

CMS WORKING PAPER 2023/4

Andisheh Ghaderi and Antje Ziethen

Mapping African Migration Literature Across the Atlantic

September 2023

Editors:

Antje Ellermann, Alessandra Santos, Matthew Wright, and Gaoheng Zhang

The **CMS Working Paper Series** is published electronically by the Centre for Migration Studies (CMS) at the University of British Columbia (UBC).

© Copyright is held by the author or authors of each Working Paper. CMS Working Papers cannot be republished, reprinted, or reproduced in any format without the permission of the paper's author or authors.

Note: The views expressed in each paper are those of the author(s) of the paper. They do not necessarily represent or reflect the views of the Centre for Migration Studies, the Editors, or the University of British Columbia.

Citations of this electronic publication should be made in the following manner: Ghaderi, Andisheh, and Antje Ziethen. "Mapping African Migration Literature Across the Atlantic," UBC CMS Working Paper, 2023/4, September 2023, https://migration.ubc.ca/research/working-paperseries/.

CMS Working Paper Series Editors

Antje Ellermann Matthew Wright Gaoheng Zhang

Editorial Assistant: Fiana Kawane

Copy Editor: Gabriele Dumpys Woolever

Centre for Migration Studies University of British Columbia

1855 West Mall, Room 322 Vancouver BC V6T 1Z2 Canada

Tel: (604) 827 6401

Website: www.migration.ubc.ca
Email: admin.migration@ubc.ca

The Centre for Migration Studies (CMS), a UBC Research Excellence Cluster, was established as a university-level centre in the Faculty of Arts in 2020 as one of the strategic initiatives of the University of British Columbia (UBC). The Centre's mandate is to provide an interdisciplinary home for migration and mobility research at UBC and promote cutting-edge research, graduate training, and community and policy outreach on issues of migration. Within UBC, the Centre is supported by UBC's Excellence Funds, the Faculty of Arts (Dean's Office), the Departments of Political Science, Sociology, Geography, Anthropology, Central, Eastern and Northern European Studies, and the Peter A. Allard School of Law.

Abstract

The working paper presents the methodology as well as preliminary results and visualizations of a digital humanities project that explores transatlantic migration in African literature through a computing and cartographic approach. At its current stage, the study encompasses 26 texts (out of 70) – written in English, French, Portuguese, and Arabic – from across the African continent that deal with migration to Brazil, Canada, and the US. Mapping geographic and socioeconomic data collected from a larger corpus is a powerful tool to reveal both the multi-sited nature of African writing produced by flows and circulations and the multidimensional experience of migration represented in the novels – voluntary or involuntary, indirect or direct. Moreover, it allows to draw conclusions in terms of migration corridors, clusters, flows, transit routes, and gender ratio. The results are showcased using the digital storytelling tool *ArcGIS StoryMaps* in order to promote open and inclusive forms of scholarly production. This mapping project is the first of its kind and aims to reinvigorate the field of comparative African Literature. Ultimately, the objective is to contribute to the decolonization of the Digital Humanities (DH) by applying its tools to African Studies.

Authors

Andisheh Ghaderi has a Ph.D. in French Studies from the University of British Columbia. Her research focuses on representations of the American Dream in Francophone literature and issues related to migration, race, class, and gender. Her most recent work has appeared in *The French Review, South Atlantic Review*, and *Mouvance Francophone*.

Antje Ziethen is Assistant Professor in the Department of French, Hispanic & Italian Studies at UBC. She specializes in Francophone literatures from West Africa, the Indian Ocean, and the Caribbean, with particular interests in urban space, migration, and gender. Her most recent publications deal with the reverse Diaspora, the Black Mediterranean, African speculative fiction, and the concept of geographic metafiction.

Table of Contents

Introduction	1
Literature Review	3
Methodology	5
Discussion of Preliminary Results	8
Conclusion	
Literary Texts	16
Secondary Sources	18

Introduction

Many of Africa's most acclaimed writers have lived in the Americas. Notable authors such as Nobel Prize Laureate Wole Soyinka, Chinua Achebe (the "father of African literature"), Ngugi wa Thiong'o, Nurrudin Farah, and Chimamanda N. Adichie have all taken this path in order to escape persecution, pursue higher education, or benefit from job mobility. The experience of exile and migration often finds its way into their work, resulting in a blend of biographical and fictional itineraries. Indeed, in recent years, migration to the Americas has become an important theme in contemporary African fiction. However, scholarship has yet to engage with it in a meaningful and systematic way. It must be noted that African migration literature reflects "real" trends and patterns. Starting in the 1990s, restrictive immigration policies in European countries changed migration flows and made the Americas more attractive for African immigrants. Statistics show that the number of African immigrants in the Americas has grown rapidly. In the last 15 years, Africans have shown the fastest growth rate among Black immigrant groups in the US. In Canada, Africa now ranks second as a source continent of recent immigrants. In Brazil, Africans represent 65 percent of all asylum seekers, according to Brazil's National Committee for Refugees (Conare).

This working paper explores transatlantic migration in African literature through a computing and cartographic approach with the goal of mapping and performing distant readings of texts that deal with migration to Brazil, Canada, and the US – the three most prominent destinations in African literature.⁴ While the entire project will eventually include 70 titles, so far we have mapped data from 26 texts written by authors from across the African continent and published between 1990 and 2022 in English, French, Portuguese, and Arabic.⁵ Research on African literatures rarely adopts such a pan-African perspective, as texts are most often studied in

^{1.} Christine Tamir, "Key Findings About Black Immigrants in the U.S.," Pew Research Center, updated January 27, 2022, https://www.pewresearch.org/short-reads/2022/01/27/key-findings-about-black-immigrants-in-the-u-s/.

