thus be inevitable that cognitive-evaluative templates differ on the basis of differences in social contexts: we would reasonably expect differences in templates for translation from minoritised to majoritised languages, and vice versa; or for translation between different languages. Likewise, the nature and value of different genres are construed in different ways (which furthermore also varies by context), and this genre variability will also influence cognitive-evaluative templates for translated texts of different genres. In other words, not only do people have different (normative) expectations of, say, a translated children's picturebook, a popular young adult novel and a literary novel, but these expectations will also be differently inflected by different contexts. We thus expect an interaction between translation

<sup>3.</sup> This is particularly evident in the fact that Goodreads (the largest social networking site focused on books and reading) is also a subsidiary of the mammoth Internet retailer Amazon. Goodreads was launched in 2007, and acquired by Amazon in 2013. By 2019 it had in the order of 90 million members.

pairs and directionality, and genre, in shaping cognitive-evaluative templates for translation.

We aim to answer two main questions:

- RQ1. How visible, or salient, is the fact of translation to readers reading a translated literary text, and are there differences in the degree and nature of this visibility when considered by different language pairs and directionality?
- RQ2. What are the main concepts, and emotional and evaluative parameters that readers use to describe translated literary texts, and are there differences in these concepts and parameters when considered by different translation directionalities and genres?

We make use of computational methods, including collocational network analysis, keyword analysis, and sentiment analysis to extract information about the salience of translation, and the networks of emotive and evaluative language that are used around the concept of translation. This forms the basis of our proposals for particular cognitive-evaluative templates. In Section 2, we provide a brief overview of existing research on the reception of translation, and highlight, particularly, the limitations of this work and the benefits that big data from sites like Goodreads offer. Section 3 focuses on the methodology of the study: the corpus composition, and the methods used to analyse the perceptibility of translation, and the concepts, emotions and evaluations it elicits from readers. Section 4 presents the analysis and discussion relating to RQ1, focusing on the frequency of mentions of translations and star ratings as a coarse-grained evaluative measure. Section 5 focuses on RQ2, and discusses in more detail the cognitiveevaluative templates used by readers as they write about translation in different language pairs and across different genres, as these may be derived from collocational analysis (Section 5.1), keyword analysis (Section 5.2) and sentiment analysis (Section 5.3). Section 6 summarises the findings and concludes the study by outlining further avenues of research.

#### 2. Related work: Reader reception and literary translation

Pym (2020, 453) points out that "[w]e know remarkably little about how readers construe translations". This limitation is not just an empirical one, but, as Kruger & Kruger (2017) and Pym (2020) argue, cuts to the heart of theorisations of translation. As already discussed in Section 1, many theoretical approaches rely on assumptions about the effects of translations on readers and societies; and the (socioculturally and ideologically conditioned) expectations that readers have of translation, often conceptualised from the theoretical framework of norms – yet

there is hardly any empirical investigation of such normative expectations or the frames that readers use when conceptualising and evaluating translations. In this section, we briefly outline existing empirical research on readers' reception of written (literary) translations.<sup>4</sup>

Over the last decades, eye tracking and other physical measures have become more prevalent as a tool for empirically testing cognitive effort in translation (Walker & Federici 2018). However, the focus has been on translator effort and choice-making; reader reception of translations is an overlooked subject within this area of exploration as well, with a few exceptions. Kruger (2013) uses eye tracking to investigate how the use of domesticating (i.e. adapting to the receiving culture) or foreignising (i.e. retaining source-culture references) strategies influence the reading behaviour, attitudes, and comprehension of child and adult readers of picturebooks translated from English to Afrikaans. Rojo et al (2014) focus on affective response in relation to translated metaphors, investigating the differences in emotional response (measured by heartrate) that literal and metaphorical translations of figurative language elicit in readers. Most recently, Walker (2021) has employed eye tracking to compare French and English readers' experience of literary style in the French original of Raymond Queneau's Zazie dans le métro (1959) and its English translation by Barbara Wright, Zazie in the Metro (1960), focusing on the notion of 'equivalent effect'. He attempts to investigate whether changes to the style of the text in translation influence the degree to which an equivalent effect on the reader can be obtained at the same points in the text.

Apart from these (quasi-) experimental approaches, survey and rating approaches have also been used to investigate readers' preferences for particular translation strategies or styles (and, indirectly, the norms that shape readers' expectations and evaluations of translation). For example, Puurtinen (1994) investigates how different translation styles in Finnish children's books (dynamic vs static style) influence the comprehension and subjective assessment of readers. Liang (2007) uses surveys to investigate whether readers have particular preferences regarding the use of foreignised or domesticated words in translations of the Harry Potter books in Taiwan, and shows that readers tend to have a preference for the latter.

Research like this identifies some of the primary and secondary effects of translations on readers, and, in some cases (as in Puurtinen 1994) there is also an

<sup>4.</sup> Our focus here is strictly on written and predominantly literary translation; as Kruger & Kruger (2017) point out, empirical research on the reception of audiovisual translation (e.g. subtitles) is much more extensive than research on written (and specifically literary) translation. In addition, we also do not discuss the tradition of literary reception studies more broadly; see Kruger & Kruger (2017) for an overview of the connection between this area of scholarship and translation studies.

explicit attempt to link this to the norms that readers 'bring to' the reading of a translated text, and by means of which they engage with it and evaluate it. However, it is limited by the largely decontextualised reading experiences involved (sentences or extracts), and the clearly 'manipulated' experimental or survey conditions. It also involves (particularly in the case of experimental research) small numbers of readers. All in all, the degree to which generalisations can be made from these types of research on reader responses in translation remains unclear.

Ethnographic (e.g. Tekgül 2019) approaches aim to address the concern of non-naturalistic reading conditions, by using situations in which readers naturally discuss the experience of reading (whole) books as a source of analysis, to understand the interplay between aesthetic and normative expectations of literary and specifically translated books. However, in this case, datasets are so small and context-specific that no generalisation can be attempted. The analysis of reader reviews from Goodreads, which we undertake in this article, can, to some degree, be seen as a 'scaling up' of the ecologically valid type of data on reader responses that might be gathered from book clubs; Goodreads is, in some respects, a massive online reading group. In using reader reviews from Goodreads for our analysis of reader perceptions of translated books, specifically, we draw on a developing tradition of analysing user-generated content for various purposes, more generally (see Henning-Thurau et al 2004; Hai-Jew 2017; Alt & Reinhold 2020), and for an understanding of literary text reception and the factors that impinge on it, more specifically. The use of user-generated content to investigate the reception of translation is slowly making inroads into translation studies; however, so far it has been used primarily to investigate readers' reponses to individual (re)translations, as in Liu & Baer (2017) and Wang & Humblé (2020), with computational 'big data' methods hardly having been used. In this paper, we scale up these approaches, both in content (by focusing on a large number of translated literary texts across a range of languages), and in method, by making use of a combination of collocational, keyword and sentiment analysis.

## 3. Methodology

In this section, we describe the methodology designed to answer RQ1 and RQ2.<sup>5</sup> Our ultimate aim is to triangulate and synthesise the findings from our analyses to inductively develop what we refer to as cognitive-evaluative templates. We define a cognitive-evaluative template as a particular configuration of parameters for con-

<sup>5.</sup> Scripts used for various analyses can be found at https://github.com/UUDigitalHumanitieslab/Reader-responses-to-translated-literature

ceptualisation and evaluation of a phenomenon, in our case 'translation', which can be derived from patterns identified by analysing the linguistic data of people's discussions of the phenomenon. A cognitive-evaluative template may thus be seen as the sociocognitive representation of a conglomerate of normative ideas about translation.

We outline the dataset used (Section 3.1), before setting out the analytical steps followed to answer each of the two research questions in turn (Section 3.2). Within Section 3.2 we pay attention specifically to the three methods in the triangulation process: collocational network analysis (Section 3.2.1), keyword analysis (Section 3.2.2) and sentiment analysis (Section 3.2.3).

