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Descriptive Finding

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A geography of unmarried cohabitation in the Americas

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Abstract

BACKGROUND

As the incidence of cohabitation has been rising in many parts of the world, efforts to determine the forces driving the cohabitation boom have also been intensifying. But most of the analyses of this issue conducted so far were carried out at a national level, and did not account for regional heterogeneity within countries.

OBJECTIVE

This paper presents the geography of unmarried cohabitation in the Americas. We offer a large-scale, cross-national perspective, together with small-area estimates of cohabitation. We created this map for several reasons. (i) First, our examination of the geography of cohabitation reveals considerable spatial heterogeneity, and challenges the explanatory frameworks which may work at the international level, but which have low explanatory power with regard to intra-national variation. (ii) Second, we argue that historical pockets of cohabitation can still be identified by examining the current

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geography of cohabitation. (iii) Finally, our map serves as an initial step in efforts to determine whether the recent increase in cohabitation is an intensification of pre-existing traditions, or whether it has different roots that suggest that a new geography may be evolving.

METHODS

Census microdata from 39 countries and 19,000 local units have been pooled together to map the prevalence of cohabitation among women.

RESULTS

The results show inter- and intra-national regional contrasts. The highest rates of cohabitation are found in areas of Central America, the Caribbean, Colombia, and Peru. The lowest rates are mainly found in the United States and Mexico. In all of the countries, the spatial autocorrelation statistics indicate that there is substantial spatial heterogeneity.

CONCLUSIONS

Our results lead us to ask what forces may have shaped these patterns, and they remind us that these forces need to be taken into account when seeking to explain recent cohabitation patterns, and especially the rise in cohabitation.

1. Introduction

In the vast majority of countries in both North and South America, unmarried cohabitation has increased significantly in recent decades (Esteve et al. 2012; Binstock 2008; Cabella et al. 2004; Quilodrán 2010; Kennedy and Bumpass 2008; Le Bourdais and Lapierre-Adamcyk 2004) (see Appendix A). In many Latin American countries, cohabitation is hardly an anomaly, and has coexisted with marriage since colonial times (Castro-Martín 2002; Rodríguez Vignoli 2005). But there has also been a significant degree of variation in the prevalence of cohabitation. For example, in some areas of southern Latin America, the incidence of cohabitation has been low historically (e.g., southern Brazil, Chile, Argentina, Uruguay). By contrast, marriage was almost universal in the United States and Canada until at least the second half of the 20th century (Cherlin 2004; Le Bourdais and Lapierre-Adamcyk 2004). While cohabitation has become increasingly common in all layers of society and in all regions of Latin America, there are still marked social and geographic differences in cohabitation patterns. In countries with pre-existing traditions of cohabitation, the social and spatial gradients of the present patterns of cohabitation echo the geo-cultural legacies, and historical patterns of disadvantage are linked to traditional forms of cohabitation. By

contrast, in countries with weak or non-existent traditions of cohabitation, social and regional heterogeneity in cohabitation patterns provide us with information about the social groups and regions that spearheaded the trend. While there is a sizeable amount of literature on the social gradient of cohabitation and its theoretical implications (Lesthaeghe and van de Kaa 1986; van de Kaa 1987; Perelli-Harris et al. 2010; Kenney and Goldstein 2012), scholars have devoted less attention to regional differences in cohabitation trends. Most of the existing research on cohabitation was carried out at a national level, and thus did not account for regional heterogeneity within countries (exceptions include Klüsener et al. 2013 and Coale and Watkins 1986).

To fill this gap in the research, we present in this article a detailed geography of unmarried cohabitation in the Americas. We have created a map of 39 countries extending from Canada to Argentina with more than 19,000 spatial units in which the percentages of cohabiting women among all women aged 25-29 who are in union are represented. By showing the spatial heterogeneity in cohabitation patterns, our goal is to reveal the marked regional differences that exist both across and within countries. Our map represents a first step toward explaining the roots and the causes of the recent cohabitation boom. Specifically, we examine the question of whether the current rise in cohabitation is basically an intensification of pre-existing traditions, and can therefore be seen as history's "revenge;" or whether it has different roots and follows new geographic patterns. In either case, a time-based perspective will be needed to answer this question. At this stage, our map primarily documents the dominant picture of cohabitation in the year 2000, but not the degree to which this picture has changed over time. Although we have not traced developments over time, we argue that historical pockets of cohabitation can still be identified by examining the current geography of cohabitation⁹.