^{2. &}quot;Immigration and Ethnocultural Diversity: Key Results from the 2016 Census," Statistic Canada, updated Ocotber 25, 2017, https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025b-eng.htm.

^{3.} Luis Andres Henao, "African Immigrants Drift Toward Latin America," Reuters.com, updated January 15, 2009, https://www.reuters.com/article/us-latinamerica-africans-idUSTRE5AF0AG20091116.

^{4.} Sami Tchak's novel focuses on Mexico. Sami Tchak, Filles de Mexico (Paris: Mercure de France, 2008).

^{5.} *Chicago* by Al-Aswany is a novel written in Arabic but we used the English translation for this project. Alaa Al-Aswany, *Chicago: A Novel* (New York: Harper, 2007).

separate subfields: African, English, French, and Portuguese Studies. Our selection overrides this typical (and limiting) compartmentalization of African Studies divided by language.

Mapping geographic and sociological data collected from a large number of novels is a powerful tool to uncover dynamics that would go unnoticed when closely reading only a few texts. It reveals the multi-sited nature of African writing produced by flows and circulations as well as the multidimensional experience of migration – voluntary or involuntary; direct or indirect. Moreover, we have been able to draw preliminary conclusions in terms of migration corridors, clusters, flows, transit routes, and gender ratios. Results will be showcased using the digital storytelling tool *ArcGIS StoryMaps* in order to promote open and inclusive forms of scholarly production. For the purpose of this paper, we focus on the methodological aspects of the project and discuss preliminary findings based on maps, charts, and graphs extracted from our StoryMap.⁶ Ultimately, our objective is to contribute to the decolonization of digital humanities (DH) by applying its tools to African Studies. DH projects in this area are still a marginal phenomenon, as most studies concentrate on North America and Europe. Babalola T. Aiyegbusi states:

Historically, digital humanities has flourished more in developed countries. Scholars who have a grasp of its dynamic multifaceted scope have mostly one thing in common: the Western world. This notion is supported by a list of DH centers provided by CenterNet, an international network of digital humanities centers, which accounts for about 190 centers spread across the world; most of these are located in developed parts of the world, that is, North America, Australia, and Europe; a few are in Asia and South America with just two in Africa (CenterNet).⁷

Located in Nigeria and South Africa, these two centers document African languages and their oral traditions. Other scholars in African DH, such as James Yeku, have focused on creating digital

2

^{6.} The ArcGIS website is scheduled to go live in late 2023.

^{7.} Babalola T. Aiyegbusi, "Decolonizing Digital Humanities," in *Bodies of Information: Intersectional Feminism and the Digital Humanities*, ed. Elizabeth Losh and Jacqueline Wernimont (Minneapolis: University of Minnesota, 2018), 434.

^{8.} Emmanuel Ngue Um, "Endangered Languages Project," accessed April 21, 2023, https://www.endangeredlanguages.com/about/; "SADiLaR Language Resource Repository," South African Centre for Digital Language Resources, accessed April 21, 2023, https://www.sadilar.org/index.php/en/.

repositories for artifacts and analyzing data from social media. However, our research is the first of its kind to visualize the topic using a literary mapping project and aims to reinvigorate the field of comparative African Literature.

Literature Review

The project's focus on spatial relations aligns with what is commonly referred to as the "spatial turn." This describes a shift in the humanities and social sciences from which new lines of inquiry and research areas have emerged. Scholars have developed interdisciplinary approaches that examine the role of space in literature and how literature "does" geography. The most prominent examples are geocriticism, 10 the narratology of space, 11 literary geography, 12 and literary urban studies. 13 These approaches all start from the premise that space is key to interpreting literary texts, as actions take place both at a precise moment in time and in a particular location. 14 More recently, there has been a significant emphasis on data visualization within Digital Humanities. Data visualization involves creating visual representations of data to unveil insights and trends that might not be immediately evident from raw data. This has been accompanied by a "cartographic turn" in the humanities and social sciences, where maps, digital technology, and visualization have taken a prominent role in the analysis of literary works. Interactive maps, timelines, and graphs have become valuable tools, offering new ways to explore and understand the spatial and temporal dimensions of literature. 15 With this being said, mapping literary geographies is certainly not new. As Ann-Kathrin Reuschel and Lorenz Hurni note, "literary

^{9.} James Yeku, "The Hashtag as Archive: Internet Memes and Nigeria's Social Media Election," in *Art, Creativity, and Politics in Africa and the Diaspora. African Histories and Modernities*, ed. Adelakun Abimbnola and Toyin Falola (London: Palgrave Macmillan, 2018), 217-245.

^{10.} Bertrand Westphal, *La Géocritique: réel, fiction, espace* (Paris: Édition de Minuit, 2002); Robert Tally, ed., *Spatial Literary Studies: Interdisciplinary Approaches to Space, Geography, and the Imagination* (London, New York: Routledge, 2020).

^{11.} Marie-Laure Ryan, "Narrative Cartography: Towards a Visual Narratology," in *What Is Narratology? Questions and Answers Regarding the Status of a Theory*, ed. Tom Kindt and Hans-Harald Müller (Berlin: Walter de Gruyter, 2003), 333-364; Katrin Dennerlein, *Die Narratologie des Raumes* (Berlin: Walter de Gruyter, 2009).

^{12.} Michel Collot, *Pour une géographie littéraire* (Paris: Corti, 2014); Robert Tally, ed., *Literary Cartographies: Spatiality, Representation, and Narrative* (New York: Palgrave, 2014).

