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The Literary System of the Iberian Worlds Through the Lens of Criticometrics

According to the historians José Javier Ruiz Ibáñez and Óscar Mazín Gómez:

The Iberian worlds are constituted by the group of people whose culture and history were forged when the matrix of the Mediterranean world was projected through the Portuguese and Spanish expansion. The populations that are protagonists of this process (Europeans, Africans, Americans, and Asians) and their descendants share a common experience and a way of conceiving the world (Ruiz Ibáñez y Mazín Gómez 2021:2).¹

The purpose of our study is to map the literatures that belong to the above defined Iberian worlds, in order to reveal the complex relations that the national literatures that constitute these worlds have developed through time.

To this effect, this research is located at the convergence of two phenomena: the conceptual turn from comparative literature into world literature (Damrosch 2014; Gupta 2009; Saussy 2006), and the emergence of big data in the humanities (Boyd and Crawford 2012; Mayer-Schönberger and Cukier 2013; Schreibman, Siemens, and Unsworth 2004, 2016). Specifically, in this paper, we will illustrate how this availability of massive amounts of information for the humanities – unimaginable not long ago – will allow us to analyze the configuration of the literary system of the Iberian worlds.

We would like to emphasize that, in this research, we modify the usual top-down viewpoint to introduce a bottom-up perspective. To achieve this, we use the methodological approach of criticometrics (Ferrer 2011), that we have developed based on the exploitation of digital databases and which makes it possible to articulate theoretical concepts with empirical research. Instead of imposing pre-established criteria, this approach stems from the observation of thousands of

1 “Los mundos ibéricos están constituidos por el conjunto de personas cuya cultura e historia se forjaron cuando la matriz del mundo mediterráneo se proyectó mediante la expansión portuguesa y española. Las poblaciones protagonistas de ese proceso (europeos, africanos, americanos y asiáticos) y sus descendientes comparten una experiencia común y una forma de concebir el mundo” (Ruiz Ibáñez y Mazín Gómez 2021: 2). We translate.

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studies carried out by the international academic community and relies on the law of large numbers.

1 Systems Theory

In 2017, based on system analysis – introduced in the social sciences and the humanities by Niklas Luhmann (2000) and Immanuel Wallerstein (2004) –, and, more precisely, on the concept of *champ* developed by Pierre Bourdieu (1992; 1997) as well as on polysystem theory proposed by Itamar Even-Zohar (1990), we inaugurated a research project in order to map world literature (Ferrer 2018).

According to Pierre Bourdieu, “the social world can be decomposed into a multitude of microcosms, the fields or ‘champs’, each one featuring specific stakes, objects, and interests” (Bourdieu 1997: 119).² Moreover, the configuration of the fields is characterized by complex relations between their diverse components (Bourdieu et Wacquant 1997: 72).

Likewise, the interactions between national literatures also constitute complex phenomena. In order to understand these interactions, we use Itamar Even-Zohar’s polysystem studies, that allowed him to formulate hypothesis about the functional relations between the components of the systems and subsystems under scrutiny. As stated by the Israelian semiotician, the literary system is defined as “the network of relations that is hypothesized to obtain a number of activities called ‘literary,’ and consequently these activities themselves observed via that network” (Even-Zohar 1990: 28).

One of our goals is to articulate theoretical concepts with empirical research. To achieve this, we developed criticometrics, a methodology that we have elaborated inspired by scientometrics.

2 Criticometrics

Initially developed by Derek De Solla Price (1963), scientometrics became possible due to the tools elaborated by Eugene Garfield, founder of the Institute for Scientific Information, that later became *Thomson ISI* and nowadays is known as *Clarivate*. The goal of scientometrics is to measure and to analyze scientific and

2 « Le monde social moderne se décompose en une multitude de microcosmes, les *champs*, dont chacun possède des enjeux, des objets et des intérêts spécifiques » (Bourdieu, 1997 : 119). We translate.

technological activity. By analogy, we created criticometrics,³ with the goal to measure and to analyze critical activity in the arts, particularly in literary studies. This meant to adapt scientometric indicators to the reality of the existing databases dedicated to the humanities and the arts, with the aim of exploiting the metadata contained in these bibliographies.

Following our analogy, we present the main scientometric indicators. There are two categories of indicators. Those in the first category are called descriptive indicators or activity indicators. Those in the second category are relational indicators. They can all be measured at several levels of aggregation: researchers, research group, institute, country, discipline. The simplest descriptive indicator is the count of publications or patents. Another descriptive indicator is citation counts (Leydesdorff 1998). This corresponds to the number of times a text is cited in another publication. Supposedly, this indicator signals the quality of a publication. However, this argument has been extensively debated, and the consensus has transformed it into an indicator of visibility (Cozzens 1985). In the case of criticometrics, we follow the viewpoint stated by Kees van Rees, who considers that “A reliable indicator of the quality attributed to a work of art is permanent and intensive attention – in the form of (spoken or written) discourses” (van Rees 1997: 93).

In turn, the simplest of relational indicators is the co-signing of publications. One of the problems with this indicator is the difference of publication habits in the different disciplines. To overcome the shortcomings of the citations indicator, Henri Small (1973) created that of cocitations: to count the number of times that two citations appear simultaneously in a publication. This coincidence of references would indicate a closer link between the documents that contain them. Another method for solving the problems of the citations indicator was created by Callon, Courtial, and Penan (1993). Instead of considering the number of references, they proposed to count the cooccurrences of words in the documents. “The higher the frequency of the cooccurrence of words in different texts, the more reinforced are the research problems and the connexions between these problems” (Callon, Courtial et Penan 1993: 81).⁴

In the case of criticometrics, we measure the attention received by works and writers in the form of discourse, to use van Rees’s terms. Consequently, we favor three types of indicators: firstly, the cooccurrences of words, such as the national literature label; secondly, the number of citations, for instance, the number of

³ This is a summarized version of criticometrics. For a more detailed presentation, see Ferrer 2022.

⁴ « Plus les mots co-occurent fréquemment dans des textes différents et plus les problèmes de recherche et les connexions entre ces problèmes se renforcent » (Callon, Courtial et Penan 1993 : 81). We translate.

publications relating to a writer or a literary work; thirdly, the number of citations, which allows us to reveal the relationships between the writers, or literary works, who are the subject of comparative studies.