2. Methodology

The results presented in this paper were obtained using census data from the 2000 census round. Assembling these data involved working with more than 20 million individual records of women aged 25–29 from 39 countries and 19,191 administrative units. For each unit, we have computed the percentage of 25–29-year-old women in a

⁹ We have used local spatial autocorrelation statistics to examine the map of cohabitation in Brazil for 1980, 1990, 2000, and 2010. The spatial clustering of cohabitation is very similar across years, despite the overall increase in cohabitation. The degree of correlation between the 2000 cohabitation rates and earlier measures is higher than 0.7 in the vast majority of countries. Results are available from the authors.

union who were cohabiting¹⁰ (See Appendix B). The method used to distinguish between cohabiting and married couples was similar across all of the countries except for the United States. In all of the Latin American countries and in Canada, the census includes an explicit category on cohabitation within the marital or relationship status questions. For the United States, cohabiting couples had to be identified based on their relationship to the head of household and marital status: the unmarried partner of an unmarried head of household is considered to be in a cohabiting union.¹¹

In all of the countries except Bolivia, Chile, El Salvador, and Honduras, we used the lowest geographical level at which we could compute the prevalence of cohabitation among 25–29-year-old women in relationships. In Bolivia, for instance, we used the 314 *secciones* instead the 1,384 *cantones*; in Chile, we used 314 *municipios* instead of 2,881 *distritos*; in El Salvador, we used 261 *municipios* in place of 2,270 *cantones*; and in Honduras, we used 298 *municipios* instead of 3,727 *aldeas*. The primary reason for not using the lowest geographic detail in these four countries was that more than 50% of these areas had fewer than 25 women of our targeted ages, which added a considerable degree of local uncertainty. Even with these precautions, 5% of the areas considered in the final map had fewer than 25 women in the denominator; and of these areas, 25% had extreme estimates of cohabitation that were below 10% or above 90%. We used Spatial Empirical Bayes (SEB) techniques (see Assunção et al. 2005) to smooth the rates in a particular area only when the estimate was based on a small sample size and differed significantly from the estimates of its neighboring units. The map with the unsmoothed rates does not differ significantly from the map with the smoothed rates (results and details are available from the authors).

¹⁰ The levels of cohabitation at ages 25–29 vary between men and women because women form unions at earlier ages. However, the geography of cohabitation is essentially the same regardless of which sex is taken as a reference. Since the main focus of the paper is to identify the hotspots of cohabitation and not to compare patterns between men and women, and in order to avoid unnecessary repetition, we decided to show only results for women. The degree of correlation between female and male cohabitation rates across local units is 0.93. Concentrating on the 25–29 age group permitted us to compare successive cohorts at ages at which education has been completed and patterns of family formation are becoming clear. Analyses of alternative age groups yielded exactly the same spatial patterning. The degree of correlation between the cohabitation rates of females ages 25–29 and of females ages 35–39 across local units is 0.87.

¹¹ Recent research has shown that this approach underestimates US cohabitation levels by 20% compared to direct methods (Kennedy and Fitch 2012). Consequently, we adjusted our estimates to reflect this under-reporting. Our adjusted estimates of the percentage of women who were cohabiting in 2000 exactly match the cohabitation estimates produced for 2002 using a direct cohabitation question (Kennedy and Bumpass 2008).