^{13.} Jeremy Tambling, ed., *The Palgrave Handbook of Literature and the City* (New York: Palgrave MacMillan, 2016); Malcolm Miles, *Cities and Literature* (London; New York: Routledge, 2018); Jason Finch, *Literary Urban Studies and How to Practice It* (New York: Routledge, 2021).

^{14.} Dennerlein, "Narrative Cartographie," 4.

^{15.} Jacques Lévy, *A Cartographic Turn: Mapping and the Spatial Challenge in Social Sciences* (Chicago: University of Chicago Press, 2015).

atlases have been in circulation since the late nineteenth century, and early quantitative experiments in literary cartography followed shortly thereafter."¹⁶ However, Franco Moretti, Barbara Piatti, and the Stanford Literary Lab have opened up new avenues in literary cartography using digital tools.¹⁷ Their maps have revealed the geographical reach of particular authors and genres, the relations between geographical, imagined, and figurative spaces, and the networks of correspondence between intellectuals since the 17th century.

This interdisciplinarity presents certain challenges because scholars have to be as "comfortable with material tinkering, engineering diagrams, and programming languages as [they are] with close reading and historical contextualization." While this array of skills certainly requires additional training, it is not mandatory to be an expert in all of them. Rather, research in digital literary studies generates fruitful collaborations between scholars that otherwise would never have worked together. While literary mapping is sometimes criticized for its reductive and fragmentary approach, Piatti points out that abstraction and quantification are always counterbalanced by both comparative and contextual analysis. This interpretative work strives to find answers to the questions raised by its unique cartography. Both Moretti and Piatti emphasize that the work of a literary geographer does not end, but rather begins, with a map.

So, why map literature? Scholars agree that it allows for the combining of two modes of reading: distant and close reading. Originally introduced by Franco Moretti, distant reading is widely understood as the application of computational methods to literary data. ²⁰ Joanna Taylor et al. contend that "[a] full appreciation and understanding of texts, places, and spaces depends upon an ongoing interplay between generalization and detailed inquiry. ... Digital approaches to literary geography have provided a productive focal point for such negotiations of scale."²¹ They can

4

^{16.} Anne-Kathrin Reuschel and Lorenz Hurni "Mapping Literature: Visualisation of Spatial Uncertainty in Fiction," *The Cartographic Journal* 48, no. 4 (2011): 293.

^{17.} Franco Moretti, *Atlas of the European Novel, 1800-1900* (London, New York: Verso, 1998); Barbara Piatti et al., "Mapping Literature. Towards a Geography of Fiction," *Proceedings of the Symposium "Art & Cartography"* (Vienna: University of Vienna, 2008), n.p.; "Project Archive," Stanford Literary Lab, accessed April 22, 2023, https://litlab.stanford.edu/projects/archive/.

^{18.} Roger Whitson, *Steampunk and Nineteenth-Century Digital Humanities: Literary Retrofuturisms*, *Media Archaeologies*, *Alternate Histories* (New York and London: Routledge, 2017), 5.

^{19.} Barbara Piatti, "Mit Karten lesen. Plädoyer für eine visualisierte Geographie der Literatur," in *Textwelt-Lebenswelt*, ed. Bernd Boothe et al. (Würzburg: Königshausen & Neumann, 2012), 273.

^{20.} Franco Moretti, Distant Reading (London: Verso, 2013).

^{21.} Joanna Taylor et al., "Mapping Digitally, Mapping Deep: Exploring Digital Literary Geographies," *Literary Geographies* 4, no. 1 (2018): 12.

uncover connections and patterns which lead to a deeper understanding of an individual text or even draw out features from a number of texts – selected by author, genre, motif, or epoch. Literary geography, especially in its digital form, is capable of challenging conventional research practices, "generating new modes of knowledge production and advancing new means of expression."²²

A review of relevant scholarship reveals that there are currently no studies on digital literary geography in African literature. The few projects involving geography in an African context focus on historical maps produced during colonial occupation. Otherwise, they perform textual analyses to show how individual African novels represent geography, but without a mapping component. Digital mapping projects on a larger scale exist only for European texts, such as Piatti's maps featuring central Switzerland, Cooper's and Gregory's work on writings from the English Lake District, and the ongoing project "Mapping the Republic of Letters" at Stanford University. There are also mapping projects in literary history such as Moretti's *Atlas of the European Novel*, 1800-1900 and Isasi's and Rodrigues' cartography of Iberian literary relationships. While we draw inspiration from these existing projects, our study explores uncharted territory because it focuses on contemporary African literature and transatlantic migration.

Methodology

Our methodology mobilizes tools that still remain isolated within individual fields, ranging from textual analysis and data collection and management to coding and visualization. Randa El Khatib and Marcel Schaeben rightly argue that building a project and a methodology are in and of themselves "a form of knowledge production that can grant new ways of engaging

^{22.} Taylor, "Mapping Digitally," 12.

^{23.} Dominic Thomas, "African Cartographies in Motion," in *Literature and Cartography: Theories, Histories, Genres*, ed. Anders Engberg-Pedersen (Cambridge, Mass.: The MIT Press, 2017): 299-322.

^{24.} Dustin Crowley, *Africa's Narrative Geographies. Charting the Intersections of Geocriticism and Postcolonial Studies* (New York: Palgrave, 2015).

