

Measuring the effect of censorship on translation flow

Kirill Maslinsky¹ 

¹ INALCO, Paris, France

Abstract

The intensity of translation flows between national literatures is defined not only by symbolic value, but by politics as well. State censorship is the most obvious limiting factor for the incoming translations. In this paper, I propose a method to estimate the strength of the negative effect of censorship on translation flow using bibliographic data on published translations. The foundational idea of the suggested measurement is that engagement with a foreign literary field is reflected in the publication of works by contemporary writers. Higher political pressure would mean less publications of contemporary works. I argue that *vitality coefficient* — a proportion of works by authors who were alive at the time of publication of the translation — is indicative of the strength of the political censorship. Translations of children's books into Russian in the USSR during the period of the Cold War will serve as a case study. Quantitative analysis is enabled by the availability of comprehensive bibliographic data. The effect of the censorial barriers associated with the country of provenance on the share of works by living authors in the translation flow was estimated with the help of a Bayesian generalized additive model. Results show that vitality coefficient responded to the political alliances and hostility dynamics during the period in the predicted way: higher levels of confrontation led to lower share of the contemporary works in the translation flow. This fact helps realize a side effect of the political censorship barriers that is not much talked about: by hindering the publication of current authors, censorship reinforces the position in the book market of the already well-established and familiar authors. If we assume that reprints contribute to the canonical status of a writer, censorship is then an indirect but real factor for canon consolidation.

Keywords: translations, literary canon, censorship, children's literature, Cold War

1 Introduction

Flow is a key conceptual metaphor in the history and sociology of literary translations. It visualizes the idea of movement of texts on the international scale, while implying that this movement has a quantitative dimension to it.

Using the intensity of translation flows to discern the power imbalances in the symbolic field of world literature is now a classical idea. In a seminal paper, Heilbron directly linked the quantity of outgoing translations to symbolic centrality [8]. Yet the literary field is not entirely autonomous and is known to be contingent on the political and economic conditions [1; 9; 12]. Politics can thus both facilitate and impede the flow of translations. Political interests may support supply-driven translations not really motivated by demand on the receiving side [20; 27]. State censorship is the most obvious limiting factor for the incoming translations [2].

Large-scale quantitative studies of translation flows are now a common occurrence thanks to the availability of digital bibliographic databases [5; 8; 12; 24, inter alia]. They are a good instrument to look into the structure and dynamics of the transnational literary field. But there is a methodological limitation. Focusing on the number of published translations leaves out those that did not make it through due to censorship or other factors. The negative effect of the political barriers on the translation flow is then difficult to estimate in quantitative terms. Translation

Kirill Maslinsky. "Measuring the effect of censorship on translation flow." In: *Computational Cultural Science Workshop 2026*, ed. by Suzanne Mpouli, Jean-Baptiste Camps, Florian Cafiero, and Chahan Vidal-Gorène. Vol. 6. Anthology of Computers and the Humanities. 2026, 84–93. <https://doi.org/10.63744/LmL1NgYUw712>.

© 2026 by the authors. Licensed under Creative Commons Attribution 4.0 International (CC BY 4.0).

scholars mention this problem in passing, often in a footnote, as a challenging research desideratum requiring the compilation of the list of cases where the transfer is stymied [23, p. 70; 6, p. 12].

In this paper, I propose a method to estimate the strength of the negative effect of censorship on translation flow using bibliographic data on published translations. The foundational idea of the suggested measurement is that engagement with a foreign literary field is reflected in the publication of works by contemporary writers. Higher political pressure would mean less publications of contemporary works. I argue that *vitality coefficient* — a proportion of works by authors who were alive at the time of publication of the translation — is indicative of the strength of the political censorship.

Translations of children's books into Russian in the USSR during the period of the Cold War will serve as diagnostic data to evaluate the potential of the method. The data in this case study make it possible to provide a statistical estimate of the effect of censorship on the vitality coefficient.

Results show that vitality coefficient responded to the political alliances and hostility dynamics during the period in the predicted way: higher levels of confrontation led to lower share of the works by living authors in the translation flow. This result has implications for the relationship between censorship and literary canon, considered in the Discussion section.

2 Translations in the USSR during the Cold War

The Cold War period in Europe is perhaps the best studied case of the effects of censorship on translation. In a recent handbook on translation and censorship 10 out of 32 chapters address translation in the Eastern bloc countries during the Cold War period [19].