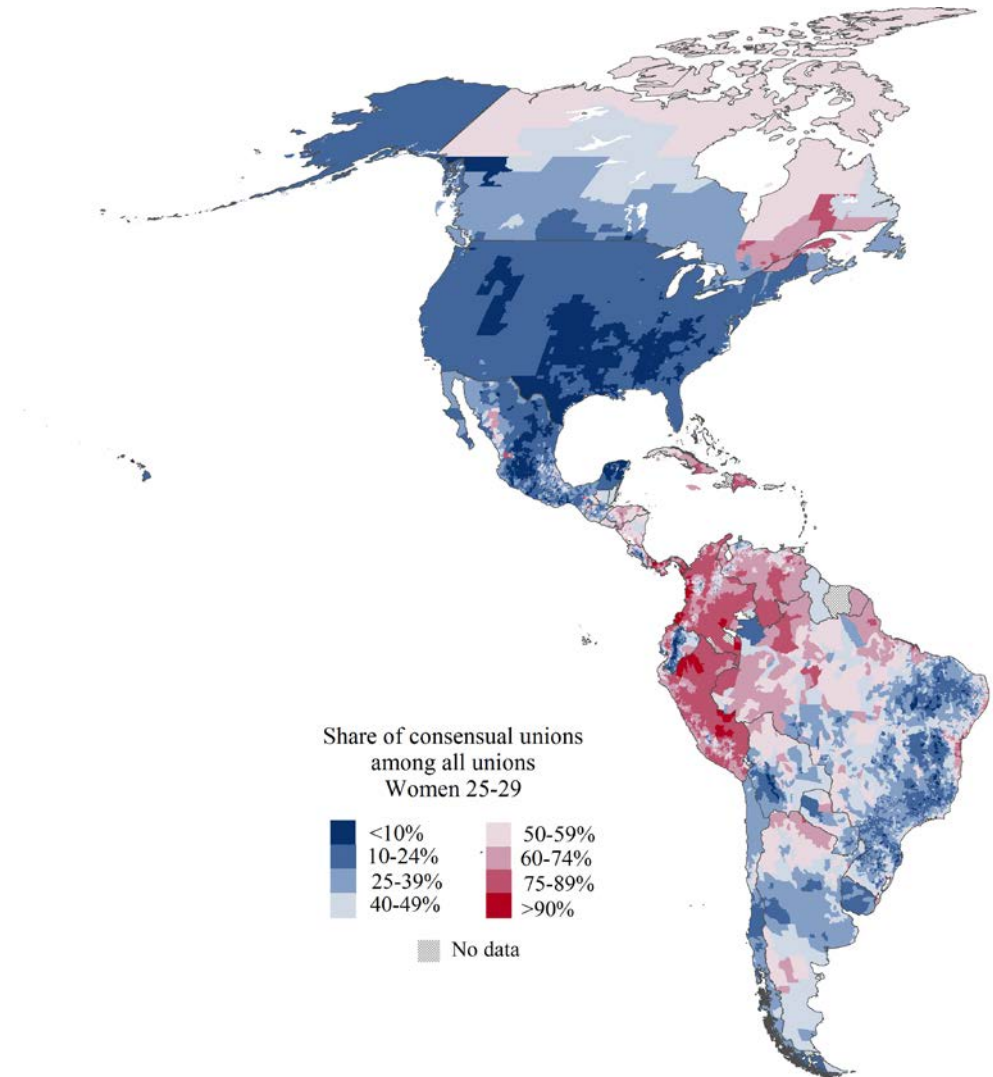
3. Results

The spatial distribution of cohabitation in the Americas (as measured by the smoothed estimator) is shown in Map 1. Around the year 2000 across the Americas, the cohabitation rate among 25–29-year-old women in a relationship was approximately 35%. The highest rates of cohabitation were found in Central America, the Caribbean, Colombia, and Peru; while, the lowest cohabitation rates were mainly found in the United States and Mexico. Canada, Brazil, Bolivia, Paraguay, Argentina, Uruguay, and Chile occupied intermediate positions in 2000.

