

# GEOMAPPING BIBLIOGRAPHIC TRANSLATION DATA FROM THE GERMAN NATIONAL LIBRARY CATALOGUE: A CASESTUDY

Making translations in the German National Library Catalogue visible in geographic space using a Shiny web application

APP:  
<http://lt-ladirec.shinyapps.io/GeomappingTranslationsPrototype>

LINK TO DATASET AND R SCRIPTS:  
<https://doi.org/10.5683/SP3/VNUEPO>

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## AFFILIATIONS

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## BACKGROUND

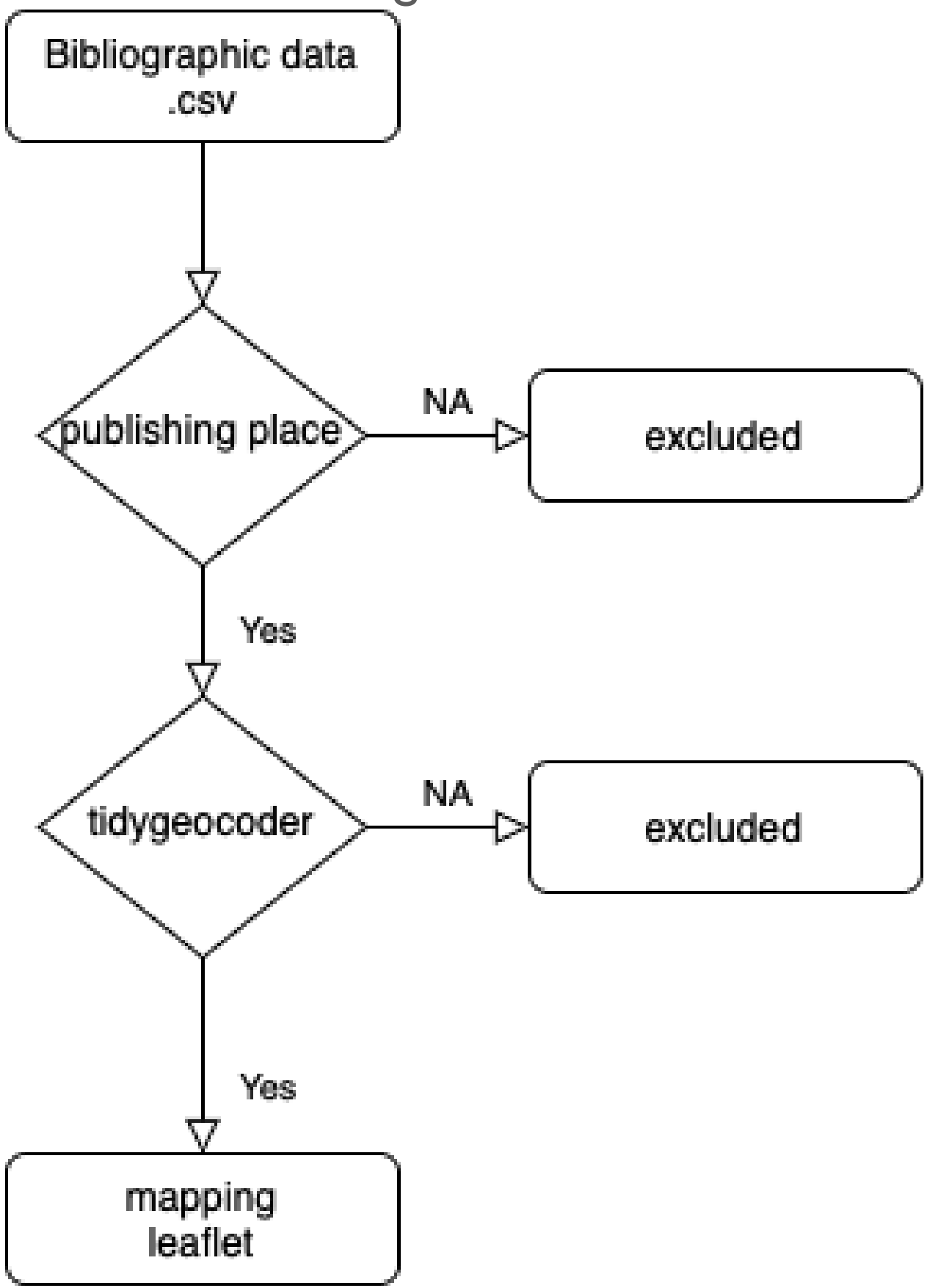
According to the Index Translationum German is one of the most translated source languages, however to this date tools in order to map the translation flow of German literature and explore dynamics and routes of literary transfer have not been developed yet. Due to its collection policies and data accessibility, the German National Library catalogue is an immensely rich open resource for bibliographic data, containing information on publication places, publishers, and languages. However, to date there is still a lack of datasets for bibliographic translation data of German fiction. This project aims at visualizing translations in the German National Library catalogue and therefore making this rich resource of bibliographic data accessible to the field of Digital Humanities, German and Translation Studies, and Comparative Literature. By presenting a prototype app as a portal of exploration, this project aims at testing different data visualizations and their web integration in order to develop a user-friendly platform which can be adapted for the teaching environment.