#### 3.1 The DIOPTRA-L corpus

The reviews included in the DIOPTRA-L corpus<sup>6</sup> were extracted from Goodreads. We included only reviews that had running text (in other words, we excluded reviews with only a star rating), given that textual data are essential for all of the analyses of interest. The reviews are of 154 contemporary narrative texts, written for both children, young adults, and adults, that have been translated from and into Afrikaans, Dutch, English, French, German, Italian, Portuguese and Spanish (in other words, these languages are considered as both source and target languages; approximately 20 source texts in each language were selected).7 The selection of books was done by two of the members of the research team, who considered the typical patterns of literary exchange<sup>8</sup> in the languages involved, and aimed to make a representative selection on this basis. The expansion of the corpus is ongoing. The selection covers mostly fiction, contains both literary and popular fiction across various subgenres (romance, fantasy, historical, etc.), and books aimed at different age groups (adult, young adult and children's books). These classifications were carried out by the research team, based on available bibliographical data and book classification systems.

<sup>6.</sup> The corpus is accessible at https://doi.org/10.17026/dans-zv4-5phn

<sup>7.</sup> The list of texts included in the corpus can be found at ianalyzer.hum.uu.nl/search/goodreads.

<sup>8.</sup> In other words, the fact that patterns of literary exchange are not equal or symmetrical: volumes of translation not only vary by different language pairs, but also by directionalities, and the types of texts selected for translation differ along these parameters too. For detail, see Heilbron (1999), de Swaan (2001) and Venuti (2008).

At the time of writing, the full corpus consists of 278,883 reviews and 33,138,874 running words. Table 1 shows a breakdown of the languages in the corpus: the number of reviews and number of words written *about* source and target texts in the different languages, and the number of reviews and words written *in* the different languages. As is evident from this table, the majority of books were originally published in English or translated into English. Table 2 reflects the genre distributions in the corpus.

Table 1. Source, target and review languages in the DIOPTRA-L corpus

| Source language of being reviewed |               | U              | ook Target language of book<br>being reviewed |                | Review language |                |
|-----------------------------------|---------------|----------------|---|----------------|-----------------|----------------|
| Language                          | No of reviews | No of<br>words | No of reviews                                 | No of<br>words | No of reviews   | No of<br>words |
| Afrikaans                         | 3792          | 372,462        | 308   | 17,250         | -               | -              |
| Dutch                             | 15,389        | 1,747,744      | 7204  | 719,519        | 6137            | 643,133        |
| English                           | 120,319       | 14,819,780     | 202,400                                       | 24,838,629     | 208,966         | 25,161,132     |
| French                            | 32,180        | 3,668,032      | 10,691  | 1,011,172      | 6921            | 674,306        |
| German                            | 35,013        | 4,084,064      | 7136  | 834,671        | 5033            | 671,979        |
| Italian                           | 27,287        | 3,243,036      | 11,938  | 1,683,732      | 12,043          | 1,699,149      |
| Portuguese                        | 8543          | 1,159,178      | 7411  | 867,109        | 7281            | 874,856        |
| Spanish                           | 36,360        | 4,044,578      | 31,795  | 3,166,792      | 32,502          | 3,414,319      |

#### 3.2 Analytical steps

In general, we divide the corpus by whether the edition commented on by the reviewer was translated or published in its original language (T = Translated / O

<sup>9.</sup> Privacy considerations (and the fact that the API does not capture user IDs) mean that estimating the number of reviewers represented in the corpus (and gaining information about their background) is not straightforward. There are 117,170 unique reviewer usernames in the corpus, but some (common) names may be used by more than one person. Other information about users' background is not captured, though estimations of gender representation (using name dictionaries) suggest that the gender distribution is similar to that identified as typical of the Goodreads community in general: approximately three quarters of reviewers are women. See Thelwall & Kousha (2017) for discussion of (the difficulties of estimating) the characteristics of Goodreads users.

<sup>10.</sup> It is important to note that a review is not necessarily written in the language the book was published in.

| Table 2. ( | Genres reviewed | in the | e DIOPTRA-L corpus |
|------------|-----------------|--------|--------------------|
|            |                 |        |                    |

| Genre                           | No of reviews | No of words |
|---------------------------------|---------------|-------------|
| Folktales                       | 190           | 12,905      |
| Literary fiction                | 139,696       | 16,734,476  |
| Biographies                     | 6276          | 779,241     |
| Picturebook                     | 2191          | 156,890     |
| Popular fiction – general       | 25,848        | 3,183,876   |
| Popular fiction – crime/mystery | 18,574        | 2,103,653   |
| Popular fiction – fantasy       | 62,236        | 7,199,954   |
| Popular fiction – historical    | 23,872        | 2,967,879   |

= Original),<sup>11</sup> and whether translation was mentioned in the review or not (M = Mention of translation / N = No mention of translation). Table 3 provides a basic summary of the subsets of data created in this way.

Table 3. Basic subsets of data for analysis

|   | Review of original-language text (O) | Review of translated text (T)    |
|---|--------------------------------------|----------------------------------|
| Mention of translation in review (M)    | O/M-dataset<br>(1219 reviews)        | T/M-dataset<br>(8120 reviews)    |
| No mention of translation in review (N) | O/N-dataset<br>(133,725 reviews)     | T/N-dataset<br>(135,819 reviews) |

RQ1 focuses on the salience of translation, and whether translation is more 'visible' (commented on) in translations in particular translation directions. We also focus on the nature of this visibility: whether translation is conceptualised in predominantly positive or negative terms, as reflected in star ratings. We operationalise mentions of translation by using regular expressions to cover all verb, noun and adjective forms of the lemma TRANSLATE and its equivalents in Dutch (VERTALEN), French (TRADUIRE), German (ÜBERSETZEN), Italian (TRADUZIONE), Spanish (TRADUCIR), and Portuguese (TRADUZIR). While languages other than those selected for inclusion in the corpus itself are used in the reviews, our analysis focuses on reviews written in these languages – the most represented among

<sup>11.</sup> We realise that in some of the cases, readers pick an edition they did not necessarily read; however, this is a limitation of the dataset that, while it should be acknowledged, cannot be circumvented.

the review languages. We investigate how frequently translation is mentioned in these corpus subsets, and correlate this frequency of mentions of the lemma TRANSLATE<sup>12</sup> with (a) language pairs and translation directions and (b) the star ratings given by reviewers.

In this analysis, and all subsequent ones where we investigate the question of translation directionality, we group the T-dataset (in other words, reviews of translated books) into three groups: Reviews of translations from another language to English (henceforth nonE>E), translations from English to another language (henceforth E>nonE), and translations from one language to another where neither is English (henceforth nonE>nonE). Grouping the data in this way allows us to investigate, broadly, whether there are differences in cognitive-evaluative templates used in relation to translation related to the relative status of languages. Given the role of English as hyper-central (or indisputably globally majoritised language) (see Heilbron 1999; de Swaan 2001; Venuti 2008), our directionality groupings may therefore be taken to reflect three different translation patterns: minor to major, major to minor, and minor to minor.<sup>13</sup>

RQ2 focuses on identifying the main concepts, and emotional and evaluative parameters that readers use to describe translated literary texts, and determining whether there are differences in these concepts and parameters when considered by different translation directionalities and genres. In the second part of the analysis, we triangulate the results of three text-mining methods (collocational network analysis, keyword analysis, and sentiment analysis) to explore the degree to which these converge on the identification of cognitive-evaluative templates that readers use when they talk about translation – i.e., the degree to which these methods identify typical concepts and emotional and evaluative language that reflect the underlying sociocognitive norm constructs that inform readers' engagement with and evaluation of translated texts. Our interest is also in whether, as may be expected, these cognitive-evaluative templates are mediated by translation directionalities and genres. The ordering of these three computational analyses reflects a shift in focus from micro- to macro-, or from more fine-grained to more text-oriented.