As we can clearly see in Map 1 and the boxplots in Figure 1, there is a huge degree of variation in the incidence of cohabitation both across and within countries. The lowest values are observed in the US, while the highest values are found in Panama, Peru, and the Dominican Republic. The boxplots graphically depict the lower, the median, and the upper quartiles for each country. The countries are ordered on the basis of their median values. Most of the Caribbean countries are not represented here because we had only one observation. The median values range from 11.5% in the United States to 78.9% in the Dominican Republic. The United States is the only country where the median value is below 20%. A very diverse set of countries can be found in the 20% to 40% range, including Mexico, Canada, Brazil, Uruguay, Argentina, Bolivia, Paraguay, Costa Rica, and Trinidad and Tobago. In the 40% to 60% range are Venezuela and Barbados as well as three Central American countries: El Salvador, Nicaragua, and Honduras. Five countries have median value above 60%: Colombia, Cuba, Panama, Peru, and the Dominican Republic.

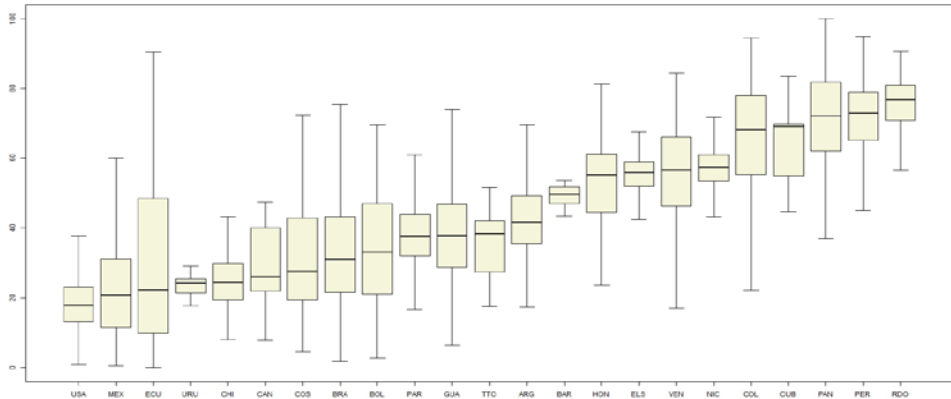
To measure regional heterogeneity within countries, we computed the interquartile range (IQR). The degrees of regional heterogeneity within countries are not strictly comparable because the units have not been standardized by population or land mass criteria, and the number of units varies across countries. Nevertheless, our results show that countries with very few observations may have a high degree of regional heterogeneity, while countries with many observations may have a low degree of regional heterogeneity. The United States has more than 2,000 units, and the IQR is 5.7. Mexico also has more than 2,000 units, but the IQR is 21.8. At over 40, Ecuador is the country with the highest IQR. At 38, Canada has the second-highest IQR, indicating a substantial degree of regional heterogeneity. Bolivia, Costa Rica, Colombia, Brazil, Panama, Venezuela, and Mexico have IQRs of between 20 and 30. IQRs below 15 are found in Paraguay, Nicaragua, the Dominican Republic, Chile, Barbados, El Salvador, the United States, and Uruguay.

Map 1: Share of consensual unions among all 25- to-29-year-old women in a union based on census data from the 2000 census round (color version*)



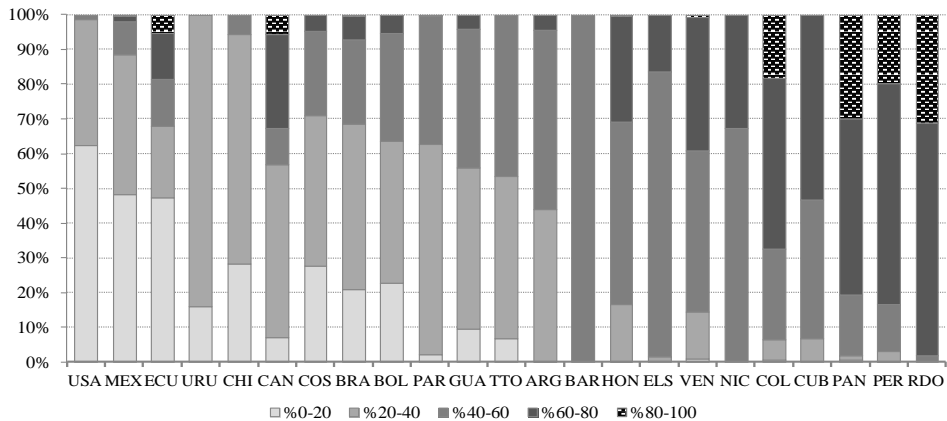
Source: Authors' own work based on census microdata from the represented countries (see Appendix B for the exact sources). *See Appendix C for a black and white version.