In this research, we interrogated the main literary database, the *Modern Language Association International Bibliography*, to which we will refer to as MLA. This database contains over 3 million references and covers more than 170 years of texts published by the international academic community. Several types of documents are listed: articles, books, book chapters, editorials, theses.⁵

Firstly, we compiled the critical references for each national literature, by querying the terms “Portuguese literature”, “Spanish literature” and so on, thus, using a data mining technique (Han, Kamber, and Pei 2012; Witten, Frank, and Hall 2011) based on the cooccurrences of these terms (Callon, Courtial, and Penan 1993). Secondly, the total sample was created by forming an ensemble of the national literatures. Given that some references include more than one national literature, the conglomerate of references of the literary system of the Iberian worlds is not the simple addition of the national literatures.

3 The Literary System of the Iberian Worlds

The system of the Iberian worlds is composed of the countries whose territory is in the Iberian Peninsula or, at some point, were colonized by the Spanish Empire or by the Portuguese Empire. Since all the territories previously colonized by these empires obtained their independence several decades ago, and in some cases more than two centuries ago, we added an additional condition for the constitution of the system: at least one of the official languages of the selected countries must be Spanish (Castilian) or Portuguese. According to these criteria, the sample obtained from MLA contains 210,021 references and includes 2 European literatures, 20 literatures of the Americas, 6 African literatures, and 2 Asian literatures. The first reference in MLA was registered in 1887. The end date for our sample was set at 2018.

Based on the number of references by national literature, Figure 1 corresponds to the map of the literary system of the Iberian worlds.

In Figure 2, we observe the distribution of the publications by national literature. There is a huge disparity in terms of the critical bibliography dedicated to

⁵ However, in this study, we omitted dissertations, as they are essentially restricted to those defended in the United States, which would introduce a bias the data. See *Dissertation Abstracts International*.

each of them. For instance, Spain cumulates 531 times the number of publications compared to those dedicated to Equatorial Guinea, which is the only Spanish speaking national literature of the African continent.

From the continental viewpoint, Figure 3, we see that the European countries cumulate 54% of the publications, those belonging to the Americas 45%, and those from Africa less than 1% of the system. The publications about the Iberian literatures in Asia are extremely scarce.

The chronological evolution of the publications about the system is represented in Figure 4. Although the first reference goes back to 1887, we only observe a positive tendency of the series after World War Two, particularly since the mid-fifties. This slope remains positive until 2004, when the number of publications reaches its maximum of 5,839 references.

Table 1 shows the 25 most studied writers of the system of the Iberian worlds. Among them, 13 are European, and 12 from the Americas. Moreover, we observe that Spain concentrates 11 writers. There is only one woman in this list: Juana Inés de la Cruz.⁶ Their life period cover from the 16th to the 21st centuries.

To diversify the list of writers, in Table 2, we present the 25 writers of the Iberian worlds whose critical bibliography in MLA concentrates the highest percentages of their national literature. We thus see several names from the Americas, Africa and even Asia. Among these, we find 4 of the 6 Spanish American writers who have received the Nobel Prize in literature. Moreover, we observe the presence of 3 women.

Table 3 corresponds to the 25 most studied literary works of the system. Again, Spain is at the top of the list, this time with 2 titles. We also observe the presence of a Portuguese title. The 22 other literary works are from the Americas, with 2 of them signed by women. We must point out that 5 titles belong to the Colombian writer Gabriel García Márquez. There also are 5 titles signed by Cuban authors.

In Figure 5, we represent the linguistic distribution of the publications by national literature and for the Iberian worlds system. At a systemic level, Spanish accumulates 57% of the sample, followed by English with 25% of the references. Portuguese is in third place with 10% of the publications. Next come French, 3%, followed by German, Italian and Catalan with 1% of the publications each. At the national level, we observe that, except for Guinea-Bissau, Timor-Leste, and Macau, where publications in English prevail, the highest percentage of publications corresponds to Spanish or Portuguese, both for the literatures of Spain

6 For a detailed analysis of the place of women writers in world literature, see Ferrer (2019).

and Portugal, as well as for the literatures of the countries that were formerly colonized by them.

Thus, we consider that it is extremely important to measure the linguistic diversification of the system. To this aim, we introduce a diversification indicator. It is inspired, on the one hand, by the Herfindahl-Hirschmann Index (Herfindahl 1950; Hirschmann 1945), used in economics to measure the degree of concentration of the markets, and, on the other hand, by the index developed in political sciences by Douglas W. Rae (1967), with the goal of measuring the fractionalization of political party systems. One of the advantages of this indicator is that it enables the comparison of systems that have different numbers of components.

The indicator of linguistic diversification that we propose is similar to the one elaborated by Rae:

$$LD = 1 - \sum_{j=1}^m L_j^2$$

where L_j is the part of the total documents published in the language j .

The value of LD varies between 0 and 1. When one language concentrates an important proportion of the publications, the LD index is close to 0. On the opposite pole, when the publications are more equally shared by several languages, the index tends to 1.

Figure 6 represents the LD index of the literary system of the Iberian worlds and of the national literatures that compose it. Globally, its value is 0.6. Timor-Leste is the literature with the lowest index: only 0.26. It should be noted that, although Portuguese is one of the two official languages in that country, the critical bibliography in Portuguese corresponds to only 15% of the sample, since English accounts for 85%. São Tomé and Príncipe shows the highest index: 0.67. In this case, the bibliography is divided between Portuguese, 44%, English, 32%, French, 16%, and Spanish, 2%. In both cases, they are embryonic literary fields belonging to countries that have undergone great political changes in recent decades. Evidently, the percentage of publications in English, which fluctuates between 12%, in the case of Costa Rica, up to 85% in the case of Timor-Leste, would be an indication of a possible literary interference, according to the terms used by Even-Zohar.⁷

⁷ In our opinion, the interference exercised by the United States in numerous literatures of the Iberian worlds is undeniable. For instance, regarding the interference of the United States in Spanish American literature, see Ferrer (2014).