**<sup>12.</sup>** References to the lemma TRANSLATE and similar therefore refer to the translation lemmas in all the languages, unless otherwise specified.

<sup>13.</sup> This is of course an overgeneralisation, and in all three subsets, finer distinctions could (and should) be drawn. Such detailed analysis, however, is complicated by the differences in the sizes of datasets, and imbalances in genre representations. The aggregation of translation directions in the way we propose here also solves this problem.

#### 3.2.1 Collocational network analysis

The collocational network analysis focuses only on book reviews that mention translation (i.e., where one of the pre-defined TRANSLATE keywords appear), and where the book being reviewed is a translation itself (the T/M-dataset; see Table 3); in other words, the focus is on the cognitive-evaluative templates in evidence when readers comment on translation when they have read a translated text. The collocational network analysis is based on 8120 reviews (just over 2 million words); more information about the distribution of these reviews across review languages, translation language pairs, and genres is provided in Table 4, and further detailed in Section 5.1.

As highlighted in Section 1 and 2, existing theorisation prompts us to anticipate that the language pairs and genres involved will influence the way in which readers conceptualise and evaluate translations. In order to investigate (a) what cognitive-evaluative templates readers use when they write about translations on Goodreads, and (b) whether the directionality of translation and genre influence these cognitive-evaluative templates, we model various sets of collocational networks for the concept of translation (as operationalised by the set of pre-defined TRANSLATE lemmas). The collocational networks are produced using the Graph-Coll function in LancsBox (Brezina et al 2020; see also Brezina et al 2015 on collocational networks), using a mutual information (MI) score<sup>14</sup> over 5.0 as measure of collocational strength, and a range of five words before and after the word expressing the concept of translation.

Table 4 shows the information about the subset of the corpus used for the collocational analysis, in terms of the relation between the languages in which reviews are written, and the target and source languages of the translated book being reviewed. As outlined above, we subset the data into three groups (nonE>E, E>nonE, and nonE>nonE). For the purposes of the analysis, the genre classification is simplified, and a distinction is made between two main genres: literary fiction, and popular texts. The latter category includes popular fiction (crime fiction, fantasy, historical fiction, etc.) for adult and young adult readers, as well as biographies, folktales and picturebooks.

<sup>14.</sup> The MI score expresses the extent to which the observed frequency of co-occurrence of two words differs from a baseline expectation. It thus measures the strength of association between two words, and is calculated on the basis of the number of times the two words were observed together in comparison to not. The decision on the cut-off value for the MI score was based on the informativity of results; more lenient cut-off scores often resulted in larger collocational networks, but such collocates were usually non-informative function words. The decision to retain function words in the collocational analysis was made since, in this method, function words are often informative of typical phrases that are used in talking about translation.

**Table 4.** Summary of dataset for collocational network analysis: The relation between review languages, genres, and translation source and target languages

|                    | Lite          | rary           | Popular       |                |                     |                      |
|--------------------|---------------|----------------|---------------|----------------|---------------------|----------------------|
| Review<br>language | No of reviews | No of<br>words | No of reviews | No of<br>words | Total no of reviews | Total no of<br>words |
| nonE>E             |               |                |               |                |                     |                      |
| Dutch              | 13            | 5305           | 4             | 733            | 17                  | 6038                 |
| English            | 4086          | 1,092,439      | 2675          | 579,040        | 6761                | 1,671,479            |
| French             | 6             | 3177           | 3             | 447            | 9                   | 3624                 |
| German             | 2             | 1408           | 2             | 162            | 4                   | 1570                 |
| Italian            | 6             | 949            | 2             | 341            | 8                   | 1290                 |
| Portuguese         | 11            | 2518           | 5             | 4610           | 16                  | 7128                 |
| Spanish            | 21            | 8874           | 6             | 1298           | 27                  | 10,172               |
| Total              | 4145          | 1,114,670      | 2697          | 586,631        | 6842                | 1,701,301            |
| E>nonE             |               |                |               |                |                     |                      |
| Dutch              | 11            | 3491           | 19            | 3519           | 30                  | 7010                 |
| English            | 10            | 1978           | 107           | 11,867         | 117                 | 13,845               |
| French             | 13            | 1877           | 27            | 6750           | 40                  | 8627                 |
| German             | 6             | 1864           | 17            | 4880           | 23                  | 6744                 |
| Italian            | 19            | 7644           | 74            | 21,940         | 93                  | 29,584               |
| Portuguese         | 12            | 4195           | 25            | 9226           | 37                  | 13,421               |
| Spanish            | 40            | 14,425         | 48            | 10,586         | 88                  | 25,011               |
| Total              | 111           | 35,474         | 317           | 68,768         | 428                 | 104,242              |
| nonE>nonE          |               |                |               |                |                     |                      |
| Dutch              | 109           | 44,919         | 44            | 12,607         | 153                 | 57,526               |
| English            | 112           | 27,634         | 50            | 10,600         | 162                 | 38,234               |
| French             | 24            | 3763           | 29            | 4778           | 53                  | 8541                 |
| German             | 19            | 5243           | 13            | 4428           | 32                  | 9671                 |
| Italian            | 92            | 33,199         | 65            | 20,203         | 157                 | 53,402               |
| Portuguese         | 81            | 32,020         | 38            | 13,541         | 119                 | 45,561               |
| Spanish            | 139           | 42,220         | 35            | 12,296         | 174                 | 54,516               |
| Total              | 576           | 188,998        | 274           | 78,453         | 850                 | 267,451              |
| TOTAL              | 4832          | 1,339,142      | 3288          | 733,852        | 8120                | 2,072,994            |

As is evident from Table 4, by far the largest part of the T/M-subcorpus consists of reviews for books translated from other languages into English (84% of all reviews), with reviews for books translated from English into other languages making up the smallest component (5% of all reviews). Reviews of books between languages other than English make up the remaining 11% of reviews. This provides an important perspective on the online ecology of Goodreads as far as translation is concerned: the dominance of reviews (mostly also written in English) of books translated into English is a key feature.

The collocational network analysis proceeds in the following way. The first part of the analysis (Section 5.1.1) focuses on the English-language reviews, and compares collocational networks for the concept of translation for the three sets of reviews set out in Table 4 (nonE>E, E>nonE and nonE>nonE), with the aim of determining whether different ways of talking about translations, and different evaluative patterns (or cognitive-evaluative templates) are evident for these translation directions. In the discussion, where relevant, it is also investigated whether genre (operationalised as a distinction between literary fiction and popular writing) has an effect on these cognitive-evaluative templates. The analysis subsequently turns to reviews written in languages other than English, and considers each set of reviews separately, outlining both the representation of E>nonE vs nonE>nonE directions, and genre representation in each set of reviews (Section 5.1.2). This analysis both aims to determine to what degree the reviews in languages other than English reflect the same cognitive-evaluative templates than the English reviews, and aims to determine whether these reviews potentially reflect distinct conceptualisation and evaluation mechanisms for the contexts in question (since the reviews written in languages other than English most likely represent the views of readers in the respective contexts).

#### 3.2.2 Keyword analysis

Collocational analyses give information on the direct context of the TRANSLATE lemmas. To determine whether taking the *whole text* of the reviews into consideration yields more nuanced understanding of the cognitive-evaluative templates used, we perform additional keyword analyses. Keyword analyses show which words in a corpus stand out in comparison to a reference corpus: which words are important in a group of texs, but are barely used in the comparison group? If Group A contains documents on plant care, and Group B on dog care, words related to plants will show up as keywords for A, and words related to dogs for B. But if we use Group B again, and compare it to Group C which is about dog training, then words about care will become the keywords for B; as opposed to training words for C. Words related to dogs should be prevalent in both, so they will not be found as keywords for one of the groups.