Figure 1: Regional distributions of the proportions of consensual unions among all 25-29-year-old women in a union by country, based on census data from the 2000 census round



Source: Authors' own work based on census microdata from the represented countries (see Appendix B for the exact sources).

Figure 2: Distribution of the population by level of cohabitation of the administrative units



Source: Authors' own work based on census microdata from the represented countries.

To supplement the information in the boxplots, in Figure 2 we present the relative distributions of each country's population based on the level of cohabitation of the administrative unit in which they reside. The countries are ordered as in Figure 1. By 2000, 60% of the population in the United States lived in areas where cohabiting couples represented less than 20% of all unions. At the other extreme, virtually the whole population of the Dominican Republic resided in areas where cohabiting couples comprised of more than 60% of all unions. Generally, the higher the country's median level of cohabitation (as shown in Figure 1), the higher the share of the population who reside in areas where 40% of couples cohabit. Ecuador and Canada are the two exceptions to this rule. In both countries, and particularly in Canada, similar percentages of the population live in areas with both low and high levels of cohabitation.

The dispersion results shown in Figure 1 are not informative in terms of the spatial distribution of cohabitation within countries. In Table 1, we report the degree of spatial autocorrelation using Global Moran's I index¹² for the largest countries of the Americas (the index cannot be computed for many Caribbean countries with a single administrative unit, as the computation requires a comparison of the levels of cohabitation between different administrative units within each country). Most countries have moderate to high levels of spatial autocorrelation. This is particularly true in Ecuador, Colombia, Chile, Bolivia, Argentina, Cuba, Panama, Costa Rica, and Canada, where Moran's I index is above 0.8. A Global Moran value above 0.8 indicates that there is strong spatial clustering in these countries, which means that the observed levels of cohabitation are not randomly distributed within countries, but that there are clusters of local areas with high levels of cohabitation, and others with low levels. As we can see in Map 1, the *parroquias* in the Andean region of Ecuador have extremely low levels of cohabitation, whereas the *parroquias* in the Amazonian and coastal regions have very high levels of cohabitation. Canada has a level of clustering similar to that of Ecuador. The highest rates of cohabitation are clearly clustered in the province of Quebec. At the other extreme, the countries with the lowest values of the Global Moran index (Mexico and the United States) show the lowest levels of cohabitation. The low values observed in Uruguay (0.227) might have been influenced by the low degree of geographical detail in that country.

¹²The Global Moran's I index is defined as $I = \left(\frac{n}{\sum_i \sum_j w_{ij}} \right) \frac{\sum_i \sum_j w_{ij} z_i z_j}{\sum_i z_i^2}$ where the observations z_i, z_j are in units of deviation from the mean, and the weights w_{ij} take a value of 1 whenever "i" and "j" are neighbors, and zero otherwise. By definition, the values of I are bounded between -1 and one. A value close to one is attained whenever most administrative units are surrounded by other administrative units with similar cohabitation levels. When the levels of cohabitation in most administrative units differ greatly relative to those of their neighbors, Global Moran's I takes a value close to -1.