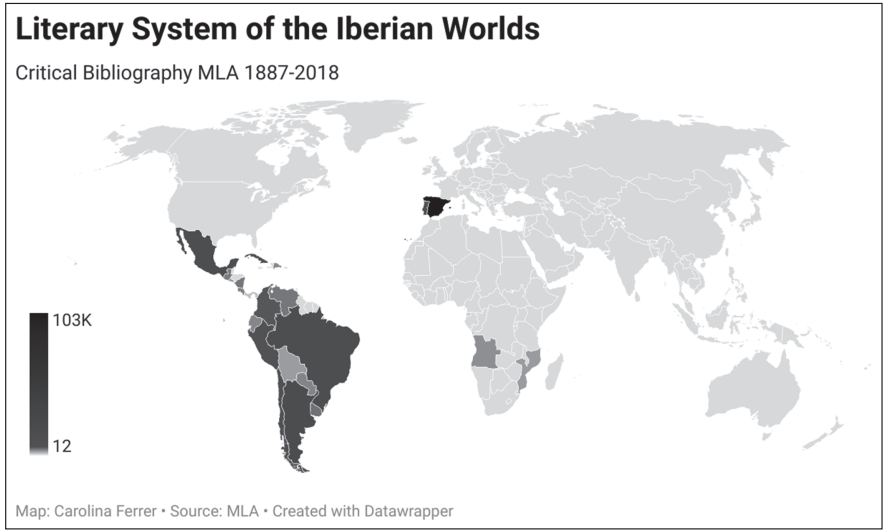


Figure 1: Map of the Critical Bibliography by National Literature (MLA 1887–2018).

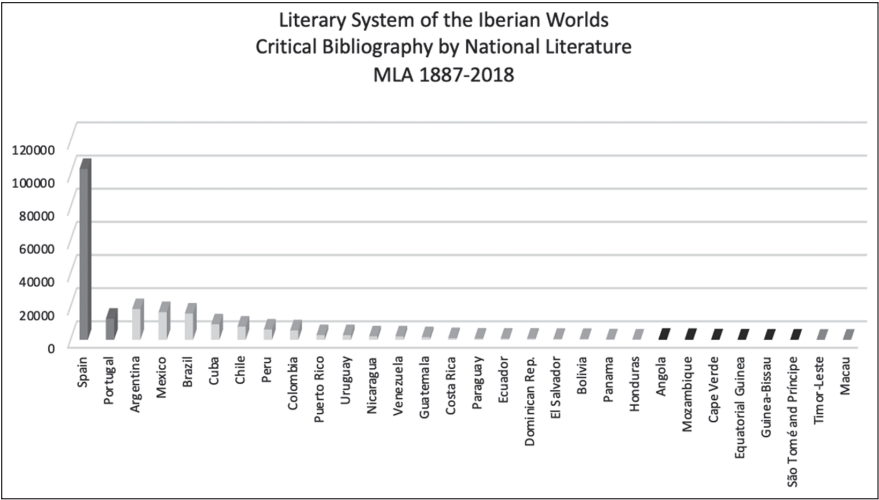


Figure 2: Critical Bibliography by National Literature (MLA 1887–2018).

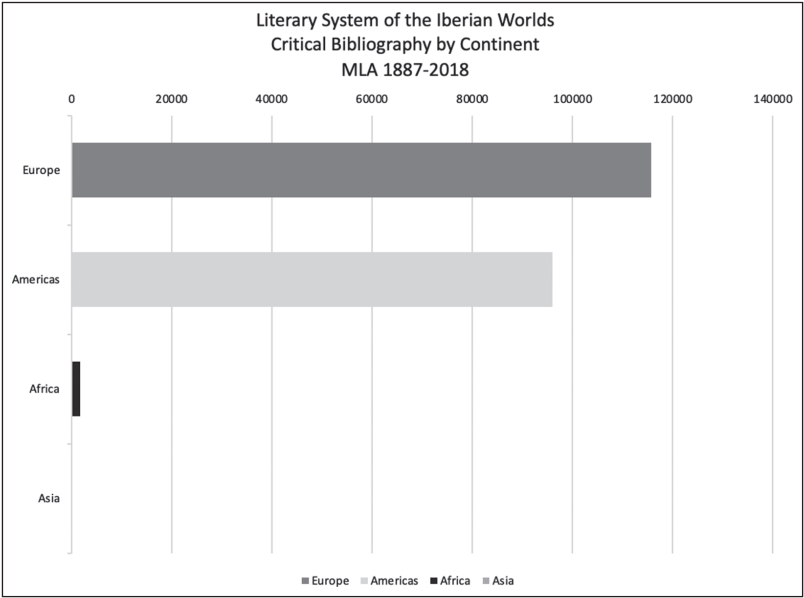


Figure 3: Critical Bibliography by Continent (MLA 1887–2018).

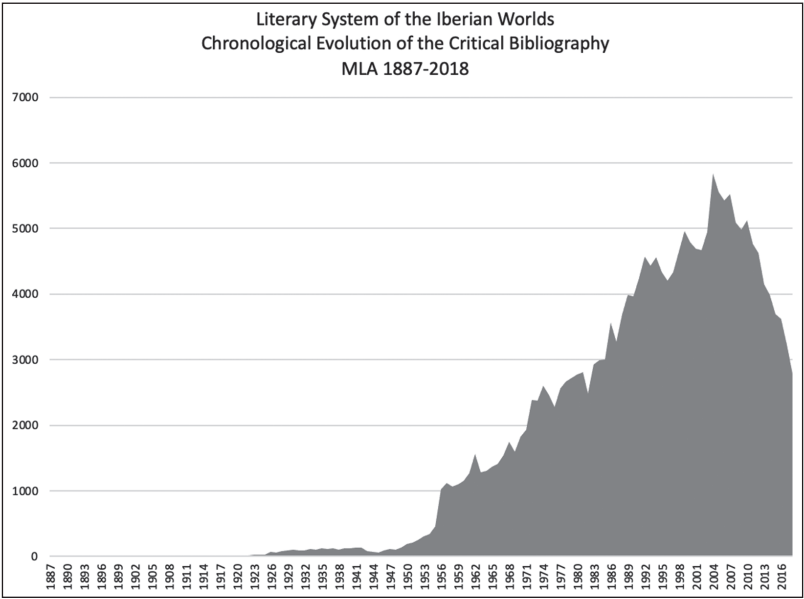


Figure 4: Chronological Evolution of the Critical Bibliography (MLA 1887–2018).