The most evident quantitative fact reflected in various facets of the bibliographic data of the period is the scarcity of the translations across the East-West political divide known under the name of the iron curtain [3, pp. 267–312; 28]. Historical research provide explanation for this scarcity through the analysis of channels and practices of translation and the logic of censorship [11; 15; 22; 25]. Some metaphor for pressure is a common linguistic device in this literature.

The logic of censorship applied to the incoming translations in the USSR attached great importance to the figure of the author. There were various reasons for a Western writer to be prohibited from publication in the USSR. The political stance of the author, their position towards the Soviet state, their public statements, and aesthetic considerations all played a role [11; 14; 25]. As a consequence, authors who were still active throughout the period carried higher risks of not passing some of the filters and being rejected for any reason compared to the authors of the past. Children's literature was no different with respect to censorship, and shared the same constraints [7, pp. 29–31; 21].

I focus on children's literature, as there exists a comprehensive digital bibliography of books for children printed in the USSR that enables statistical analysis [16]. These data include all the translations, not only those originating in the West, which makes it possible to compare the translation flows from the different regions of the world in quantitative terms. While we already know that the translations from the Western countries were impeded, this kind of comparative data is key to understanding and measuring the relative strength of the censorship barriers.

3 Methodology

The target to estimate is the direct effect of the political censorship barriers on the publication rate of the translations of contemporary writers. Political censorship is seen here as a general environmental condition related to ideological control. It aggregates various causal mechanisms that limited translations: direct administrative interventions, self-censorship by translators and editors,

as well as poor access to sources and lack of information on the literary process. Political censorship can be seen as a force that acted against the interest of the Soviet readers in the Western literature which was quite high [14].

There are two starting assumptions. First, since the political alliances were well defined at the period, one may assume that the books originating from the countries of the same political region were subject to the similar level of censorial pressure. Second, the level of censorial pressure varied over time in a way specific for each region. It is also necessary to take into account competing factors that may confound the estimate. Operationalization of the variables and the assumptions about their interdependence are briefly outlined below.

The outcome of interest is the probability that a translated book is a work by an author who was alive at the moment of the publication of the translation. Let us call this probability a *vitality coefficient*.

To estimate the effect of political barriers I split all the translations into a few macro-regions according to the country of provenance of the author. The regions reflect political alliances of the period. First, translations from languages of Soviet republics and minoritized languages of Russia form their own internal region, coded as USSR in this paper. Western world, coded W1, is a complex construct that unites the political confrontation of the period with the broader history of the cultural transfer. The opponents of the Soviet state in the Cold War form the core of this category, that includes Western Europe, Scandinavia, and all English-speaking countries. By extension, I code all the work written in the Western European languages before the WWII as coming from the same region W1, since these works were presumably regarded in the USSR through the same politicized lens. Countries of the Eastern bloc, coded W2, is a simpler category defined exclusively on the political grounds (countries of the Warsaw pact). Pre-war translations of children's books from the languages of these countries were extremely rare. Yugoslavia was a European country that was sitting on the fence of the East-West divide politically, and this position was reflected in the translation and censorship practices that were not exactly the same as in the Eastern bloc [13]. On this basis Yugoslavia is coded as a separate region, W1/2. The rest of the world, in my data, Asian countries, Cuba and Latin America, were coded EXT. This last region corresponds best to the Third world — a political project which was a very relevant category for the cultural policy in the USSR during the Cold War [4].

The region of the author was inferred from the language of the original work with the exception of German and Spanish. For the latter languages each author had to be coded manually with respect to their region.

The major confounding factor that may affect vitality coefficient is the competition with reprints and retranslations of works by already familiar or canonical authors. I assume that translations from the same source language compete with one another more directly. Then the higher the accumulated capital of translations from a language, the higher the competitive pressure for contemporary authors. Accumulated capital of a language is measured as a logarithm of the total number of children's books translated from that language printed in USSR since 1918 up until the year before the publication. The logarithmic transformation reflects the intuition of the diminishing returns in the supposed mechanism: if there are already hundreds of translations from a language adding one more barely changes the field in the same way as if there were only a dozen.

Finally, Universal Copyright Convention signed by USSR in 1973 may have affected legal and economic accesibility of the works by foreign contemporary writers. Thus I assign a variable that indicates new international copyright regime to all translations from beyond USSR published since 1974.