Table 1: Global Moran's I based on census data from the 2000 census round

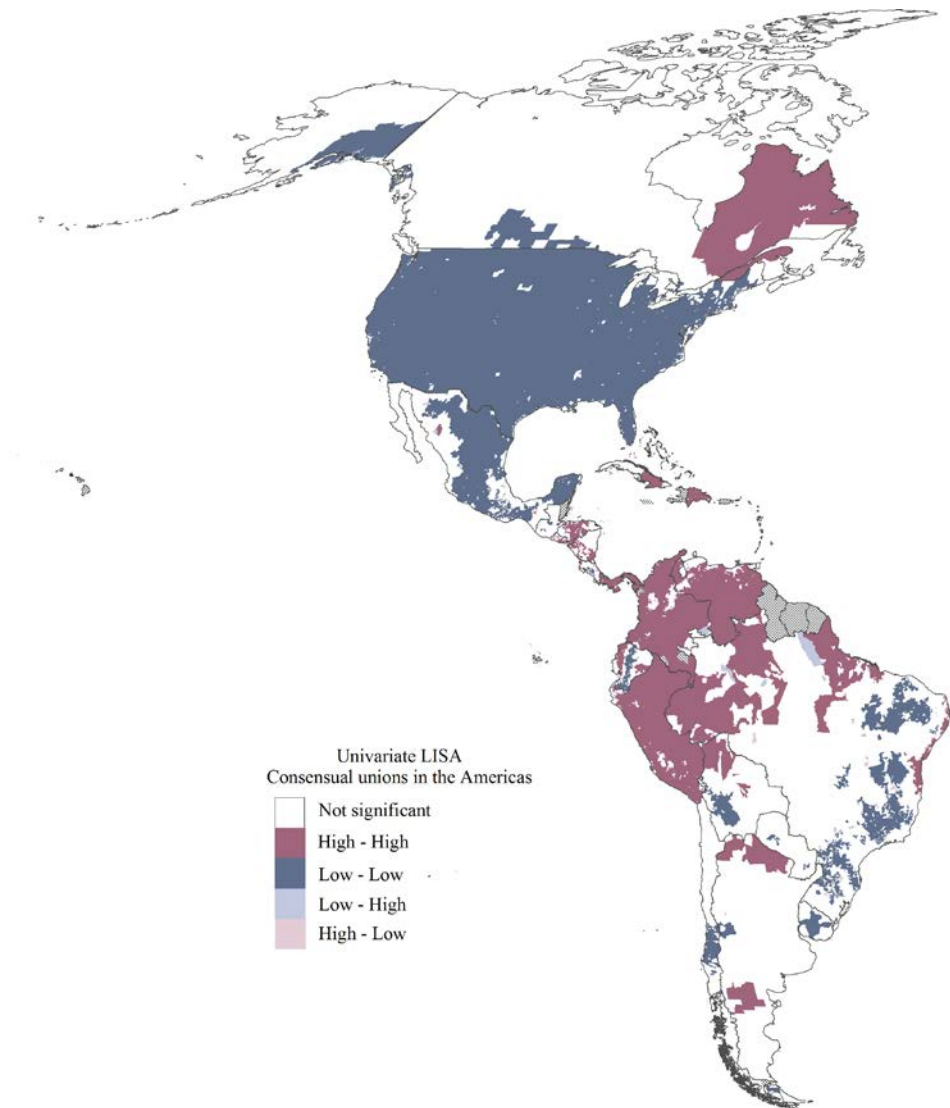
Country	Global Moran's I	Country	Global Moran's I
<i>North America</i>		<i>Caribbean</i>	
Canada	0.8393	Cuba	0.8206
Mexico	0.4160	Dominican Republic	0.6842
United States	0.4465	South America	
<i>Central America</i>		Argentina	0.8309
Costa Rica	0.8197	Bolivia	0.8153
El Salvador	0.4160	Brazil	0.7794
Guatemala	0.4805	Chile	0.8123
Honduras	0.7535	Colombia	0.8175
Mexico	0.6504	Ecuador	0.9228
Nicaragua	0.6102	Paraguay	0.6506
Panama	0.8319	Peru	0.7611
		Uruguay	0.2270
		Venezuela	0.7509

Source: Authors' own work based on census microdata from the represented countries (see Appendix B for the exact sources).