## DATASET

For the purpose of creating a prototype, the translations of selected authors (Ingeborg Bachmann, Yoko Tawada, Verena Stefan, Herta Müller, Emine Sevgi Özdamar, and Ilse Aichinger) have been extracted from the Datenshop portal of the German National Library by using an expert query that includes the condition spo=ger (spo standing for original language and ger for German). The resulting table (CSV format) is composed of 483 titles and includes a column containing the publisher's name and publishing place. Additionally, the dataset also contains target language and countries of publication amongst other variables. Based on the publisher column, the publishing places can be extracted and geocoded.

## GEOMAPPING

Geocoding – the process of assigning latitude and longitude coordinates to the extracted place names – was done by using the tidygeocoder package from CRAN in the R Studio environment. Coordinates could be assigned for all except for nine places due to place name ambiguity and the multilingual nature of the publisher information. Geomapping was done in the leaflet package adding a layer of points grouped by authors that represent the publishing places of translated titles.

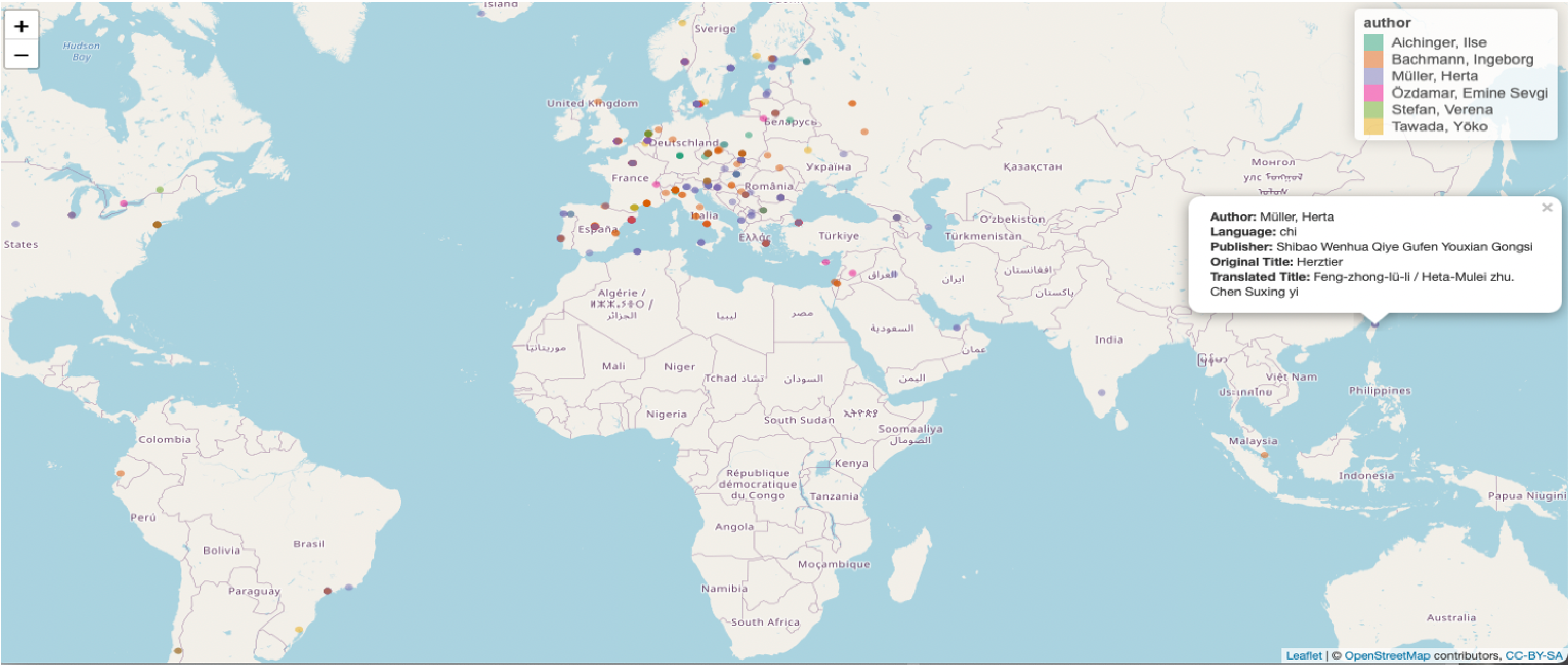


## ACKNOWLEDGEMENTS

I want to thank Pascal Brissette for teaching me how to use Shiny. If you want to learn how to create a Shiny app see: [https://github.com/LADIREC/ladirec\\_01atelier\\_shiny](https://github.com/LADIREC/ladirec_01atelier_shiny)