Table 1: The 25 Most Studied Writers of the Iberian Worlds (MLA 1887–2018).

National Literature	Writer	References	%LSIW
Spain	Cervantes Saavedra, Miguel de (1547–1616)	7211	3.4%
Argentina	Borges, Jorge Luis (1899–1986)	4372	2.1%
Spain	Vega Carpio, Lope Félix de (1562–1635)	2922	1.4%
Spain	Calderón de la Barca, Pedro (1600–1681)	2825	1.3%
Spain	García Lorca, Federico (1898–1936)	2498	1.2%
Spain	Pérez Galdós, Benito (1843–1920)	2359	1.1%
Spain	Unamuno y Jugo, Miguel de (1864–1936)	1878	0.9%
Colombia	García Márquez, Gabriel (1928–2014)	1822	0.9%
Argentina	Cortázar, Julio (1914–1984)	1723	0.8%
Spain	Quevedo y Villegas, Francisco Gómez de (1580–1645)	1550	0.7%
Spain	Valle-Inclán, Ramón María del (1866–1936)	1436	0.7%
Mexico	Fuentes, Carlos (1928–2012)	1275	0.6%
Nicaragua	Darío, Rubén (1867–1916)	1225	0.6%
Mexico	Paz, Octavio (1914–1998)	1183	0.6%
Chile	Neruda, Pablo (1904–1973)	1162	0.6%
Spain	Machado y Ruiz, Antonio (1875–1939)	1161	0.6%
Peru	Vargas Llosa, Mario (1936–)	1155	0.5%
Portugal	Pessoa, Fernando António Nogueira (1888–1935)	1089	0.5%
Cuba	Martí, José (1853–1895)	1088	0.5%
Spain	Ortega y Gasset, José (1883–1955)	1085	0.5%
Spain	Rojas, Fernando de (d. 1541)	1065	0.5%
Cuba	Carpentier, Alejo (1904–1980)	1022	0.5%
Mexico	Juana Inés de la Cruz (1648–1695)	1019	0.5%
Brazil	Assis, Joaquim Maria Machado de (1839–1908)	945	0.4%
Portugal	Camões, Luís Vaz de (1524/5–1580)	913	0.4%

Table 2: The 25 Writers with the highest percentage by National Literature (MLA 1887–2018).

National Literature	Writer	References	% NL	%LS IW
Paraguay	Roa Bastos, Augusto (1917–2005)	430	61.25%	0.20%
Nicaragua	Darío, Rubén (1867–1916)	1225	59.44%	0.58%
Timor-Leste	Cardoso, Luís (1958-)	4	33.33%	0.00%
Guinea-Bissau	Cabral, Amílcar (1921–1973)	21	32.81%	0.01%
Colombia	García Márquez, Gabriel (1928–2014)	1822	32.43%	0.87%
Mozambique	Couto, Mia (1955-)	145	32.37%	0.07%
Guatemala	Asturias, Miguel Ángel (1899–1974)	487	32.04%	0.23%
Equatorial Guinea	Ndongo-Bidyogo, Donato (1950-)	51	26.56%	0.02%
Argentina	Borges, Jorge Luis (1899–1986)	4372	24.05%	2.08%
Peru	Vargas Llosa, Mario (1936-)	1155	18.97%	0.55%
Uruguay	Onetti, Juan Carlos (1909–1994)	509	18.80%	0.24%
Panama	Jaramillo Levi, Enrique (1944-)	42	17.50%	0.02%
Dominican Rep.	Henríquez Ureña, Pedro (1884–1946)	110	16.52%	0.05%
Angola	Pepetela (1941-)	86	14.98%	0.04%
Chile	Neruda, Pablo (1904–1973)	1162	14.95%	0.55%
Honduras	Castillo, Roberto (1950–2008)	19	14.07%	0.01%
El Salvador	Castellanos Moya, Horacio (1957-)	73	13.88%	0.03%
Venezuela	Bello, Andrés (1781–1865)	277	13.59%	0.13%
São Tomé and Príncipe	Tenreiro, Francisco José (1921–1963)	5	12.82%	0.00%
Panama	Britton, Rosa María (1936-)	30	12.50%	0.01%
El Salvador	Alegria, Claribel (1924–2018)	64	12.17%	0.03%
Equatorial Guinea	Ávila Laurel, Juan-Tomás (1966-)	23	11.98%	0.01%
Cuba	Martí, José (1853–1895)	1088	11.80%	0.52%
Costa Rica	Vallbona, Rima de (1931-)	113	11.73%	0.05%
Peru	Vallejo, César Abraham (1892–1938)	691	11.35%	0.33%

Table 3: The 25 Most Studied Literary Works of the Iberian Worlds (MLA 1887–2018).

National Literature	Writer	Literary Work	References	%IW
Spain	Cervantes Saavedra, Miguel de	<i>Quijote</i> (1605, 1615)	4081	1.94%
Spain	Rojas, Fernando de	<i>La Celestina</i> (ca. 1499)	1072	0.51%
Colombia	García Márquez, Gabriel	<i>Cien años de soledad</i> (1967)	468	0.22%
Mexico	Rulfo, Juan	<i>Pedro Páramo</i> (1955)	304	0.14%
Portugal	Camões, Luís Vaz de	<i>Os Lusíadas</i> (1572)	267	0.13%
Argentina	Cortázar, Julio	<i>Rayuela</i> (1963)	215	0.10%
Peru	Garcilaso de la Vega, el Inca	<i>Comentarios reales de los incas</i> (1609)	190	0.09%
Paraguay	Roa Bastos, Augusto	<i>Yo el Supremo</i> (1974)	157	0.07%
Colombia	García Márquez, Gabriel	<i>Crónica de una muerte anunciada</i> (1981)	155	0.07%
Peru	Poma de Ayala, Felipe Huamán	<i>El primer nueva corónica y buen gobierno</i> (1615)	150	0.07%
Guatemala	Menchú, Rigoberta	<i>Me llamo Rigoberta Menchú</i> (1983)	145	0.07%
Cuba	Carpentier, Alejo	<i>Los pasos perdidos</i> (1953)	134	0.06%
Cuba	Carpentier, Alejo	<i>El reino de este mundo</i> (1949)	132	0.06%
Chile	Allende, Isabel	<i>La casa de los espíritus</i> (1982)	130	0.06%
Cuba	Lezama Lima, José	<i>Paradiso</i> (1966)	123	0.06%
Cuba	Cabrera Infante, Guillermo	<i>Tres tristes tigres</i> (1967)	118	0.06%
Guatemala	n.n.	<i>Popol Vuh</i>	111	0.05%
Colombia	Rivera, José Eustasio	<i>La vorágine</i> (1924)	109	0.05%
Chile	Bolaño, Roberto	<i>2666</i> (2004)	108	0.05%
Colombia	García Márquez, Gabriel	<i>El otoño del patriarca</i> (1975)	100	0.05%
Cuba	Villaverde, Cirilo	<i>Cecilia Valdés o la loma del ángel</i> (1839, 1882)	98	0.05%