^{25.} Barbara Piatti, *Die Geographie der Literatur: Schauplätze, Handlungsräume, Raumphantasien* (Göttingen: Wallstein Verlag, 2008); David Cooper and Ian N. Gregory, "Mapping the English Lake District: A Literary GIS," *Transactions of the Institute of British Geographers* 36, no. 1 (2011): 89-108; "Mapping the Republic of Letters," Stanford University, accessed April 22, 2023, http://republicofletters.stanford.edu.

^{26.} Moretti, *Atlas*; Pérez Isasi Santiago and Catarina Sequeira Rodrigues, "Cartography as a Tool for Studying Iberian Literary Relationships: Evaluation of a Practical Experiment," *Literary Geographies* 7, no. 2 (2021): 189-213.

the text and imagining technical solutions to collaboratively visualize complex, multilayered, literary space."²⁷ Since this project requires expertise beyond our own discipline, one of us received training in using *JupyterHub*, *Anaconda*, and *ArcGIS StoryMaps* to acquire the necessary skillsets. As the experience of other scholars has shown, digital projects frequently encounter unexpected problems that can sometimes take a significant amount of time to resolve. Indeed, we have had to make specific adjustments to our methodology in response to challenges. For example, we aimed to create a code that would generate a comprehensive list of global locations along with their frequencies. However, our efforts were complicated by certain factors. Notably, the list of places from Global South countries was incomplete, impacting the accuracy of our results. Additionally, the code's functionality was hampered by the inclusion of highly particular terms that the program erroneously interpreted as place names – an instance of this was the term "an." This experience highlights the need for us to refine our approach to accommodate such complexities.

This study consists of three major phases. The first phase involved establishing a bibliography of texts according to the following three criteria: (1) The texts deal with African migration to North and South America. We thus exclude texts with protagonists that merely visit the Americas. (2) The texts are written in any language that we are able to read and that will be recognized by a geoparsing program (in our case French, English, and Portuguese). Translations into these languages are also accepted. (3) The study targets first-generation immigrant authors who were born on the African continent before migrating to the Americas. The criteria, therefore, exclude well-known authors such as Teju Cole or Uzodinma Iweala who are second-generation African immigrants. Our current bibliography contains 70 titles from across the African continent – from Egypt to South Africa, from Angola to Djibouti. Once this list of texts was established, we started the scanning process using CZUR digitizing tools. Although this type of scanner is equipped with advanced optical character recognition (OCR) technology that converts scans into searchable PDFs, it requires time-consuming manual work. If the resources that we borrowed from the library had user doodling, notes, and pencil marks, we had to remove those from the digitized version as they would interfere with our search and lead to the loss of

^{27.} Randa El Khatib and Marcel Schaeben, "Why Map Literature? Geospatial Prototyping for Literary Studies and Digital Humanities," *Digital Studies/Le Champ numérique* 10, no. 1 (2020): 3. Our methodology has been documented in a work journal that records and describes procedures while also identifying anomalies, errors, and challenges.

valuable data. Another issue related to words that fell at the end of one line and continued onto the next. In the end, we converted the searchable PDFs to text documents to minimize word recognition errors.

The second phase involved text mining in which we used *Anaconda* and *JupiterHub* to extract place names and geographical coordinates. Both are free, web-based code and data platforms for Python programming. Since our project is quite straightforward and does not involve a large amount of data, we decided to use the coding platform *Anaconda* because of its easy user interface. *Anaconda* allows us to text mine each novel for geographical information and transfer the resulting data into an Excel document. Moreover, the program also displays the surrounding paragraphs from which the mined place names and/or coordinates were extracted in order to verify the context (destination, transit, or simple reference). However, since *Anaconda* is an open-access database, any user can contribute to these lists and add to its code which can lead to a number of flaws in the resulting data sets. For example, although one novel resulted in supposedly 300 lines of extracted data, during the data filtering stage, we realized that only one-third of the data referred to place names; the rest was unusable. It was further concluded that the Python lists were not reliable as they did not register all of the place names mentioned in our texts, especially those related to places in the Global South. The project was thus facing difficulties related to lacunae in the information available online, and in coding more generally.

In the end, we designed our own list of places and coded our project outside of the Python environment. This involved skimming texts to extract data and proceed to the visualization stage. We collected the following information: (1) bibliographical information (author, title, year); (2) geographical data for authors and protagonists (country of origin, city of origin, country of destination, city of destination, transit locations); (3) sociological data for authors and protagonists (gender, type of migration). At this stage, it was also crucial to decide which questions to ask and to consider how best to use this data to gain meaningful new insights into transatlantic migration in African literature. Questions that we wanted to answer were: (1) What types of migration are represented in the texts? (2) Does transatlantic migration mainly involve urban spaces? (3) Which are the major corridors of migration? (4) Are there clusters of destinations and origins? (5) Do the protagonists follow indirect or direct routes of migration? (6) What is the proportion of female authors/protagonists?

The third phase involved generating visualizations that would allow us to interpret the data and identify trends, ratios, patterns, and other forms of relations. We also wanted to tell a story and make it aesthetically pleasing to the eye, avoiding the underwhelming appeal of Google pin maps. After much debating and testing, we decided to use ArcGIS StoryMaps, which is a digital storytelling tool that combines text, maps, videos, images, and sound to create dynamic digital narratives. It helped us generate maps allowing users to follow the spatial story arc of each protagonist. The StoryMap was then populated with images (author, book cover, pictures of home and host cities) as well as text (project description, author biographies, synopses, and analysis). The program's most valuable feature is certainly its global map option, which allowed us to pinpoint and color-code geographical places such as home city, host city, and transit cities. The result is a global flow map that displays all character movements and spatial relations across continents. Visualizations have to be understandable to clearly answer the questions asked, which is why the global map is supplemented by charts, tables, and graphs representing additional data in our StoryMap. This project was made public for three weeks during an initial testing phase and received over 360 views on ArcGIS Online, which is a testament to both the accessibility of our research and the interest in the topic. Since the project is still ongoing, public access is currently restricted in order to further enhance the visualizations and include data from the remaining texts.