## SHINYAPP

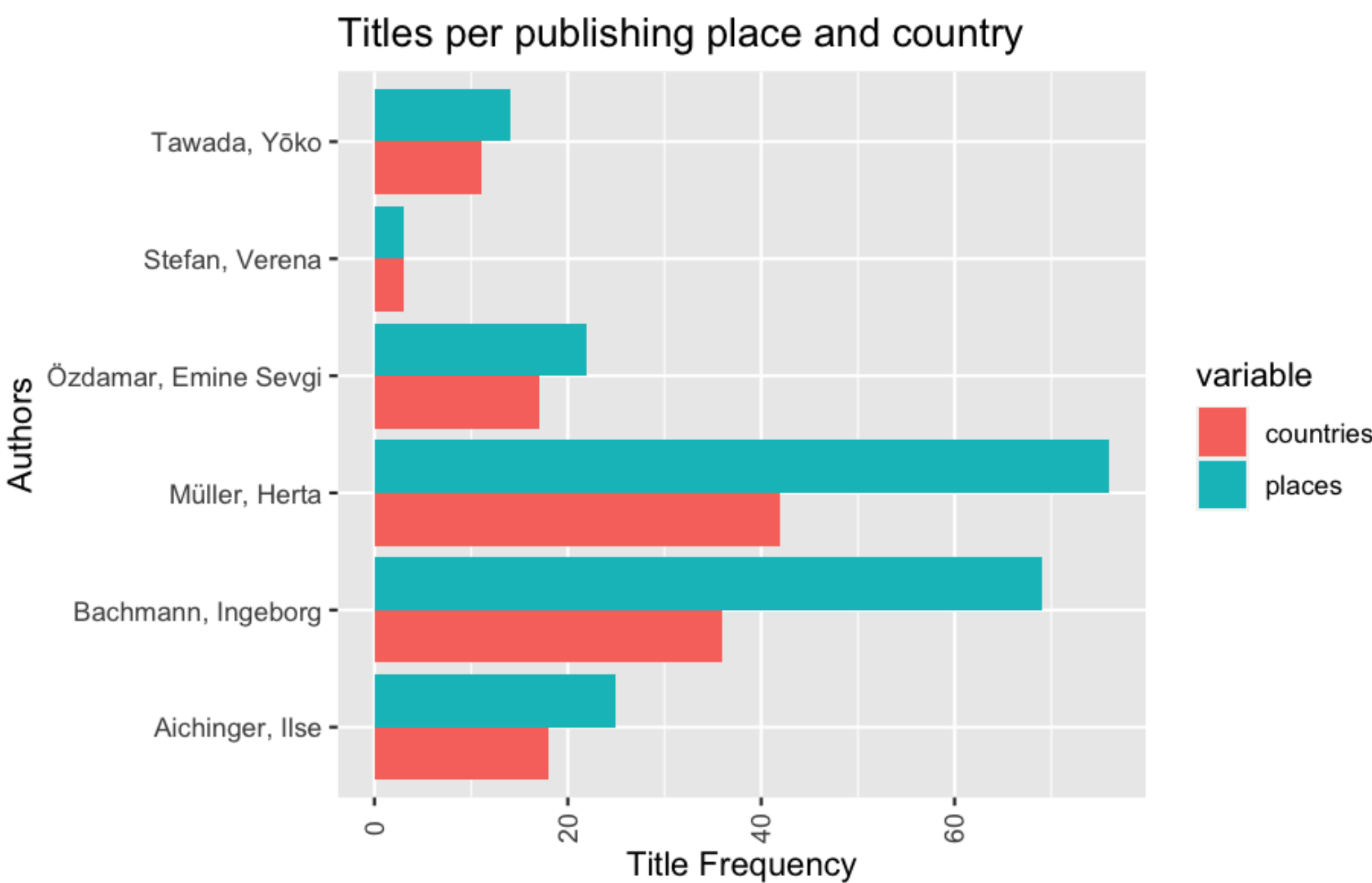
The Shiny app represents a simple, interactive visualization of the publishing places by author. It invites the user to explore translated titles in geographic space, compare the reach different authors have by means of their translations, and also identifying important publishing centres of publishers. Leaflet provides the user with the possibility to interact with the map by zooming and clicking on points on the map. The popup window displays further information on the specific titles, the target language, and the publisher. Figures of preliminary results of the frequency distributions for publishing places and countries per author as well as target languages have also been added to the application for comparison.



Visualization of translated novels originally published in German (January 15th, 2022) with data from the German National Library using R and leaflet. Geocoded with the Nominatim API and tidygeocoder. Source: <https://portal.dnb.de/>

## RESULTS

While the map highlights the overall geographic distribution and hotspots of translations for each author, comparing in how many countries versus in how many publishing places an author's translation gets published, gives a sense of how specialized certain authors are in a number of countries. Ingeborg Bachmann, for instance, has translations published in seven different places in Italy and six of Herta Müller's translations are published in Spain including translations into Galician and Basque, which underlines the importance of these countries for the distribution of their translations.



## FUTURE STEPS

The presented visualizations, dataset, and web application represent a prototype for a geographic map of all catalogued translations in the German National Library. The next step is to design an app for the complete translation dataset which will be published in the near future as part of the supplemental material of the author's PhD thesis. Additionally, data visualizations will be added to the app, such as network graphs illustrating the relationships between authors, publishing places, languages, and publishers. The map will also be expanded by adding layers with filters by target languages. For now, the map does not include polygons to mark the countries, which is also planned to be added.

TRY THE APP