Table 3 (continued)

National Literature	Writer	Literary Work	References	%IW
Peru	Arguedas, José María	<i>Los ríos profundos</i> (1958)	98	0.05%
Colombia	García Márquez, Gabriel	<i>El general en su laberinto</i> (1989)	92	0.04%
Colombia	García Márquez, Gabriel	<i>El amor en los tiempos del cólera</i> (1985)	88	0.04%
Colombia	Vallejo, Fernando	<i>La Virgen de los Sicarios</i> (1994)	88	0.04%

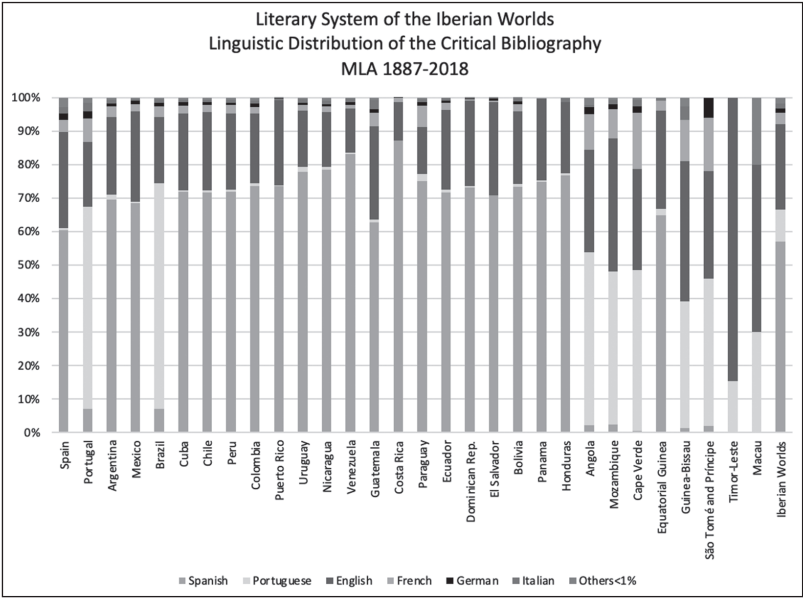


Figure 5: Linguistic Distribution of the Critical Bibliography (MLA 1887–2018).

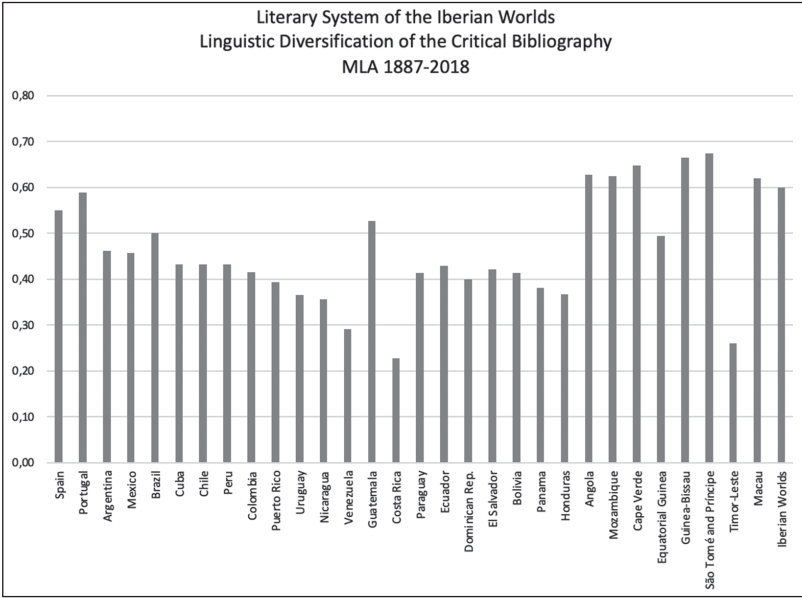


Figure 6: Linguistic Diversification of the Critical Bibliography (MLA 1887–2018).

4 Selected Writers

With the purpose of illustrating the relational analysis that can be carried out at the level of writers, we have selected a subset of them. For each continent, we chose the first man and the first woman whose language of expression is, respectively, Spanish and Portuguese. This way, we constituted a sample of 13 writers. Table 4 contains the essential metadata associated to them. There are 4 European writers, 4 from the Americas, 4 from Africa, and 1 from Asia. Their life period expands from the 16th to the 21st centuries. In fact, Cervantes, who lived in the 16th century, is the most ancient writer of the sample, followed by Juana Inés de la Cruz, who lived in the 17th century. Most of the other authors were born in the 19th or 20th centuries, with the writers from Africa and Asia being the youngest of the sample. Out of the 13 selected writers, 6 are women.

Figure 7 represents the number of references contained in MLA about each of these writers. We observe important differences in the number of references dedicated to each writer. Particularly, Cervantes and Borges concentrate very important volumes of publications. Also, in the cases of Spain and Portugal, there is

a striking disparity between men and women in the number of publications dedicated to them.

Figure 8 corresponds to the linguistic distribution of the publications about each writer. Except for the cases of Couto and Cardoso, whose bibliography is mostly in English, and Chiziane, whose bibliography is exactly distributed between Spanish and English, the main language of publication of the bibliography corresponds to the writing language of the authors. The bibliography that shows the greatest diversification is that related to Pessoa, and the least one is that on Cardoso.