Discussion of Preliminary Results

For the discussion section, we have chosen a map, charts, tables, and graphs based on data collected from the initial 26 texts (23 novels, 1 memoir, 2 short stories) analyzed for this project.²⁸ There are no particular criteria for this selection, as we mapped them in the order in which we discovered or scanned them. The questions we raised during the second phase of the project can only be answered partially, as there are many more texts to map, but there are a number of conclusions to draw even from these preliminary findings. Our first question, "What are the dominant types of migration?," is answered by Figure 1. More than three-quarters of the texts revolve around protagonists who migrate voluntarily, most often to pursue higher

^{28.} *How to Read the Air* by Dinaw Mengestu has two sets of migrants which is why Figures 3 and 4 contain 27 countries of origin and destination; Dinaw Mengestu, *How to Read the Air* (New York: Riverhead Books, 2010).

education²⁹ or to enter the job market.³⁰ Instances of voluntary migration are linked to persecution and political conflict in home countries such as Angola and Ethiopia.³¹ We suspect that this ratio can be explained by the correlation between real and fictional itineraries, as many authors have been educated by, or work at, Western academic institutions, particularly in the US.

Our second question asked if transatlantic migration mainly involves cities. The answer is a definite yes, as all of the 70 texts currently listed in our bibliography represent the Africa-Americas nexus through urban space, for instance Djibouti-Montreal, Cairo-Chicago, Luanda-Rio de Janeiro, Lagos-Halifax, or Kinshasa-Toronto. Historical events and geopolitical interests tie African and American cities to each other, as authors engage with issues such as colonization, slavery, the war on terror, the global economy, international surveillance, education, and social media. Cities on both continents become an extension of each other because the characters build communities in the host societies while maintaining social networks in their home countries. For example, Al-Aswany's novel *Chicago* (2007) illustrates how political conflict migrates with the characters from Cairo to Chicago as Egyptian nationals, incited by their government, spy on dissident fellow citizens who moved to the US.³² Moreover, the two cities overlap in certain places as this quote illustrates: "Even though the apartment was in Chicago, it had mysteriously acquired an Egyptian bureaucratic character that reminded one of the Mugamma building in Tahrir Square." **Moreover*, the two cities overlap had mysteriously provided by immigrants make crucial contributions to urban economies in their home country.

Figure 2 represents character movement across the Atlantic on a small-scale map. On the *ArcGIS* website, users can zoom in on specific city names. Unfortunately, the version included in this paper is a static image that does not allow one to identify details. However, this map does provide general indications of origin, destination, transit locations, and patterns, thus answering questions 3 and 4 pertaining to migration corridors and clusters. Combined with the results shown in Figure 3, it appears that most protagonists depart from Western Africa (Angola,

^{29.} Such as in the novels by Adichie, Al-Aswany, Busjeet, Gyasi, Lopes, and Waberi.

^{30.} For instance in the texts by Mabanckou and Mbue.

^{31.} Represented in the novels by Agualusa and Mengestu.

^{32.} Alaa Al-Aswany, Chicago: A Novel (New York: Harper, 2007).

^{33.} Al-Aswany, Chicago, 46.

^{34.} Chimamanda Ngozi Adichie, Americanah (New York: Alfred A. Knopf, 2013).

Cameroun, Ghana, Nigeria, and Togo). Migration from North Africa (Egypt, Morocco), Southern Africa (Mauritius, South Africa), Central Africa (the two Congos), and East Africa (Djibouti, Ethiopia, Somalia) are less frequent. Figure 3 also shows that the most important sending country in the selected texts is Nigeria – Africa's most populous country and largest economy. This coincides with the fact that most authors listed in our biography are Nigerian in origin. The destination of choice for the majority of protagonists is Eastern North America, to cities such as Toronto, Montreal, Halifax, New York, and Philadelphia. Hence, the major migration corridor follows a north-westward pathway from West Africa.

Eight texts represent indirect transatlantic migration by adding transit locations in Europe (i.e., Paris, London, Montpelier, and Durham). This opens up two separate corridors: the first, northward to Europe; the second, westward from Europe. Therefore, Europe – which has been the predominant migration destination for both African writers and their protagonists for many decades – is still relevant in 8 of the 26 texts that focus on the Americas, such as *Butter Honey Pig Bread* (2020), *Silent Winds, Dry Seas* (2021), *Une enfant de Poto-Poto* (2012), and *Cion* (2007).³⁵ Indeed, the presence of several transit locations (indicated by green markers) not only in Europe but also on the African continent³⁶, North America³⁷, and South America³⁸, points to the results illustrated in Figure 7: that literary migration itineraries are more often indirect than direct. This, in turn, answers question 5, confirming Heike Drotbohm and Nanneke Winters' assertion that it is not enough to focus only on "circumscribed origins and destination settings" to understand migration, but to pay attention to what happens in between these two locations. ³⁹

Figure 4 indicates that two-thirds of the selected texts portray migration to the United States, with Canada and Brazil as a distant second and third. Again, this can be linked to the real trajectories of the authors and the attraction of the United States as a destination of choice for many African immigrants. Jane Lorenzi and Jeanne Batalova, for instance, emphasize that "the

10

^{35.} Francesca Ekwuyasi, *Butter Honey Pig Bread* (Vancouver: Arsenal Pulp Press, 2020); Vinod Busjeet, *Silent Winds, Dry Seas* (New York: Doubleday, 2021); Henri Lopes, *Une enfant de Poto-Poto* (Paris: Gallimard, 2012); Zakes Mda, *Cion* (London: Picador, 2007).