Assuming that accumulated translations depend on the region (Western world being the region of the highest concentration of the literary capital) and both accumulated translations and copyright regime depend on time (by construction), one must include accumulated translations and

copyright regime in the model in order to identify direct causal effect of political censorship on vitality coefficient (see fig. 1 for a causal DAG).

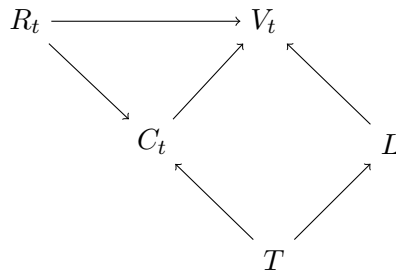


Figure 1: Directed acyclic graph representing the assumed causal relationships among variables. R_t — censorship policy associated with a region, changes over time; V_t — vitality coefficient, changes over time; C_t — accumulated translations from a language, grows over time; T — time in years; L — international copyright regime, changes in 1974

Bayesian generalized additive model was chosen as a statistical estimator. The model was coded using rethinking R package [18] and estimated with STAN [26]. See appendix for the model specification. The replication data and code are available at Zenodo [17], as well as a git repository¹.

4 Data

The bibliographic data on the translated children’s books published in USSR comes from a dataset based on the 18 volume comprehensive bibliography covering the period since 1918 to 1984 [16]. The bibliography includes 7397 translated volumes published in 1946–1984 where the authors are indicated. These are translations of works by 2473 authors from 108 source languages. Collections, adaptations where the original author is not indicated, and publications of folklore were not included in this set. The distribution of editions, authors, and printruns across the regions is given in the table 1 (PAST denotes translations from the ancient languages).

Table 1: Distribution of source languages, authors, editions and printruns (in millions of copies) across the macro-regions defined in the study

region	languages	authors	% auth.	editions	% edn.	copies (mln)	% copies
USSR	69	1536	62	4137	55	493.76	43
W1	14	389	16	2442	32	521.74	45
W2	9	390	16	713	9	94.11	8
EXT	15	121	5	219	3	27.63	2
W1/2	3	33	1	61	1	9.71	1
PAST	2	5	0	11	0	0.81	0

To estimate vitality coefficient, one needs data on the dates of life of the authors. The source dataset contains this information, but it is incomplete. The region that is affected by this incompleteness the most is USSR, with biographical data missing for the half of the authors. For this reason, I had to exclude translations from the languages of the USSR from the analysis. Since vitality coefficient makes no sense for the ancient literature, the PAST region was also excluded. In the rest, there were only 61 authors whose dates of life could not be determined. 20 of these

¹ <https://github.com/maslinych/vitality-coef>

authors come from China and North Korea, and were most likely contemporary authors, so the vitality coefficient may be slightly underestimated for the EXT region. This leaves us with 3242 editions by 883 authors translated from 39 languages of W1, W2, W1/2, and EXT regions. The distribution of the translated editions across the period is shown in the fig. 2.

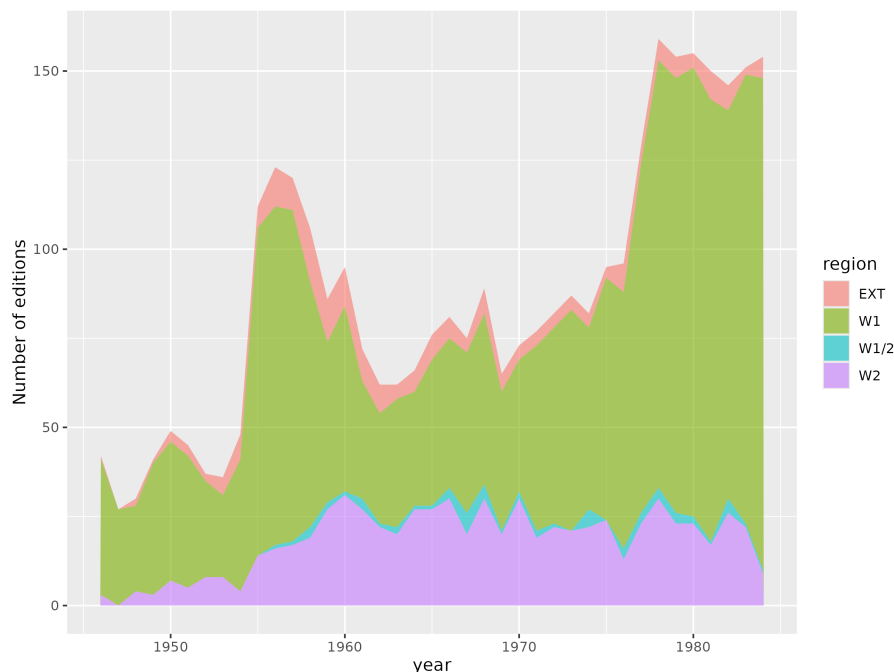


Figure 2: Diachronic distribution of translations from different regions, number of editions by year