To perform the keyword analysis we used AntConc (Anthony 2020), with the log likelihood as statistical measure for determining how well the model fits the data (see Paquot & Bestgen 2009 for a comparison of statistical measures in keyword extraction). We used the tokenised, lemmatised and stop-listed versions of the reviews. We performed the analyses only on the English-language reviews, because there is insufficient data for the other languages to make meaningful within-language comparisons. This means that we selected English-language reviews on English books, both originally written in English, and translated into English from other languages (the nonE>E dataset). We compared two groups of reviews; both groups contain all genres:

- (1) reviews that mention translation (M-dataset, written in English) vs. reviews that do not mention translation (N-dataset, written in English);
- (2) reviews on a translated book that mention translation (T/M-dataset, written in English) vs. reviews on an originally English book that mention translation (O/M-dataset, written in English) (see also Table 3).

To make sure the comparisons are not skewed, we performed a random selection on the group that contains the largest amount of reviews, to equal the amount of the group with the fewest. This results in a set of 7164 reviews per group in the first keyword analysis (1) and a set of 403 reviews per group in the second keyword analysis (2). This analysis supplements the collocational analyses: certain words could be prevalent in reviews that mention translation that are not found in the vicinity of the TRANSLATE lemmas. The keyword analyses show whether this is the case.

#### 3.2.3 Sentiment analysis

Since we were interested in sentiments related to translation, we had to find a method which would allow us to measure such sentiments. This task has been addressed in machine learning as feature-based sentiment analysis; however, existing models, trained on product reviews and pertaining to features such as battery life in phones, were not applicable to our data. At the same time, the number of reviews which mention translation provide too little data to train stable machine learning models. Therefore, we developed a computational approach with a human categorisation step: we tallied the words surrounding the TRANSLATE lemmas in Dutch, English, French, German, Italian, Portuguese and Spanish. We removed stop words and tokenised all reviews, and then searched for the TRANSLATE lemmas in each review. We compiled lists of the 100 most frequent tokens surrounding TRANSLATE lemmas: from four words before until four words after a translation lemma.

These lists were then sent to annotators who had native or professional proficiency in one or more of the languages analysed. The annotators were instructed to indicate whether a word had positive (P) or negative (N) sentiment, or expressed uncertainty (H). Since we only received one annotation of Italian, we had to exclude Italian from the further analysis. Moreover, not all annotators interpreted the task in a similar way: some of them assigned positive sentiment to words such as *français*. This caused us to exclude one French annotation and two Portuguese annotations. Ultimately, all remaining languages had two annotators, except for English, which had five annotators. In all these cases, the interannotator agreement was at least  $\kappa$  = 0.5, indicating moderate agreement, and in most cases,  $\kappa$  = 0.7 and more, indicating substantial agreement.

As a next step, we counted how many terms surrounding translation lemmas in each review fell into the positive, negative or uncertain category, in order to perform cross-linguistic analyses; in other words, to investigate whether positive, negative or uncertain words occurred more frequently for specific genres, or specific translation directions (categorised as before, into three groups: nonE>E, E>nonE and nonE>nonE).

#### 4. Findings and discussion RQ1: The salience of translation

Table 5 summarises the actual and proportional frequencies of mentions of translation in reviews of original (O) and translated (T) works, with the reviews of translated works further differentiated by translation direction (E>nonE, nonE>E and nonE>nonE)

If we consider the percentages of all the books reviewed, 3.3% of reviews mention translation. Of those mentions, 2.9% are reviews of translated titles and 0.4% reviews of original titles. These low proportional frequencies of mentions of translation are in line with the general 'invisibility' of translation (Venuti 2008) discussed in Section 1: even when reviewing and discussing a translated text, the fact of translation is not particularly saliently marked. Translation directionality, however, clearly modulates the visibility or salience of translation: for translation from other languages into English (nonE>E) proportionally more reviews mention the fact of translation (2.4%) than for translation from English to other languages (E>nonE; 0.2%) or between two languages where neither is English (nonE>nonE; 0.3%).

<sup>15.</sup> The decision to explicitly ask annotators to indicate words expressing uncertainty, or hedging, was motivated by previous work (Kotze & van Egdom 2021) highlighting such words as typical of translation evaluation in particular language pairs, as well as on our own initial observation of the prevalence of such words in the wordlists.

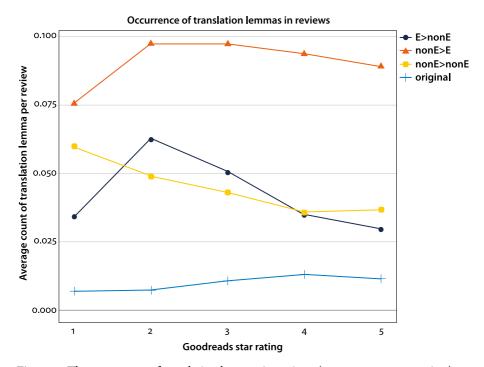
| Table 5. Actual and proportional frequencies of mentions of translation in reviews of |
|---|
| original (O) and translated (T) works, with the latter group further differentated by |
| translation direction (E>nonE, nonE>E, nonE>nonE)                                     |

|                               | Original titles (O) | All<br>translated<br>titles (T) | Translated<br>titles (T)<br>E>nonE | Translated<br>titles (T)<br>nonE>E | Translated<br>titles (T)<br>nonE>nonE | Total   |
|-------------------------------|---------------------|---------------------------------|------------------------------------|------------------------------------|---------------------------------------|---------|
| Mention of translation (M)    | 1219                | 8120                            | 428                                | 6842                               | 850                                   | 9339    |
|                               | (0.4)               | (2.9)                           | (0.2)                              | (2.4)                              | (0.3)                                 | (3.3)   |
| No mention of translation (N) | 133,725             | 135,819                         | 16,306                             | 91,973                             | 27,540                                | 269,544 |
|                               | (48.0)              | (48.7)                          | (5.8)                              | (33.0)                             | (9.9)                                 | (96.7)  |
| Total                         | 134,944             | 143,939                         | 16,734                             | 98,815                             | 28,390                                | 278,883 |
|                               | (48.4)              | (51.6)                          | (6.0)                              | (35.4)                             | (10.2)                                | (100)   |

Another way of looking at these frequencies is as a proportion of the total reviews within a particular group. Of all reviews of original titles (O), 0.9% mention translation. In the group of reviews of translations from English to other languages (E>nonE), 2.5% mention translation; for translations between languages other than English (nonE>nonE), the frequency is slightly higher at 3%. However, in the group of reviews for translations from other languages into English (nonE>E), the proportional frequency rises to 6.9%; in the region of 90% more frequent than for the other two translation directions. For translations from other languages into English, therefore, the fact of translation is considerably more saliently marked, even if the overall 'visibility' of the fact of translation remains limited.

To gain a further understanding of the relation between mentions of translation and reviewers' evaluation of the book they read, we cross-tabulated the number of mentions of a translation to the star rating (1–5 stars); split by books that are non-translated editions (original), and E>nonE, nonE>E and nonE>nonE translations (see Figure 1).

Figure 1 reiterates the more frequent overall mentions of translation in nonE>E translation, compared to the other two translation directions as well as to original books, but also shows that, generally across all three translation directionalities distinguished, when a book is translated and a reviewer did not like it, they mention the translation more often: the fact that a book has been translated thus appears as one possible reason for disliking a book. Exceptions to this trend are evident: for the two translation directions involving English, as source or target language, one-star reviews have the least frequent mentions of translation (compared to the other star-rating categories). Understanding these exceptions requires further qualitative analysis, but it may be that the most decidedly negative of reviews are unambiguously related to factors other than the transla-



**Figure 1.** The occurrence of translation lemmas in reviews (average count per review), mapped against Goodreads star ratings. The different lines represent reviews of non-translated books (original), reviews of E>nonE translations, reviews of nonE>E translations, and reviews of nonE>nonE translations

tion, and it is only when reviewers are slightly less decided on their opinion that the factor of translation is considered.