^{36.} Brazzaville, Nairobi, Nsukka, and Pointe-Noire.

^{37.} Ann Arbor, Gatineau, Nashville, New Jersey, New York, and Washington DC.

^{38.} Montego Bay.

^{39.} Heike Drotbohm and Nanneke Winters, "Transnational Lives en Route: African Trajectories of Displacement and Emplacement across Central America," *Working Papers of the Department of Anthropology and African Studies of the Johannes Gutenberg University Mainz* 175 (2018): 1.

number of sub-Saharan African immigrants in the United States has increased 16-fold since 1980."⁴⁰ This is in part due to the Immigration Act of 1990 which "created the Diversity Visa to bolster immigration from under-represented countries, including Benin and Cameroon. The 1990 law also made it easier for highly skilled immigrants to migrate for work, opening the door to educated workers and international students from countries including Ghana, Kenya, Nigeria, and South Africa."⁴¹ Our last question is answered by Figures 5 and 6, which show that protagonists and authors are primarily male, possibly pointing to a predominance of male authors in African migration literature and higher mobility rates for men.⁴²

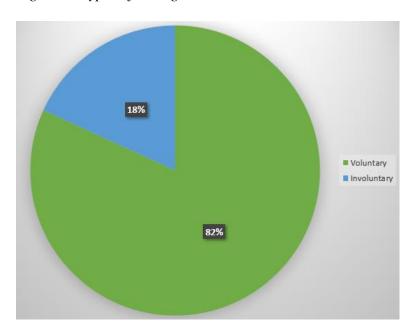


Figure 1: Types of Immigration

^{40.} Jane Lorenzi and Jeanne Batalova, "Sub-Saharan African Immigrants in the United States," *Migration Policy Institute*, May 11, 2022, https://www.migrationpolicy.org/article/sub-saharan-african-immigrants-united-states.

^{41.} Lorenzi and Batalova, "Sub-Saharan African Immigrants."

^{42.} The category "Male and Female" in Figure 5 refers to texts that have main protagonists of both genders (*Chicago*, *The Other Americans*, *How to Read the Air*).

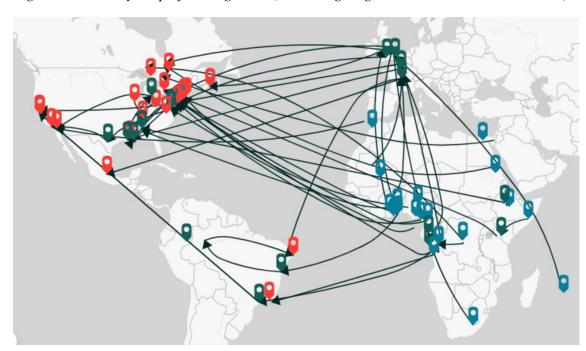


Figure 2: Itinerary Map of Protagonists (blue: origin; green: transit; red: destination)

Figure 3: Countries of Origin (Congo = 3 x Congo Brazzavile; 1 x Congo-Kinshasa)

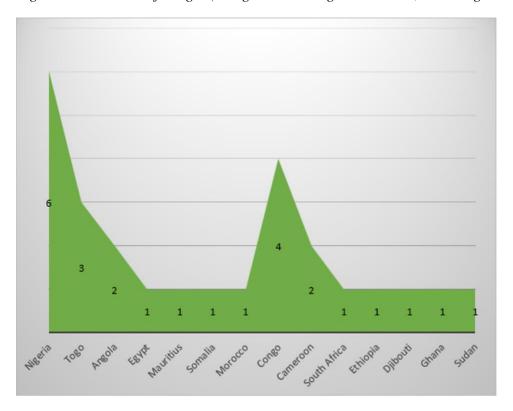


Figure 4: Destination Countries

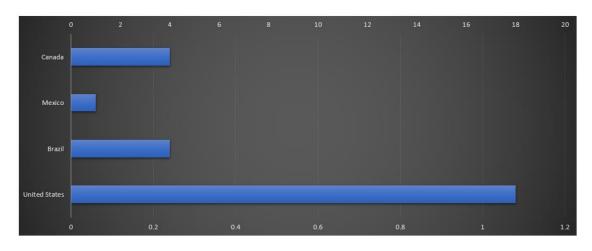


Figure 5: Gender of Protagonists



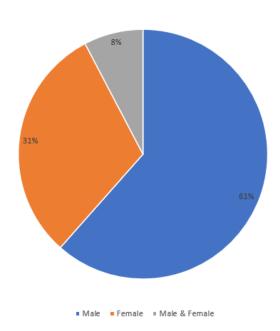


Figure 6: Gender of Authors

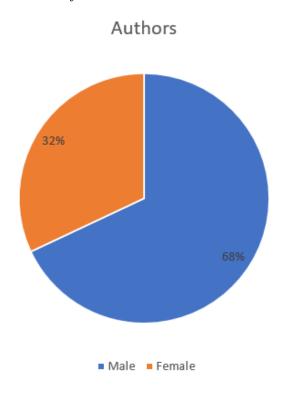
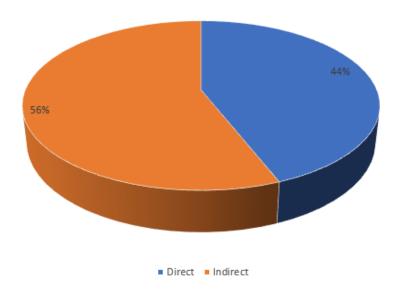