The typical share of publications by living authors for the most of the analyzed regions is 70–80%. However, the Western World stands out sharply from this typical picture: living authors account for slightly more than half (55%) of all Western authors during the period, while editions of works by living authors account for only 16%. In terms of circulation, the picture is more mixed. The share of circulation by living authors fluctuates around 60%, but there are deviations in both directions. In the Third World (EXT), the share of circulation by living authors reaches 77% (this figure is most likely an underestimate, as there are more authors with unspecified dates of birth there). But only 11% of circulated copies is attributed to contemporary Western authors (W1).

Translations from some source languages are dominated by the works by popular authors. This effect can be stronger for smaller languages. For instance, works by 8 authors were translated from Danish, but 95% of these are by Andersen. Larger languages typically present a more egalitarian picture. The translations of the top English-language author, Mark Twain, amount for only 9% of all translations for English. The accumulated translations for each language were computed using the whole dataset since 1918.

5 Results

The statistical model supports the conclusion that the censorship regime associated with the Western world had a strong negative effect on the vitality coefficient, even after taking into account the competition with the accumulated translations from the European languages (fig. 3). This effect stands out in contrast to all other regions, very similar to each other in terms of expected vitality. According to the model's estimation, the regime for the translations from the languages of the Eastern bloc (W2) and Yugoslavia (W1/2) was slightly more favorable to the publication of the

translations during the author's lifetime than for the languages of the Third world (EXT). But this discrepancy may be explained away by the fact that vitality coefficient for the EXT region is likely an underestimate due to higher rate of missing data.

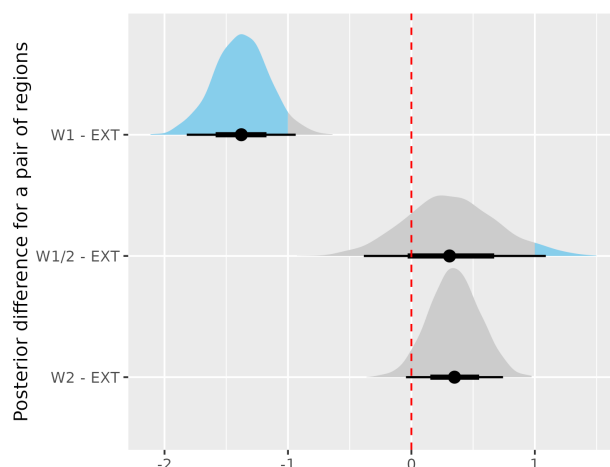


Figure 3: Posterior distribution for the relative effect of the region on the vitality coefficient (logit scale). The EXT (“the rest of the world”) region is used as a basis for comparison. Mean posterior distribution difference, with 50% and 95% compatibility intervals, and posterior distribution density for the regional differences

The dynamics of the vitality coefficients captured by the time-varying component of the model closely reflects the relative political pressure during the period (fig. 4). Notably, Khrushchev’s Thaw resulted in the rapid growth of the vitality coefficient from its historical low of the late Stalinism in all of the regions. No translations originating from Yugoslavia were attested before 1956. But the effect quickly wore off after the change of the leadership. The difference between the W1 and W2 manifests itself in the Brezhnev period when contemporary Western authors became disfavored again while admissibility of the contemporary authors from the Eastern bloc converged to the mean level for that region. Data on Yugoslavia is too sparse to be very sure about the trend which is reflected in wide compatibility intervals.

The overall form and the timing of the inferred trends is in very good accord with the periodization of relative censorial pressure suggested on the qualitative grounds [14; 25].

The model also allows to identify two additional causal effects. As expected, accumulated translations demonstrate a negative influence on the vitality coefficient (posterior mean -0.35 ; 89% CI -0.41 to -0.29). The signing of the Geneva convention by USSR barely had a large influence according to this model. But if anything, it was slightly positive for the rate of translation of contemporary foreign writers (mean posterior difference 0.26 ; 89% CI -0.05 to 0.57).