The following 3 analysis refer to cocitations. For each writer, we selected the cocited authors that represent at least 1% of the bibliography about the analyzed writer. Figure 9 represents cocitations by gender. We immediately observe that women are rarely cocited. Likewise, we see that, except for Ndongo-Bidyogo and Couto, only women are cocited with other women. This indicator shows that women are underrepresented not only in terms of the number of publications about them, but they are also less frequently cocited.

In Figure 10, we have classified the cocited writers by continent. We note that Spanish writers are only cocited with other Europeans, whereas Pessoa and the writers of the Americas are cocited with writers from Europe and the Americas. Cardoso is co-cited with writers from Europe and Africa, while Ndongo-Bidyogo is cocited with writers from the four continents. Five writers are cocited with authors from Europe, the Americas, and Africa. Except for Cardoso, mainly cocited with Europeans, the most cocited writers belong to the same continent as the analyzed writer.

Figure 11 corresponds to the distribution of the writers cocited by national literature. We have classified the literatures into 3 categories: national literature, others of the literary system of the Iberian worlds, and extra systemic. Except for Cardoso, who is cocited exclusively with other writers from the Iberian worlds, each writer is cocited with at least one other author belonging to his/her own national literature. This percentage is particularly important in the cases of Cervantes, Pardo Bazán, Agustina Luís and Borges.

Thus, we observe that there are important differences in the patterns of cocitations of writers, depending on the level of development of their own national literature, as well as on the gender of the writer.

Table 4: Metadata about the Selected Writers (MLA 1887–2018).

Writer	National Literature	Life Period	Language	References	1st MLA Reference
Cervantes Saavedra, Miguel de	Spain	1547–1616	Spanish	7456	1888
Pardo Bazán, Emilia	Spain	1851–1921	Spanish	801	1926
Pessoa, Fernando	Portugal	1888–1935	Portuguese	1147	1955
Luís, Agustina Bessa	Portugal	1922–2019	Portuguese	72	1958
Borges, Jorge Luis	Argentina	1899–1986	Spanish	4667	1952
De la Cruz, Juana Inés	Mexico	1651?–1695	Spanish	1097	1926
Assis, Joaquim Maria Machado de	Brazil	1839–1908	Portuguese	958	1949
Lispector, Clarice	Brazil	1920–1977	Portuguese	630	1967
Ndongo-Bidyongo, Donato	Equatorial Guinea	1950-	Spanish	53	1992
Nsue Angüe, María	Equatorial Guinea	1945-	Spanish	20	1995
Couto, Mia	Mozambique	1955-	Portuguese	159	1987
Chiziane, Paulina	Mozambique	1955-	Portuguese	34	2000
Cardoso, Luís	Timor-Leste	1958-	Portuguese	6	2004

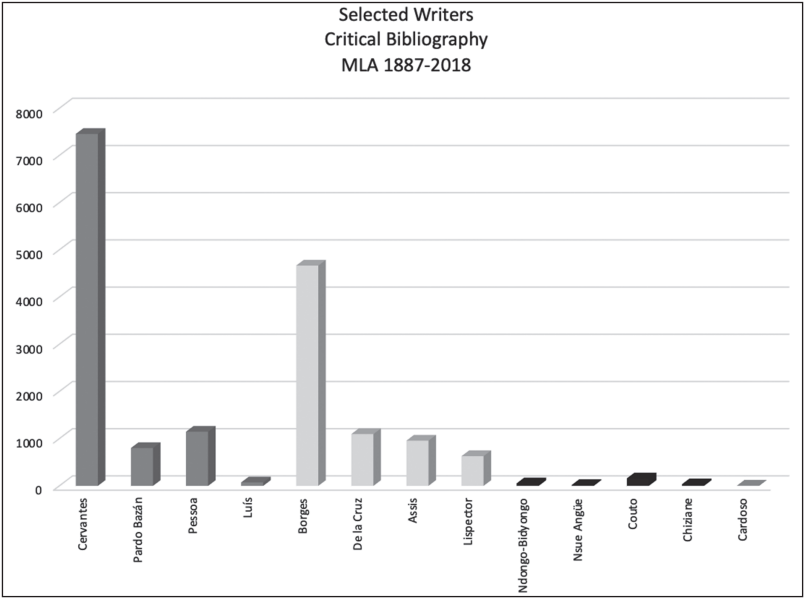


Figure 7: Critical Bibliography by Writer (MLA 1887–2018).

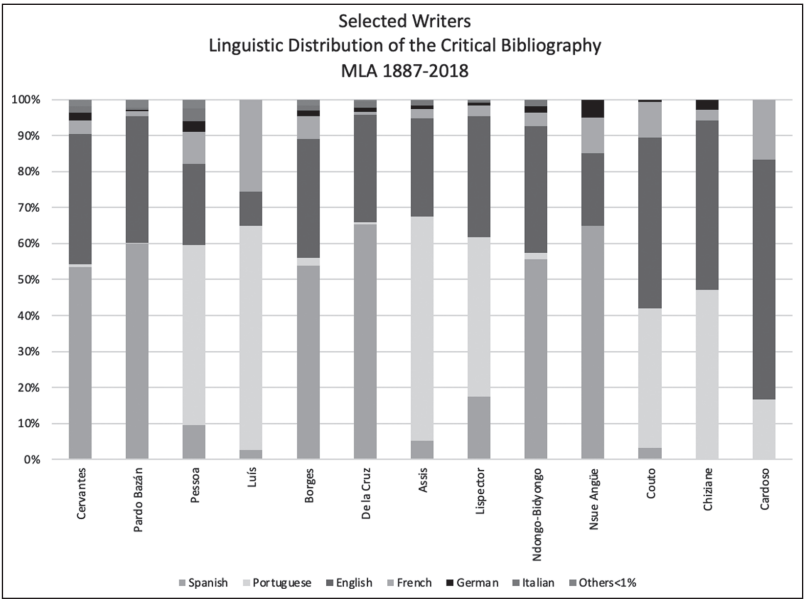


Figure 8: Linguistic Distribution of the Critical Bibliography (MLA 1887–2018).