Figure 7: Direct and Indirect Migration





Conclusion

While the results from this project are not yet representative of the entire list of 70 titles, they nevertheless provide valuable information on trends and tendencies in African migration literature. The method of distant reading is a time-consuming process with many methodological challenges, but it has proven helpful in creating a bigger picture of the dynamics at play within this literary corpus. It would be relevant to draw parallels with existing statistics from Brazil, Canada, and the US in order to determine whether or not our findings align with real migration patterns from the African continent and how they potentially differ. As for the stages of the project that have yet to be completed, we first need to finish importing data from all of the titles in our bibliography in order to complete the mapping process. Once this is complete, our *ArcGIS StoryMaps* will need to be refined in order to improve visualizations (size, color, etc.) and the user interface. This ongoing work might also lead to additional questions that we ask of our data. Once we publish the StoryMap and make it available to the public, it is our hope that other scholars will build on this project and that this will, in turn, create new lines of inquiry that advance research in African migration literature and the African digital humanities.

Literary Texts

Adichie, Chimamanda Ngozi. Americanah. New York: Alfred A. Knopf, 2013.

Agualusa, José Eduardo. *O ano em que zumbi tomou o rio*. Lisboa: Publicações Dom Quixote, 2002.

Al-Aswany, Alaa. Chicago: A novel. New York: Harper, 2007.

Alem, Kangni. Les enfants du Brésil. Lomé: Graines de pensées, 2017.

Atta, Sefi. The Bad Immigrant. Northampton, Mass.: Interlink Books, 2021.

Awumey, Edem. Rose déluge. Montréal: Boréal, 2011.

Busjeet, Vinod. Silent Winds, Dry Seas, New York: Doubleday, 2021.

Chude-Sokei, Louis. Floating in a Most Peculiar Way: A Memoir. New York: Mariner Books, 2022.

Dongala, Emanuel. Jazz et vin de palme. Paris: Hatier Intern., 2002.

Duarte de Carvalho, Ruy. *Desmedida*. 2010. Sao Paolo: Lingua Geral, 2010.

Ekwuyasi, Francesca. Butter Honey Pig Bread. Vancouver: Arsenal Pulp Press, 2020.

Emezi, Akwaeke. Freshwater. New York: Grove Press, 2018.

Farah, Nuruddin. Knots. New York: Riverhead Books, 2007.

Gyasi, Yaa. Transcendent Kingdom. New York: Alfred A Knopf, 2020.

Lalami, Laila. *The Other Americans*. New York: Pantheon Books, 2019.

Lopes, Henri. *Une enfant de Poto-Poto*. Paris: Gallimard, 2012.

Mabanckou, Alain. Rumeurs d'Amérique. Paris: Pion, 2020.

Mbue, Imbolo. Behold the Dreamers. New York: Random House, 2016.

Mda, Zakes. Cion. London: Picador, 2007.

Mengestu, Dinaw. How to Read the Air. New York: Riverhead Books, 2010.

Monénembo, Tierno. Pelourinho. Paris: Éditions du Seuil, 1995.

Mutonji, Téa. Shut up you are pretty. Vancouver: Arsenal Pulp Press, 2019.

Ndibe, Okey. Never Look an American in the Eye. New York: Soho Press, 2016.

Nganang, Patrice. Mont Plaisant. Paris: Rey, 2011.

Tchak, Sami. Filles de Mexico. Paris: Mercure de France, 2008.

Waberi, Abdourahman A. Passage des larmes. Paris: Lattès, 2009.

Secondary Sources

- Aiyegbusi, Babalola T. "Decolonizing Digital Humanities." In *Bodies of Information: Intersectional Feminism and the Digital Humanities*, edited by Elizabeth Losh and Jacqueline Wernimont, 434-46. Minneapolis: University of Minnesota, 2018.
- Alves, Daniel, and Ana Isabel Queiroz. "Exploring Literary Landscapes: From Texts to Spatiotemporal Analysis through Collaborative Work and GIS." *International Journal of Humanities and Arts Computing* 9, no. 1 (2015): 57-73.
- Bushell, Sally. "The Slipperiness of Literary Maps: Critical Cartography and Literary Cartography." *Cartographica* 47, no. 3 (2012): 149-160.
- Bushell, Sally, Julia S. Carlson, and Damian Walford Davies. *Romantic Cartographies: Mapping, Literature, Culture, 1789-1832.* Cambridge: Cambridge University Press, 2020.
- Collot, Michel. Pour une géographie littéraire. Paris: Corti, 2014.
- Cooper, David, and Ian N. Gregory. "Mapping the English Lake District: A Literary GIS." *Transactions of the Institute of British Geographers* 36, no. 1 (2011): 89-108.
- Crowley, Dustin. *Africa's Narrative Geographies. Charting the Intersections of Geocriticism and Postcolonial Studies.* New York: Palgrave, 2015.
- Dennerlein, Katrin. Die Narratologie des Raumes. Berlin: Walter de Gruyter, 2009.
- Drotbohm, Heike, and Nanneke Winters. "Transnational Lives en Route: African Trajectories of Displacement and Emplacement across Central America." Working Papers of the Department of Anthropology and African Studies of the Johannes Gutenberg University Mainz 175 (2018): 1-23.
- Echandi, Mariana. "African and Asians attracted to Latin America as a migration route." *UNHCR News*, November 10, 2010, https://www.unhcr.org/en-us/news/latest/2010/11/4cdacd4c6/africans-asians-attracted-latin-america-migration-route.html.
- El Khatib, Randa, and Marcel Schaeben. "Why Map Literature? Geospatial Prototyping for Literary Studies and Digital Humanities." *Digital Studies/Le Champ numérique* 10, no. 1 (2020): 1-18.
- Finch, Jason. Literary Urban Studies and How to Practice It. New York: Routledge, 2021.
- Henao, Luis Andres. "African Immigrants Drift Toward Latin America." *Reuters.com*, January 15, 2009, https://www.reuters.com/article/us-latinamerica-africans-idUSTRE5AF0AG20091116