The upside of a generative Bayesian model is that it can be used to simulate the expected effect in a counterfactual scenario. One can use the model to estimate how many translated books by contemporary Western writers were lost to Soviet children due to the pressure of the political censorship. If the translations originating from the Western world were subject to the same political conditions as those of the Eastern bloc, the model predicts that the total number of publications of contemporary Western children’s books in Russian (389) would more than triple. The mean estimate for this counterfactual condition is 898 more editions of contemporary Western writers. Surely there is a huge uncertainty about the exact number (89% compatibility interval: 135–1595 more editions). Interestingly, the model expects there would be more translations from all the European languages, except two: Italian and Swedish. This is explained by the fact that Gianni

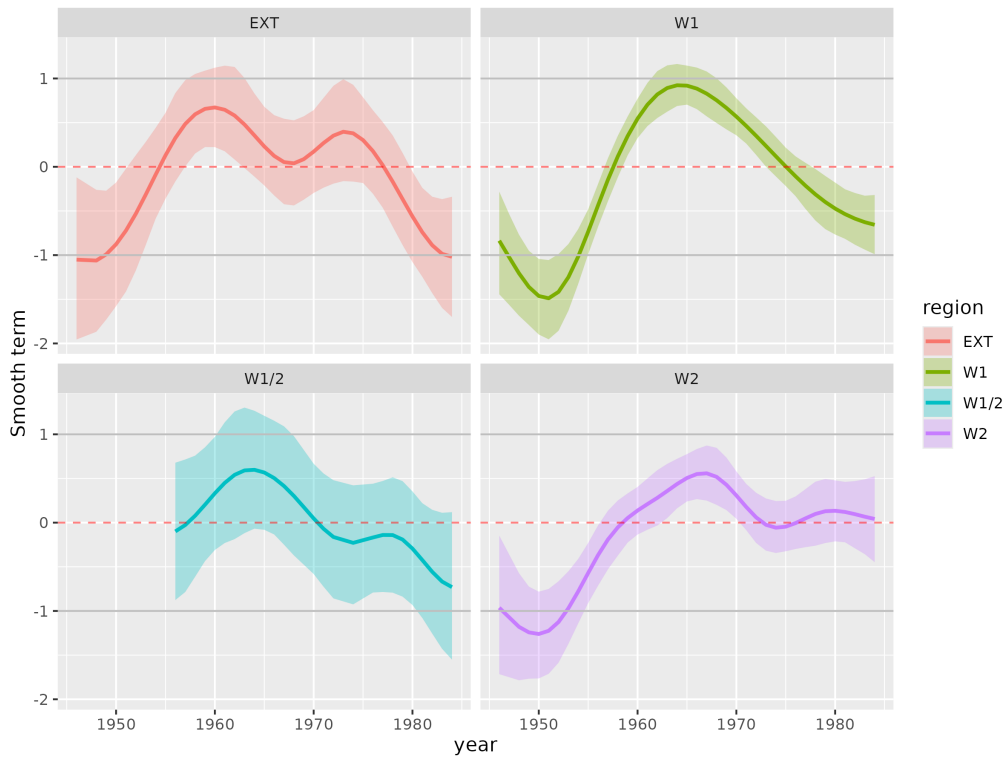


Figure 4: Time-varying effects of political pressure on vitality, by region. Mean and 89% compatibility interval for the estimated trends

Rodari and Astrid Lindgren already had exceptionally high number of published Russian editions during the period.

6 Discussion

Political and ideological confrontation with the West caused the closing of the Soviet literary space from the contemporary literary process. Soviet contemporaries and later historians have made this observation before: “As contemporary works were the most likely to contain anti-revolutionary content, an image of English-language children’s literature was constructed which was largely defined by nineteenth century and early twentieth century writers, such as Mark Twain, Daniel Defoe, Robert Louis Stevenson, Jack London, and William Mayne Reid” [10, p. 83].

This observation is much less often quantified. The metrics used in the literature that reflect the relative inaccessibility of contemporary foreign literature include the mean birth year of the translated authors [24] and the mean delay between the original editions and their translations [3, pp. 269–271]. Both would be necessarily correlated with the vitality coefficient suggested in this paper and may serve as alternatives. The advantage of the vitality coefficient is that it is a simple index more directly related to the causal mechanisms of political censorship. Moreover, vitality coefficient proved to be sensitive both to overall pressure of the regime’s political censorship and its historical fluctuations. It allows to trace how changes in the political climate affected the relative openness of Soviet children’s literature towards literary systems of adversaries and allies.