The fact that translation is mentioned at all in reviews of original books (see Table 5) might appear unusual. The fact that such mentions are somewhat more common in highly rated books provide part of a possible explanation: such mentions of translation often reflect on the many translations of a particular book (Example (1)) or on the many film (or other) adaptations of a book (where 'translation' is often used metaphorically; see Example (2)) (compare also the further discussion in Section 5.2). In both these cases, the mentions of translation are sometimes phrased in such a way that they reflect the status and importance of the text in question.

(1) I used to think that this book was meant for children, and how wrong I was! I decided to read this book since Sony talked about it... and how happy I am to discover it. It is one of the most translated books in the world and Translated

into 300 languages... This book can be read in so many levels, the more you dive into it the more you'll be surprised by how rich it is.

(review\_2254464490, review of original French *Le petit prince*)

(2) So good! The translation to screen was so well done.

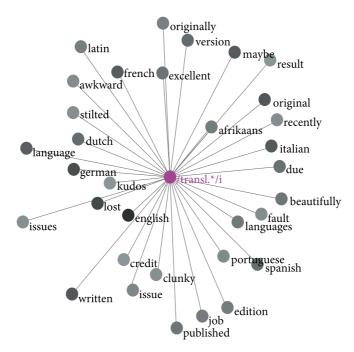
(review\_1924771567, review of original English A Game of Thrones: A Song of Ice and Fire)

- 5. Findings and discussion RQ2: Cognitive-evaluative templates in reader reviews of literary translations
- 5.1 Collocational network analysis
- 5.1.1 Analysis of English-language reviews
- **a.** Reviews of books translated into English (from all other languages): The nonE>E template

Figure 2 shows the collocational network for the lemma TRANSLATE in the English-language reviews of books translated into English, from all other languages in the dataset (the distance of the collocate from the node visualises the strength of the association; the placement shows whether the collocate occurs before or after the node word). Given the very large dataset, in this graph, a collocation frequency of 30 (in addition to the MI score of higher than 5) was set as the cut-off point.<sup>16</sup>

First, it should be noted that the names of translators occurred as collocates in this set, but were removed from the graph for the purpose of readability: John E. Woods, William Weaver, Matthew Ward, Gregory Rabassa, Edith Grossman, Stuart Gilbert, Ann Goldstein, Katherine Woods, and Ralph Manheim are all named translators in this set. This clearly signals that when reviewing books translated into English from other languages, translators are quite visible, and are often named (contrary to what one might expect from predictions about the relative invisibility of translators in Anglophone cultures; see Venuti 2008). Source languages (French, Dutch, German, Afrikaans, Italian, Spanish, Portuguese) are named, alongside the target language (English). Some words associated with the textual production of translation occur (originally, version, language(s), written, edition). There are words expressing both positive sentiment (excellent, kudos,

**<sup>16.</sup>** Decisions to alter the basic settings for the collocational analyses were dependent on the size of the subset of data; in particular, with larger datasets, the default setting yields collocational networks so dense as to be non-informative.



**Figure 2.** Collocational network for TRANSLATE in English-language reviews of nonE>E translations

beautifully), but there are also words expressing negative sentiment (awkward, stilted, issue(s), clunky, fault). Striking about these is the emphasis on a lack of stylistic fluency, reiterating the point made by Venuti (2008) that in the Anglophone world, assimilative fluency is a key normative yardstick for translation. The collocate lost reflects the notion of translation as inferior, or somehow deficient; the expression lost in translation and variants occur 461 times in the corpus. It is often accompanied by the collocate maybe, as in Example (3).<sup>17</sup>

(3) The language was a little stilted at times – maybe something was lost in translation? (review\_2668507022, English translation of *De brief voor de koning*)

Readers of books translated into English often cannot or do not read the original texts in other languages, and thus are not sure of their assessment. However, if they dislike something about the book, the translation is often painted as the possible scapegoat (as also evident in the collocations *fault* and *due*), as in Examples (4) and (5).

<sup>17.</sup> In the full list of collocates, other hedge words also occur, not represented in this network.

(4) The writing style seemed rather stilted; I got to feel like I was reading the same paragraph over and over, but with different words. This, admittedly, is most likely the fault of the translator, but until I learn to read German, there is not much I can do as far as enjoying the original.

(review\_42905856, English translation of *Tintenherz*)

(5) I liked the story well enough but the prose was very lackluster and simplistic, which is probably due to the fact that it's a translation.

(review\_1444851892, English translation of Tussen stasies)

All in all, the collocational network for texts translated into English suggests a cognitive-evaluative template for nonE>E translation that has the following features:<sup>18</sup>

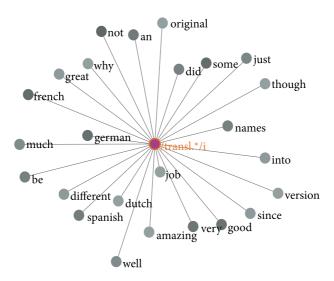
- 1. strong perceptibility of source and target languages
- 2. strong perceptibility of the textual production of translation
- 3. strong perceptibility of the translator
- 4. a trope of loss, mostly linked particularly to stylistic or fluency loss and only sometimes to loss of accuracy, or error
- 5. a clear tendency towards both positive and negative evaluation
- 6. an element of uncertainty associated with this evaluation
- 7. scapegoating of the translation as a possible reason for disliking the book.

The cognitive-evaluative template sketched here should, however, also also take account of genre. For books published in English (translated from all other languages), 60% of English-language reviews (4086/6761) are of literary (fiction) texts, and 40% (2675/6761) for other popular writing (including fiction, biographies and youth and children's books) (see Table 4). A comparison of the collocational networks of Translate in reviews for literary and popular books shows more similarities than differences. In reviewing translations in both genres, reviewers invoke loss (*lost*), and focus primarily on matters of style. The only noticeable difference is that in reviews of literary texts, *kudos* and *blame* are collocates – clearly linked to the translators, who are also named more often in reviews of literary texts than non-literary texts. All in all, however, it appears that genre is not a deciding factor in the general cognitive-evaluative templates that readers use when evaluating translations done into English: the same general template applies.

<sup>18.</sup> These templates are based on data from the reviews in which translation is mentioned, and doesn't take account of the much larger number of reviews in which it is not mentioned. The claims about templates we make here should still be seen against the relative invisibility of translation that emerges from the overall analysis.

# **b.** Reviews of books translated from English (into all other languages): The E>nonE template

This dataset is very small, consisting of only 117 reviews. In this dataset, 91% of reviews (107/117) are for popular books, including *Harry Potter and the Sorcerer's Stone, A Game of Thrones: A Song of Ice and Fire, The Fault in Our Stars, Wonder*, and *The Amber Spyglass*. This means that the collocational network presented here should be interpreted as reflecting the cognitive-evaluative template for popular (fantasy) fiction, generally written for children and young adults, translated from English to other languages. Figure 3 shows the collocational network for the concept TRANSLATE in these English-language reviews. In this graph, a collocation frequency of 5 was set as the cut-off point.



**Figure 3.** Collocational network for Translate in English-language reviews of E>nonE translations

Firstly, translators' names do not figure in this collocational network; unsurprising, perhaps, given that the dataset does not contain much literary fiction. A few words related to the textual production of translation occur, such as *original* and *version*. The source language *English*, and target languages (*Dutch, Spanish, German*) are mentioned. Strikingly, in this set of reviews, the notion of loss does not occur, nor is there any evidence of hedging or uncertainty. This may be because (as some readers in fact point out) they are also able to read the texts in question in English, and they often compare the translation to the English original, as in Example (6).

There is evidence of evaluation, but this is overwhelmingly positive: *amazing, good, great, very.* The expectation of fluency is not signalled, and no specific matters relating to translation are commented on, except for one feature, *names,* which are often commented on particularly in reviews of *Harry Potter and the Sorcerer's Stone,* also illustrated in Example (6).