- Isasi Santiago, Pérez, and Catarina Sequeira Rodrigues. "Cartography as a Tool for Studying Iberian Literary Relationships: Evaluation of a Practical Experiment." *Literary Geographies* 7, no. 2 (2021): 189-213.
- Lévy, Jacques. *A Cartographic Turn: Mapping and the Spatial Challenge in Social Sciences*. Chicago: University of Chicago Press, 2015.
- Jane Lorenzi, and Jeanne Batalova, "Sub-Saharan African Immigrants in the United States." *Migration Policy Institute*, May 11, 2022, https://www.migrationpolicy.org/article/sub-saharan-african-immigrants-united-states.
- "Mapping the Republic of Letters." Stanford University. Accessed April 22, 2023, http://republicofletters.stanford.edu.
- Miles, Malcolm. Cities and Literature. London; New York: Routledge, 2018.
- Moretti, Franco. Atlas of the European Novel, 1800-1900. London, New York: Verso, 1998.
- Moretti, Franco. Distant Reading. London: Verso, 2013.
- Ngue Um, Emmanuel. *Endangered Languages Project*. Accessed April 21, 2023, https://www.endangeredlanguages.com/about/.
- Piatti, Barbara. Die Geographie der Literatur: Schauplätze, Handlungsräume, Raumphantasien. Göttingen: Wallstein Verlag, 2008.
- Piatti, Barbara, Hans Rudolf Bär, Anne-Kathrin Reuschel, Lorenz Hurni, and William Cartwright. "Mapping Literature. Towards a Geography of Fiction." In *Proceedings of the Symposium "Art & Cartography.*" Vienna: University of Vienna, 2008.
- Piatti, Barbara. "Mit Karten lesen. Plädoyer für eine visualisierte Geographie der Literatur." In *Textwelt-Lebenswelt*, edited by Bernd Boothe, Petra Bühler, Paul Michel, and Philipp Stoellger, 261-288. Würzburg: Königshausen & Neumann, 2012.
- "Project Archive." Stanford Literary Lab. Accessed April 22, 2023, https://litlab.stanford.edu/projects/archive/.
- Reuschel, Anne-Kathrin, and Lorenz Hurni. "Mapping Literature: Visualisation of Spatial Uncertainty in Fiction." *The Cartographic Journal* 48, no. 4 (2011): 293-308.
- Ryan, Marie-Laure. "Narrative Cartography: Towards a Visual Narratology." In *What Is Narratology? Questions and Answers Regarding the Status of a Theory*, edited by Tom Kindt and Hans-Harald Müller, 333-364. Berlin: Walter de Gruyter, 2003.
- "SADiLaR Language Resource Repository." *South African Centre for Digital Language Resources*. Accessed April 21, 2023, https://www.sadilar.org/index.php/en/.

- "Immigration and Ethnocultural Diversity: Key Results from the 2016 Census." *Statistic Canada*. Ocotber 25, 2017, https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025b-eng.htm.
- Tally, Robert T., ed. *Geocritical Explorations*. *Space, Place, and Mapping in Literary and Cultural Studies*. New York: Palgrave MacMillan, 2011.
- Tally, Robert T., ed. *Literary Cartographies: Spatiality, Representation, and Narrative*. New York: Palgrave, 2014.
- Tally, Robert T., ed. *Spatial Literary Studies: Interdisciplinary Approaches to Space, Geography, and the Imagination.* London, New York: Routledge, 2020.
- Tambling, Jeremy, ed. *The Palgrave Handbook of Literature and the City*. New York: Palgrave MacMillan, 2016.
- Tamir, Christine. "Key Findings About Black Immigrants in the U.S." *Pew Research Center*, January 27, 2022, https://www.pewresearch.org/short-reads/2022/01/27/key-findings-about-black-immigrants-in-the-u-s/.
- Taylor, Joanna, Christopher E. Donaldson, Ian N. Gregory, and James O. Butler. "Mapping Digitally, Mapping Deep: Exploring Digital Literary Geographies." *Literary Geographies* 4, no. 1 (2018): 10-19.
- Thomas, Dominic. "African Cartographies in Motion." In *Literature and Cartography: Theories, Histories, Genres*, edited by Anders Engberg-Pedersen, 299-322. Cambridge, Mass.: The MIT Press, 2017.
- Westphal, Bertrand. La Géocritique: réel, fiction, espace. Paris: Édition de Minuit, 2002.
- Whitson, Roger. Steampunk and Nineteenth-Century Digital Humanities: Literary Retrofuturisms, Media Archaeologies, Alternate Histories. New York and London: Routledge, 2017.
- Yeku, James. "The Hashtag as Archive: Internet Memes and Nigeria's Social Media Election". In *Art, Creativity, and Politics in Africa and the Diaspora. African Histories and Modernities*, edited by Adelakun Abimbnola and Toyin Falola, 217-245. London: Palgrave Macmillan, 2018.