The interpretation of lower vitality coefficient as evidence for political censorship may still be viewed as problematic in case of W1. The main confounding factor is the much larger literary capital consisting of widely circulated works by the authors included in the literary canon. The popularity of the canonic authors may account for some part of the decrease of the vitality coef-

ficient of the region. The linguistic capital term included in the model in this paper is aimed to account for this confounding factor. But it is hard to tell whether the chosen operationalization allows to account for it in full. How to quantify the effect of literary capital on the vitality coefficient remains thus an open question.

The share of living authors in the translation flow measured by the vitality coefficient is by construction the inverse of the share of the authors of the past. And the main reason for older books to stay in print is the canonical status of their authors. Vitality coefficient should thus be negatively correlated with the share of books by the canonical authors (however one defines canonical status) in the same market segment. This fact helps realize a side effect of the political censorship barriers that is not much talked about: by hindering the publication of current authors, censorship reinforces the position in the book market of the already well-established and familiar authors. If we assume that reprints contribute to the canonical status of a writer, censorship is then an indirect but real factor for canon consolidation.

The relevance of the vitality coefficient may not be limited to the case of USSR during the Cold War. Other modern political barriers can have a similar effect on the flows of translations in the transnational literary field.

References

- [1] Abramitzky, Ran and Sin, Isabelle. “Book translations as idea flows: The effects of the collapse of Communism on the diffusion of knowledge”. In: *Journal of the European Economic Association* 12, no. 6 (2014), pp. 1453–1520.
- [2] Baer, Brian James and Merkle, Denise. “Introduction: Theorizing Translation and Censorship”. In: *The Routledge Handbook of Translation and Censorship*. Routledge, 2024, pp. 1–10.
- [3] Chalvin, Antoine, Muller, Jean-Léon, Talviste, Katre, and Vrinat-Nikolov, Marie. *Histoire de la traduction littéraire en Europe médiane*. Rennes, PUR, 2019.
- [4] Djalalov, Rossen. *From internationalism to postcolonialism: Literature and cinema between the second and the third worlds*. McGill-Queen’s Press-MQUP, 2020.
- [5] Franssen, Thomas. “Book translations and the autonomy of genre-subfields in the Dutch literary field, 1981–2009”. In: *Translation Studies* 8, no. 3 (2015), pp. 302–320.
- [6] Gamper, Michael, Müller-Tamm, Jutta, Wachter, David, and Wrobel, Jasmin. “The Value of Literary Circulation—An Introduction”. In: *Der Wert der literarischen Zirkulation/The Value of Literary Circulation*. Springer, 2023, pp. 1–24.
- [7] Goodwin, Elena. *Translating England into Russian: The politics of children’s literature in the Soviet Union and modern Russia*. Bloomsbury Publishing, 2019.
- [8] Heilbron, Johan. “Towards a sociology of translation: Book translations as a cultural world-system”. In: *European journal of social theory* 2, no. 4 (1999), pp. 429–444.
- [9] Heilbron, Johan and Sapiro, Gisèle. “Politics of translation: How states shape cultural transfers”. In: *Literary Translation and Cultural Mediators in ‘Peripheral’ Cultures: Customs Officers or Smugglers?* Springer, 2018, pp. 183–208.
- [10] Inggs, Judith A. “Censorship and translated children’s literature in the Soviet Union: The example of the Wizards Oz and Goodwin”. In: *Target. International Journal of Translation Studies* 23, no. 1 (2011), pp. 77–91.
- [11] Kamovnikova, Natalia. *Made under pressure: literary translation in the Soviet Union, 1960–1991*. University of Massachusetts Press, 2019.