(6) The only thing I really didn't like about this translation is that many of the names have been changed... it really breaks the flow of my reading when I see the name Rogue instead of Snape and Poudlard instead of Hogwarts. Some of the changes are fine, but others make no sense to me, especially if they're just names of book authors that are mentioned in passing, why not just keep it as it was? Overall, though, it's the same enchanting and at times hilarious book I read in English!

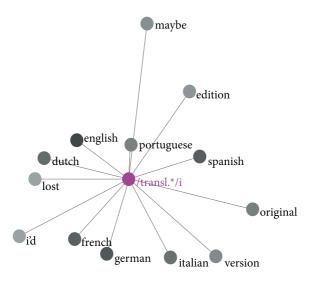
(review\_1745408159, French translation of *Harry Potter and the Sorcerer's Stone*)

Given the nature of the dataset, the E>nonE cognitive-evaluative template needs to be specified as applying to popular fiction. It has the following features:

- 1. strong perceptibility of source and target languages
- 2. miminal foregrounding of the translator
- 3. minimal emphasis on the textual production involved in translation
- 4. mostly positive sentiment
- 5. the absence of expectations of fluency
- 6. a focus on realia in translation
- 7. no hedging or uncertainty.
- **c.** Reviews of books translated between languages other than English: The nonE>nonE template

This dataset is also relatively small, consisting of 162 reviews, of which 69% (112/162) are of literary texts. Included in this are, for example, translations of L'Étranger, Le petit prince, Il nome della rosa, Het diner, Der Vorleser, Die unendliche Geschichte, and Das Parfum into various languages. The collocational network for the full set of reviews, without taking account of genre, is shown in Figure 4.

The collocational network names languages (*English*, *Portuguese*, *Spanish*, *English*, *Dutch*, *Italian*, *German*, *French*), and also signals the textual production process of translation (*original*, *version*, *edition*). Translators's names, however, do not occur in the collocational network. There is no evidence of evaluative lexis in the collocational network, except that the notion of loss does occur (*lost*), together with a hedging word (*maybe*). Example (7) illustrates how the notion of loss typically occurs in this dataset.



**Figure 4.** Collocational network for TRANSLATE in English-language reviews of nonE>nonE translations

(7) I read this book in Dutch, and it could well be that a lot of Marquez' genius just gets lost in translation.

(review\_2679570511, Dutch translation of *El amor en los tiempos del cólera*)

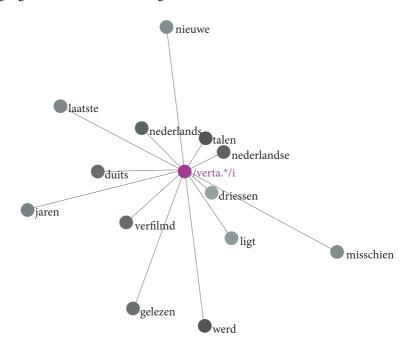
Dividing this dataset into reviews of literary and non-literary texts does not produce significantly different collocational networks, and it can thus be assumed that for the nonE>nonE template, genre has a limited effect. The **cognitive-evaluative template for translations in the nonE>nonE** language pairs can thus be summarised as follows:

- 1. strong perceptibility of source and target languages
- 2. limited visibility of translators
- 3. relatively limited visibility of the textual production of translation
- 4. absence of either positive or negative evaluative lexis
- 5. the presence of the notion of loss
- 6. some evidence of hedging
- 7. little emphasis on fluency, and limited emphasis on specific textual aspects of translation.

# 5.1.2 Analysis of reviews written in languages other than English

We analyse reviews in other languages, to also determine whether cognitiveevaluative templates are shaped, to some degree, by the local literary field – relating these to the templates identified above. For reasons of space we are not able to do detailed breakdowns by genre and source languages; however, we provide contextualisation for each of the datasets to facilitate our preliminary interpretation (based on the details in Table 4).

The **Dutch-language reviews** are almost all of books translated into Dutch (179 out of 200 reviews) – and translations from English are a minority in this set (30 out of 200 reviews, with German (62), French (39) and Italian (34) all more common source languages). Of the 200 Dutch-language reviews, 66% (133) are of literary fiction texts. The Dutch-language reviews thus reflect primarily translation from other non-English languages into Dutch (with a fairly balanced representation of literary and popular texts being reviewed). We might anticipate that the reviews in this set would align with the nonE>nonE template identified in Section 5.1.1(c) – but perhaps reflecting some specificities of the Dutch literary system. The collocational network for the lemma VERTALEN in the Dutch-language reviews is shown in Figure 5.



**Figure 5.** Collocational network of VERTALEN for Dutch-language reviews of translated books (predominantly non-English languages into Dutch)

The collocational network reflects little in the way of evaluation and there is also not much reference to the textual production process of translation. It includes references to languages (*Nederlands(e)*, *Duits, talen* 'languages'), and the name of translator Hans Driessen. The only pattern of interest is the combination of *miss*-

chien and ligt, reflecting the expression misschien ligt het aan de vertaling ('maybe it is because of the translation'), as shown in Example (8). This expression reflects some of the same notion of loss in translation, or blame being assigned to the translation if the reader does not like the book.

(8) Misschien ligt het aan de vertaling, misschien ligt het aan het feit dat het lezen hiervan meer dan een jaar duurde, maar ik vond het gevecht tegen de hemel met al het Stof te grootst en ingewikkeld... De dialogen vond ik onprettig om te lezen, de zinnen zijn vaak erg dramatisch. Desondanks is het een boeiend boek met al die parallelle werelden, en vond ik het in het Engels wel erg goed.

(review\_2188354637, Dutch translation of *The Amber Spyglass*)

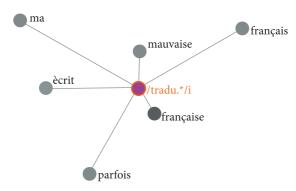
[Perhaps it is because of the translation, perhaps because of the fact that reading this took more than a year, but I found the battle against heaven with all the Dust too grandiose and complex... the dialogues I didn't find fun to read, the sentences are often very dramatic. Nevertheless it is a fascinating book with all the parallel worlds, and I did find it very good in English.]

The pattern evidenced from the collocational analysis is thus, indeed, similar to the nonE>nonE template.

In the case of the French-language reviews, 90% of the reviews (92/102) are for books translated into French, and the reviews may thus be seen as representing views of French readers for books within the French publishing landscape. The range of source languages are diverse, but English is the most common source language for translation (40/102 cases; 39%), followed by Italian (24/102; 24%) and German (19/102; 19%). Genres in the dataset are split almost evenly: 58% of reviews (59/102) are for popular books, and 42% for literary books. The collocational network for the concept TRADUIRE in the full set of French-language reviews is given in Figure 6. It is a comparably simple network, containing only the language name of the target language French (the absence of source-language names so common in other collocational networks is striking), one reference to the text-production process of translation (écrit) and two other words of interest mauvaise ('bad'), and parfois ('sometimes'). In the cognitive-evaluative template emerging from the French reviews, therefore, translation is framed strongly from the perspective of the target language, with the only evaluation negative.

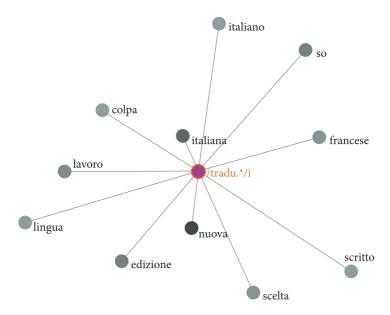
The Italian-language reviews are overwhelmingly for books translated into Italian (97% of reviews; 249/258 reviews) – again from a range of languages. English is the most frequent source language, accounting for 36% of cases (93/258 reviews), followed by French (73), German (44) and Spanish (29). There are slightly more reviews for popular books (141/258; 55%) than for literary books.