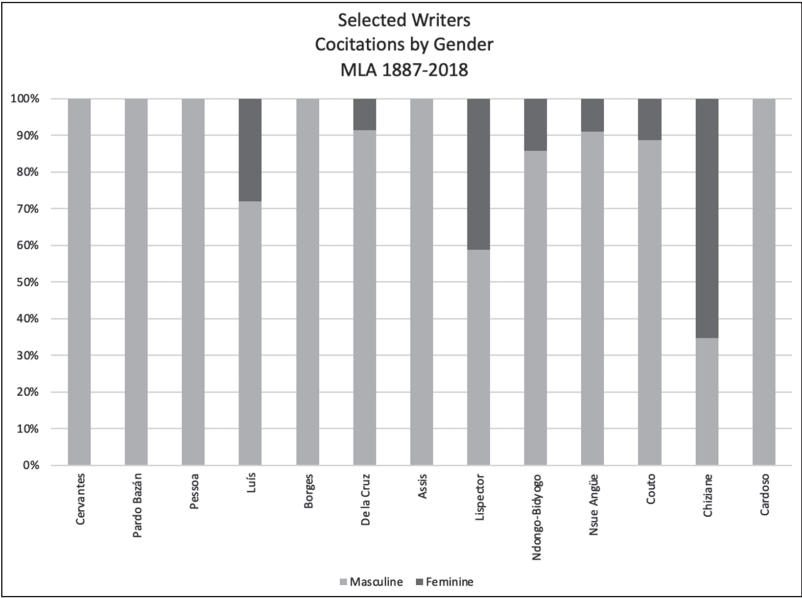


Figure 9: Cocitations by Gender (MLA 1887–2018).

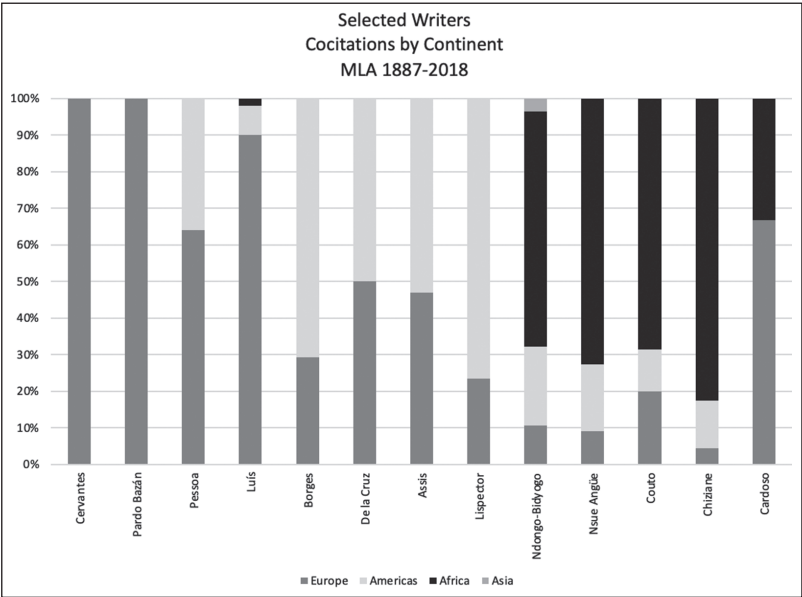


Figure 10: Cocitations by Continent (MLA 1887–2018).

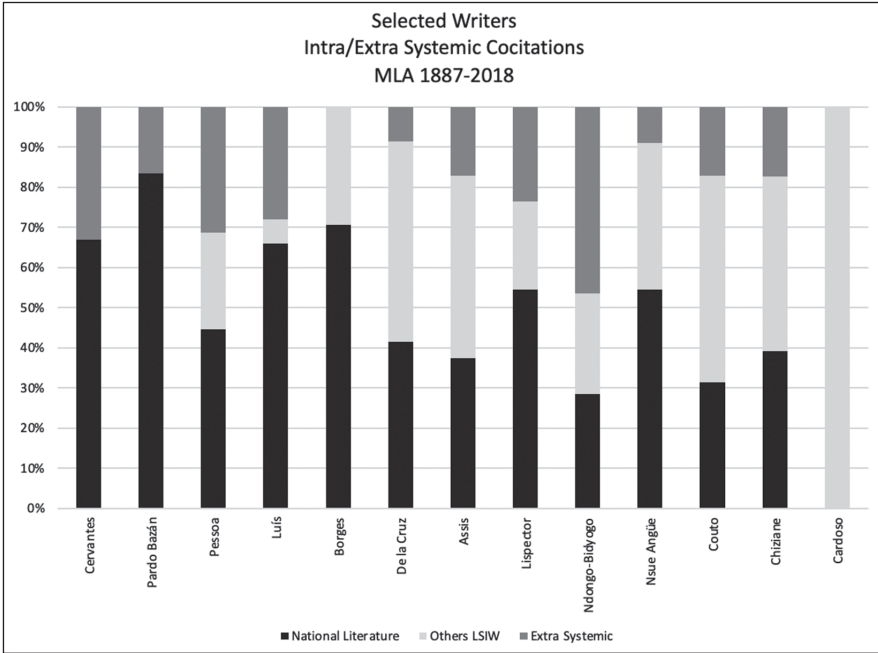


Figure 11: Cocitations by Region (MLA 1887–2018).

5 Conclusions

The analysis of the literary system of the Iberian worlds has revealed the complex relationships between 30 literatures located in 4 different continents that share Spanish or Portuguese languages as well as several historical events. In terms of national literatures, we have seen very significant disparities regarding the concentration of publications dedicated to them. We note that Spain occupies a central place in the system, despite the important evolution of other national literatures, such as those of Argentina, Mexico, Portugal, and Brazil. At the same time, we observe that some literary subsystems are still at embryonic levels of development. This is essentially the case of the Iberian national literatures found in Africa and Asia.

Regarding the writers, we were able to identify certain figures who occupy an important place at the level of the literary system of the Iberian worlds, while others are only recognized at the national level.

Additionally, we elaborated indicators to measure linguistic diversification and identified the presence of critical publications in languages that do not belong to the system of the Iberian worlds, mainly English. In some cases, where

English concentrates important percentages of the bibliography, this could be a sign of foreign and even extra systemic interference.