- [12] Kuppler, Matthias. “Of centers and peripheries: Explaining the macro-structure of book translation flows in Europe”. In: *Poetics* 113 (2025), p. 102054.
- [13] Leto, Maria Rita. “The Politics of Translation in Yugoslavia from 1945 to 1952”. In: *Translation under communism*, ed. by Christopher Rundle, Anne Lange, and Daniele Monticelli. Springer, 2022, pp. 175–206.
- [14] Lygo, Emily. “Between ideology and literature: Translation in the USSR during the Brezhnev period”. In: *Ideology, Censorship and Translation*. Routledge, 2021, pp. 48–58.
- [15] Lygo, Emily. “Translation and the Cold War”. In: *The Routledge Handbook of Translation and Politics*. Routledge, 2018, pp. 442–454.
- [16] Maslinsky, Kirill. “Bibliografiia detskoi knigi [Bibliography of children’s books] 1918–1984”. Version V5. 2022. DOI: 10.31860/openlit-2022.12-B010. URL: <https://doi.org/10.31860/openlit-2022.12-B010>.
- [17] Maslinsky, Kirill. “Replication data for: Measuring the effect of censorship on translation flow”. Version 1.0. Zenodo, Apr. 2026. DOI: 10.5281/zenodo.19863986. URL: <https://doi.org/10.5281/zenodo.19863986>.
- [18] McElreath, Richard. “rethinking: Statistical Rethinking book package”. R package version 2.42, commit ac1b3b2cda83f3e14096e2d997a6e30ad109eeee. 2024. URL: <https://github.com/rmcelreath/rethinking>.
- [19] Merkle, Denise and Baer, Brian James. *The Routledge handbook of translation and censorship*. Routledge, 2025.
- [20] Monticelli, Daniele. “‘Totalitarian Translation’ as a Means of Forced Cultural Change: The Case of Postwar Soviet Estonia”. In: *Between Cultures and Texts. Itineraries in Translation History. Entre les cultures et les texts. Itinéraires en histoire de la traduction* (2011), pp. 187–200.
- [21] Pitkäsalo, Eliisa and Oittinen, Riitta. “On Translation and Censorship of Children’s Literature during the Cold War in Europe”. In: *The Routledge Handbook of Translation and Censorship*. Taylor & Francis, 2025.
- [22] Popa, Ioana. “Traduire sous contraintes”. In: *Littérature et communisme (1947-1989)*, CNRS Éditions, Paris (2010).
- [23] Pym, Anthony. *Method in translation history*. Routledge, 2014.
- [24] Šajkevič, Anatolij JA. “Bibliometric analysis of index translationum”. In: *Meta* 37, no. 1 (1992), pp. 67–96.
- [25] Sherry, Samantha. *Discourses of Regulation and Resistance: Censoring Translation in the the Stalin and Khrushchev Era Soviet Union*. Edinburgh University Press, 2015.
- [26] Stan Development Team. “Stan Modeling Language Users Guide and Reference Manual, version 2.38”. 2026. URL: <https://mc-stan.org>.
- [27] Vimr, Ondrej. “Supply-driven translation: compensating for lack of demand”. In: *Translating the literatures of small European nations*. Liverpool University Press, 2019, pp. 47–67.
- [28] Vimr, Ondřej. “A computational approach to the history of Czech literature in translation during the Cold War (1948–1989)”. In: *Translation Studies* 18, no. 1 (2025), pp. 137–155.

A The model specification

The model predicts the probability that a work by an author from particular region, with a given original language, published in a particular year will turn out to be by a living author. This probability corresponds to the vitality coefficient. The number of the translations from a source language published in each year, as well how many of them are actually works by living author, are taken from the bibliography as external data. The mathematical specification of the model, including the priors, is given in the Equation 1.

$$\begin{aligned}
 V_i &\sim \text{Binomial}(N_i, p_i) \\
 \text{logit}(p_i) &= R_{\text{region}} + \beta \log(C_{\text{language, year}}) + L_{\text{copyright regime}} + \sum_{k=1}^K w_k B_{k,i} \\
 R_{\text{region}} &\sim \text{Normal}(0, 2) \\
 \beta &\sim \text{Normal}(0, 0.5) \\
 L_{\text{copyright regime}} &\sim \text{Normal}(0, 0.25) \\
 w_k &\sim \text{Normal}(0, 1)
 \end{aligned} \tag{1}$$

Here, V_i is the number of books by living authors translated from a given language in a given year, N_i is the total number of translations from that language published in the same year. p_i is the probability to publish a translation from a source language by a living author in a given year. C — accumulated translation capital for the language, attained in a given year. L — coefficient for a copyright regime, $\mathbf{B}$ — basis functions. Cubic splines (10 knots) were used to estimate variation of political censorship with time separately for each region. The priors were selected using prior predictive simulation with the specified model. The aim was to ensure that priors are compatible with a realistic range of outcome values (vitality coefficients and their temporal dynamic).