The collocational network for TRADUZIONE in the Italian-language reviews is shown in Figure 7. Evident here are languages: the target language (*Italiano*,



**Figure 6.** Collocational network of TRADUIRE for French-language reviews of translated books (French books, translated from a range of languages)

*Italiana*), and source languages (*Francese*), and words that generally have to do with translation as text production process (*edizione, nuova, scritto*). The notion of 'choice' arises (*scelta*) – and some negative evaluation in 'fault' (*colpa*).

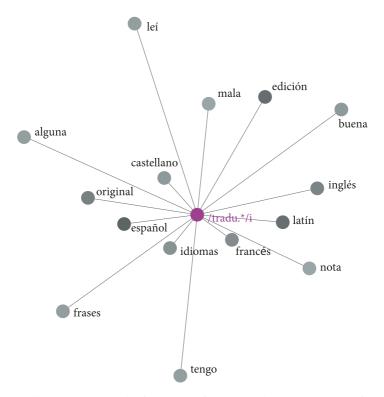


**Figure 7.** Collocational network of TRADUZIONE for Italian-language reviews of translated books (Italian books, translated from a range of languages)

The Spanish-language reviews are almost all for books translated into Spanish (90% of reviews; 261/289 reviews) – again, from a range of languages, but with English (88) and Italian (73) most strongly represented, followed by German

(51) and French (45). The dataset is weighted to literary fiction (200/289 reviews (69%) are for literary texts).

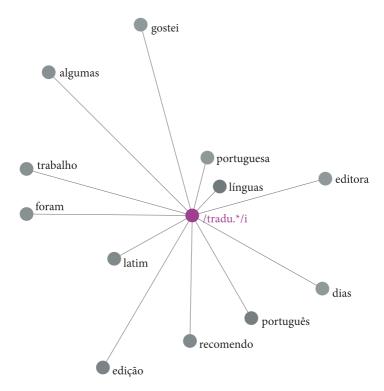
The collocational network for the concept TRADUCIR (see Figure 8) in the Spanish-language reviews contains references to the target language (*Castellano*, *Español*) and source languages (*Inglés*, *Francés*), and some reference to text-production processes involved in translation (*original*, *edición*) some evidence of quality assessment (opposing, in *buena* 'good' and *mala* 'bad'). There is limited evidence of hedging, except in *alguna* 'some'), and some evidence of a focus on phrase/sentence level (*frases*).



**Figure 8.** Collocational network of TRADUCIR for Spanish-language reviews of translated books (Spanish books, translated from a range of languages)

The **Portuguese-language reviews** are mostly for books translated into Portuguese (90% of reviews, or 155/172 reviews). The most common source languages are Italian (42), English (37), French (34) and German (31). The dataset contains only somewhat more reviews of literary than non-literary books: 102/172 reviews (59%) are of literary texts. The collocational analysis for Portuguese TRADUZIR, along the same parameters as the other collocational analyses, produces the col-

locational network in Figure 9. The network shows, apart from mentions of languages (*portuguesa*, *linguas*, *português*, *latim*) and references to the artefact of the book (*editora* 'publisher', *trabalho* 'work', *edição* 'edition'), also some evidence of positive evaluation (*gostei* 'I liked', *recomendo* 'I recommend'), and some hedging (*algumas* 'some').



**Figure 9.** Collocational network of TRADUZIR for Portuguese-language reviews of translated books (Portuguese books, translated from a range of languages)

Lastly, the German-language reviews are overwhelmingly for books translated into German (93% of reviews, or 55/59 reviews). English (23), Italian (16) and French (10) are the most common source languages. The dataset is evenly divided between literary and popular books: 54% (32/59) are popular books. The collocational analysis for German ÜBERSETZEN with the settings used for the other collocational analyses yields only one collocate, *deutscher* (referring to the target language); expanding the settings to a less strict MI criterion yields non-informative collocates consisting mostly of function words.

The reviews written in languages other than English therefore broadly correspond, as would be expected, to the nonE>nonE and to a lesser degree the E>nonE templates, with some evidence of specificities to local literary systems.

## 5.2 Keyword analyses

First, we compared reviews of books with no mention of translation (N) to reviews of books with at least one mention (M) in English language-reviews of English-language books (both original (O) and translated (T) into English). The first 50 keywords of the reviews that do mention translation, as compared to the ones that do not, show quite a large overlap with the findings of the collocational analysis presented in Section 5.1.1 (a), dealing with the nonE>E template:

- words pertaining to translation, as would be expected: translation, translate, translator, translating, translated, render, originally
- words describing the artifact of the book, the text and interaction with it, such as version, edition, original, publish, novel, work
- negative descriptors, like *lose* (see the discussion of the phrase *lost in translation* in Section 5.1.1 (a)), *stilted, awkward, clunky, choppy*
- mentions of language, such as English, German, Italian, language, French.

There is one notable group of words, however, that is not evident from the collocational analysis but does emerge from the keyword analysis. This is a group of words related to travel and geography, for instance *travel, traveler, city, street, neighbo(u)rhood* and *sea*. Examples (9) to (13) illustrate why these words (marked in bold) are keywords for the translated texts.

(9) As an American adult with minimal German language skills who has never **traveled** to Berlin, I had absolutely no trouble understanding and appreciating this book in its 1930 English translation by May Massee.

(review\_1632625682, English translation of *Emil und die Detektive*)

(10) The story of this series of novels develop over the backdrop of a poor Neapolitan **neighbourhood**.

(review\_1108768612, English translation of Storia del nuovo cognome)

(11) The premise of Blindness is that the 'white sickness' begins to spread throughout the population of an unnamed urban city.

(review\_116205436, English translation of *Ensaio sobre a cegueira*)

(12) The number and variations of name for the multiple **neighborhood** children was a struggle, though I thank the publisher of my version for putting a 'family tree' of sorts at the start of the book so I could attempt to keep track.

(review\_2601894521, English translation of *L'amica geniale*)

(13) In the end I had to skip paragraphs just to keep from drowning in the sea of text rife with untranslated Latin, tangential names and places and nuanced

theological argument about tiny aspects of Christianity that only a monk would fret over. (review\_2873113732, English translation of *Il nome della rosa*)

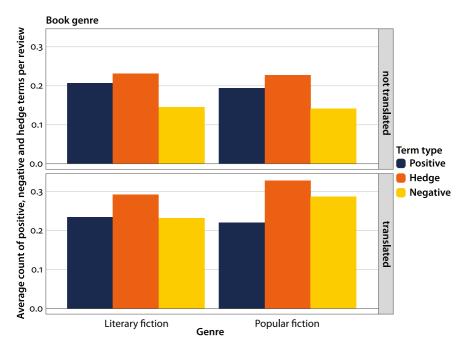
Examples (9) through (11) show that people who read a translation are more aware of the situatedness of the book, which can be explained by a deviation of the locale from the reader's own environment; in the case of Example (11), the fact that the book is situated in an unnamed city. This deviation is not the only reason to mention place, however. Examples (12) and (13) mention a form of information overload; *sea* is used metaphorically more often than not. This could mean that the translated texts, inherently, differ from the original texts in the style of writing, for instance the number of characters and geographical details, and readers notice this. Alternatively, readers may notice such text specifically, because names in other languages are less familiar. In short, the local geography of a book is more poignant to readers of novels translated into English from other languages, in comparison to readers of non-translated English novels.

The second keyword analysis pertains to reviews of books that all mention translation (the M-dataset). However, in this case we compared reviews of translated books (the T/M-dataset), and reviews of books read in the original language (the O/M-dataset). This analysis answers a question we briefly raised in Section 4: why do readers mention translation when the book is not translated? We hypothesised that referring to the book's quality might be a reason. It has been translated (into many languages); thus it must be good. The keyword analysis gives a fairly straightforward answer to the contrary, however. The first three keywords are series, watch and TV. Other words indicate that Margaret Atwood's A Handmaid's Tale (Offred, handmaid) and the Harry Potter books (Rowling, wizard) are part of these originally English novels that were reviewed. The translation mentioned is thus not principally one from book to book, but from book to series or film, and the slightly higher frequency of mentions of translations in original books with higher star ratings (see Section 4) thus in all likelihood has less to do with textual translation, and more with comments on intersemiotic translations of the book (usually viewed in a positive light).