Furthermore, thanks to the analysis of a subset of writers, we observed that cocitations are much more important in critical bibliographies that refer to writers from the Americas and Africa. Several indicators also allowed us to corroborate the marginal place that academic literary criticism attributes to women writers.

Finally, we consider that this study has revealed that, through the exploitation of bibliographic databases and the introduction of quantitative methods in literary studies, such as criticometrics, it is possible to increase our knowledge regarding the configuration of world, continental, and regional literary systems, and the relationships between them.

Bibliography

- Bourdieu, Pierre (1992): *Les règles de l'art. Genèse et structure du champ littéraire*. Paris: Seuil.
- _____. (1997): *Méthodes pascaliennes*. Paris: Seuil.
- Bourdieu, Pierre et Loïc JD Wacquant (1992): *Réponses. Pour une anthropologie réflexive*. Paris: Seuil.
- Boyd, Danah, and Kate Crawford (2012): "Critical Questions for Big Data Provocations for a Cultural, Technological, and Scholarly Phenomenon", In *Information Communication & Society*, vol. 15/n 5, pp. 662–679.
- Callon, Michel, Jean-Pierre Courtial et Hervé Penan (1993): *La Scientométrie*. Que Sais-Je? 2727. Paris: Presses Universitaires de France.
- Clarivate. <<https://clarivate.com>>.
- Cozzens, Susan E (1985): "Using the Archive – Price, Derek Theory of Differences among the Sciences", In *Scientometrics*, n 7, pp. 431–441.
- Damrosch, David (ed.) (2014): *World Literature in Theory*. Malden: Wiley Blackwell.
- Dissertation Abstracts International. <<http://proquest.com>>.
- Even-Zohar, Itamar (1990): "Polysystem Theory", In *Poetics Today*, n°11, pp. 1–268.
- Ferrer, Carolina (2011): "El boom hispanoamericano: del texto a la pantalla", In Santiago Juan-Navarro y Joan Torres-Pou (eds.), *Nuevas aproximaciones al cine hispánico: Migraciones temporales, textuales y étnicas en el bicentenario de las independencias iberoamericanas (1810–2010)*. Barcelona: Promociones y Publicaciones Universitarias, pp. 79–101.
- _____. (2014): "Difusión de la bibliografía crítica sobre la literatura hispanoamericana a través de las revistas académicas 1896–2008", In Álvaro Baraibar (ed.), *Visibilidad y divulgación de la investigación desde las humanidades digitales. Experiencias y proyectos*. Pamplona: Servicio de Publicaciones de la Universidad de Navarra, pp. 289–305.
- _____. (2018): "Les études littéraires à l'ère de la mondialisation : traces et trajets au prisme des nouveaux observables numériques", In *Zizanie*, vol. 2/n°1, pp. 76–101.
- _____. (2019): "La place des écrivaines dans la littérature mondiale: cartographie métacritique de la marginalisation des femmes", In *Pontos de interrogação : revista de crítica cultural*, vol. 9/n°2, pp. 13–33.

- _____. (2022): "De Confucius à Djébar, de Dante à Lispector. Ce que la criticométrie nous apprend sur la réception des écrivains et de leurs œuvres", In Iona Galleron et Fatiha Idmhand (dirs.), *Dix ans de corpus d'auteurs*. Paris: Éditions des archives contemporaines, pp. 245–267.
- Gupta, Suman (2009): *Globalization and Literature*. Cambridge: Polity.
- Han, J., Kamber, M., & Pei, J. (2012). *Data mining. Concepts and techniques*. Waltham: Morgan Kaufmann.
- Herfindahl, Orris C. (1950): *Concentration in the U.S. Steel Industry*, Unpublished doctoral dissertation, Columbia University.
- Hirschman, Albert O. (1945): *National Power and the Structure of Foreign Trade*, Berkeley, University of California Press.
- Leydesdorff, Loet (1998): "Theories of Citation?", In *Scientometrics*, vol. 43/n 1, pp. 5–25.
- Luhmann, Niklas (2000): *Art As A Social System*. Stanford: Stanford University Press.
- Mayer-Schönberger, Viktor and Kenneth Cukier (2013): *Big data. A revolution that will transform how we live, work, and think*. Boston and New York: Houghton Mifflin Harcourt.
- Modern Language Association International Bibliography*. <www.mla.org>.
- Price, Derek de Solla (1963): *Little Science, Big Science*. New York, Columbia University Press.
- Rae, Douglas W. (1967): *The Political Consequences of Electoral Laws*, New Haven, Yale University Press.
- Ruiz Ibáñez, José Javier y Óscar Mazín Gómez (2021): "Una presentación de *Los mundos ibéricos*", In *Otros Diálogos del Colegio de México*, n°15, pp. 1–12, <https://otrosdialogos.colmex.mx/una-presentacion-de-los-mundos-ibericos>, consulted on 08-12-2021.
- Saussy, Haun (dir.) (2006): *Comparative Literature in an Age of Globalization*. Baltimore: Johns Hopkins University Press.
- Schreibman, Susan, Ray Siemens and John Unsworth (eds.) (2004): *A Companion to Digital Humanities*. Malden: Blackwell.
- Schreibman, Susan, Ray Siemens and John Unsworth (eds.) (2016): *A New Companion to Digital Humanities*. Malden: Wiley and Sons.
- Small, Henry (1973): "Co-citation in the Scientific Literature: A New Measure of the Relationship Between Two Documents", In *Journal of the American Society for Information Science*, n 24, pp. 265–269.
- Thomson Reuters Web of Knowledge*. <<http://www.isiwebofknowledge.com/>>.
- Van Rees, Kees (1997): "Modelling the Literary Field: From System-Theoretical Speculation to Empirical Testings", In *Canadian Review of Comparative Literature/Revue Canadienne de Littérature Comparée*, March/mars, pp. 91–101.
- Wallerstein, Immanuel (2004): *World Systems Analysis: An Introduction*. Durham: Duke University Press.
- Witten, I. H., Frank, E., and Hall, M. A. (2011): *Data Mining. Practical Machine Learning Tools and Techniques*. Waltham: Morgan Kaufmann.