#### **5.3** Sentiment analysis

Lastly, we analysed the average occurrence of positive, negative and hedge terms around TRANSLATE lemmas. The terms occurring within a space of four words before and after a TRANSLATE lemma were matched against the terms categorised by native/professional speakers and then tallied as positive, negative or hedge terms. We consider here two aspects that have already been highlighted in the preceding discussion: genre (for both translated and non-translated books), and

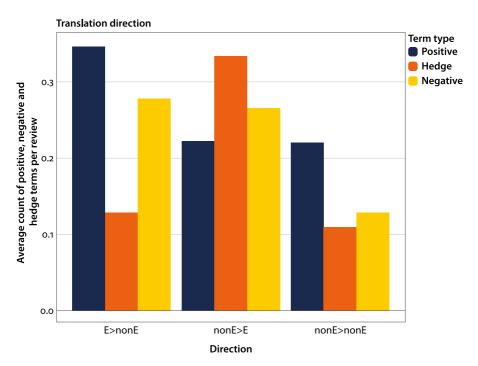
translation direction. Figure 10 shows that there is hardly any genre effect for the frequency with which positive, negative or hedge terms occur. The analysis here does demonstrate that the more common occurrence of translation-related words in reviews dealing with translated books (see Section 4), is also accompanied by increased frequency of valence related to translation, compared to reviews of non-translated books. In other words, translation is not only mentioned more often in reviews of translated books, but where it is, it carries a stronger emotional charge.



**Figure 10.** Average occurrence of positive, negative and hedge terms around translation lemmas in literary fiction and popular fiction

Finally, when we focus on the translation direction for translated books (see Figure 11), it is evident that books translated from English into other languages (E>nonE) have the most pronounced extremes: many positive terms (on average the most frequent across the three translation directions), but also many negative terms, and relatively few hedge terms occur around translation lemmas. This indicates that reviewers have outspoken opinions about the quality of the translation, since they may have been able to read the English originals. This echoes in broad strokes the cognitive-evaluative template for E>nonE translation identified in Section 5.1.1 (b) and Section 5.1.2: the sentiment analysis confirms the strong evaluative (and mostly positive) component, and the high degree of certainty in the evaluation. For the books translated from other languages to English

(nonE>E), we see a strong tendency towards hedge terms, which confirms the finding in Section 5.1.1 (a) that the cognitive-evaluative template for nonE>E translation includes uncertainty about in how far the enjoyment of a book was influenced by the quality of the translation. The strong evaluative component (both positive and negative) of this template is also confirmed by the sentiment analysis. In translations of non-English books to another non-English language (nonE>nonE), the strongest tendency is towards positive terms in combination with translation, hinting at appreciation for the fact that a given book has been translated. The comparatively less frequent use of both evaluative lexis, and hedging, also echoes the findings of the cognitive-evaluative template for nonE>nonE translation identified in Section 5.1.1 (c), and Section 5.1.2.



**Figure 11.** Average occurrence of positive, negative and hedge terms around translation lemmas for different translation directions (E>nonE, nonE>E, nonE>nonE)

#### 6. Conclusion

The findings of our study show that, in terms of visibility, the fact of translation is not particularly salient to readers of a translation; however, as we anticipated, the degree of salience of translation is influenced by the translation directionality.

Perhaps unexpectedly, the translatedness of a text is more salient to readers of texts translated from other languages into English, compared to readers of texts translated from English into other languages, or between languages that are not English. Seen narrowly, this somewhat higher perceptibility might be taken as a feature of the cognitive-evaluative template for readers in Anglophone contexts; what needs to be investigated further is whether this cognitive-evaluative template can be generalised to minor-major translation directions more generally. This is an important avenue for further research, focusing on particular language combinations.

In reviews of books in all three translation directionalities distinguished (E>nonE, nonE>E, nonE>nonE) mentions of translation are, however, more common than in reviews of non-translated books – and in all three cases, increased frequencies of mention of translation are overall correlated with lower star ratings (thus more negative evaluations). In all cases then, translation appears to be invoked as a possible scapegoat for a reader's dislike of a book. Mentions of translation in reviews of non-translated books are somewhat correlated with higher star ratings; this arises as a consequence of references to the widely translated status of a book (as a positive indicator of its quality), as well as references to its intersemiotic translation into film and other media.

The collocational network analysis, keyword analysis and sentiment analysis allow us to identify the norms, or cognitive-evaluative templates, that readers use when they engage with translations. While there appears to be a stable, shared core to this cognitive-evaluative template, there are also clear differences for the three translation directionalities distinguished, and suggestions of target-culture-specific features. We tentatively summarise these differences, triangulated across the collocational network, keyword and sentiment analyses, in Table 6. Importantly, these templates are both conceptual and affective in nature, highlighting the fact that norms are not only rational constructs by means of which evaluation is carried out, but are fully experiential and affective (Robinson 2020; Halverson & Kotze 2022).

Further, tentative nuances emerge, for example, that for nonE>E translation, readers tend to be particularly attuned to the situatedness of a book. In particular language pairs, there is evidence of some trends that require further investigation: French-language reviews (of translated French books) suggested a strong target-language orientation (source languages are not mentioned, which is unusual among the collocational networks), with principally negative evaluation. Dutch-and German-language reviews appear less oriented towards evaluation than reviews written in other languages. These patterns, however, require further investigation.

|   | nonE>E                              | E>nonE                              | nonE>nonE   |
|---|-------------------------------------|-------------------------------------|---|
| Perceptibility of source language(s)  | Strong                              | Strong                              | Strong  |
| <ol><li>Perceptibility of the<br/>textual production of<br/>translation</li></ol> | Strong                              | Weak                                | Moderate  |
| 3. Perceptibility of the translator   | Strong                              | Weak                                | Weak  |
| 4. Evaluative lexis   | Strong, both positive and negative  | Moderate,<br>mostly positive        | Weak, but more positive than negative                   |
| 5. Trope of loss  | Yes (strong)                        | No                                  | Yes (weak)  |
| 6. Fluency expectation  | Yes (strong)                        | No                                  | No  |
| 7. Fidelity expectation   | Yes (weak, in relation to accuracy) | Yes (strong, in relation to realia) | No (little emphasis on specific aspects of translation) |
| 8. Uncertainty in evaluation  | Yes                                 | No                                  | Yes   |
| 9. Scapegoating of translation  | Yes (strong)                        | No                                  | Yes (weak)  |

While we find clear differences in respect of translation directionality, we do not find substantive evidence for differences in cognitive-evaluative patterns in terms of genre. In part, this may have to do with limitations of the current dataset and the way in which genres have been grouped in this study, and is therefore another avenue of investigation that would benefit from further pursuit.

We anchored this paper in the concept of 'norms' – a widespread concept used in translation studies – but emphasise two aspects that have only recently started to receive attention in relation to the norm concept. First, we emphasise that norms do not just have conceptual/rational content, but are embedded in people's experiences, and also have strong affective components. In this, we follow recent developments in translation studies (e.g. Robinson 2020; Halverson & Kotze 2022) – but we also strongly align this with similar work in usage-based linguistics (see Halverson & Kotze 2022 for further development of this argument). Ultimately, we argue along with Harder (2012, 298) that

[a] norm that is fully internalized (i.e. one that the individual is fully adapted to) means that what is good feels good, not just that it comes out as good when tested

against an explicit mental model. The way you respond to it is part of who you are, not just an aspect of what you think.

Second, we extend this 4EA perspective of norms from its applications to translators (the focus of existing research so far), to readers, and demonstrate, by leveraging big data and the triangulation of computational methods, that readers' norms, or cognitive-evaluative templates, are both conceptual and affective, both individual and deeply embedded in social contexts.

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