To find out where the geographical pockets of high and low cohabitation are, we calculated the Local Moran's I for each spatial unit (Anselin 1995) in the Americas. In this exercise, we did not impose country boundaries. Map 2 allows for a visual inspection of the cluster analysis. The high-high and the low-low locations are referred to as spatial clusters, and the high-low and low-high locations are spatial outliers.

The spatial clustering of high levels of cohabitation can be found in Venezuela, Colombia, Ecuador, Peru, and large areas of Amazonian Brazil; which together form a large continuum of high levels of cohabitation. In the Brazilian state of Pará as well as in certain areas of Brazil's eastern coast between the municipalities of Recife and Salvador, there is spatial clustering of high levels of cohabitation. Other clusters are found in the northern part of Argentina and the northwestern area of Bolivia. In Central America, we can see a large continuum of high levels of cohabitation stretching from Panama to El Salvador, with the exception of Costa Rica. In the Caribbean, we find that the eastern part of Cuba as well as most of the municipalities in the Dominican Republic fall into the high-high category. Finally, in North America, we find clustering of high levels of cohabitation in the Mexican states of Veracruz and Chiapas and in virtually the entire Canadian province of Quebec.

Map 2: Local indicators of spatial autocorrelation (LISA) of the share of consensual unions based on census data from the 2000 census round



Source: Author's own work based on census microdata from the represented countries (see Appendix B for the exact sources).

Spatial clusters of areas with low levels of cohabitation are mainly found in North America, and cover virtually all areas in the United States, most areas of Mexico, and the areas located in the south-central part of Canada near the US border. In South America, low-low units are mainly found around the metropolitan area of Santiago de Chile, in the western regions of Bolivia, in the Ecuadorian Andes, in Uruguay, and in southern and eastern Brazil (with the exception of Brazil's Atlantic coast). In Central America, low-levels are found only on the Pacific coast of Costa Rica.

4. Conclusions

In this paper we explored the distribution of cohabitation in the Americas with unprecedented levels of geographical coverage and detail. Using complete census microdata from virtually all of the countries in the region, we have presented a highly detailed map of cohabitation that includes more than 19,000 administrative units. Our study illustrates the power of geography to reveal considerable regional heterogeneity across and within countries. We have shown that the prevalence of cohabitation varies dramatically across the Americas, from low levels in the United States and Mexico to high levels in Central America, the Caribbean, and the Amazonian and tropical areas. The macro-regional patterning of cohabitation has to be re-examined in light of the substantial degree of heterogeneity within countries. The global indicators of spatial autocorrelation uncovered significant levels of spatial clustering, especially countries like Ecuador, Canada, and Brazil. At the continental scale, the US appears to be one of the most homogeneous countries in the Americas.

What lies behind this varied geography? To understand the regional patterning of cohabitation in the Americas, we will have to dig into history, exploring the colonization, Christianization, and ethnic composition of these societies. We will also have to look at the subsequent development of the social and political structures of these countries. All of these factors and their complex interactions need to be incorporated into an explanatory framework before we can understand the spatial patterning of cohabitation. Scholars are currently in the process of constructing a set of explanatory variables which are comparable across countries, and which can measure dimensions such as religion, race, and social stratification in American societies at both the individual and the contextual levels. Only by gaining a clear picture of the underlying causes of historical cohabitation we will be able to understand the recent boom in cohabitation, and to predict how cohabitation rates will develop in the future.

5. Acknowledgments

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References

- Anselin, L. (1995). Local Indicators of Spatial Association—LISA. *Geographical Analysis* 27(2): 93–115. doi:10.1111/j.1538-4632.1995.tb00338.x.
- Assunção, R.M., Schmertmann, C.P., Potter, J.E., and Cavenaghi, S.M. (2005). Empirical bayes estimation of demographic schedules for small areas. *Demography* 42(3): 537–558. doi:10.1353/dem.2005.0022.
- Binstock, G. (2008). *Cambios en la formacion de la familia en Argentina: cuestion de tiempo o cuestion de forma?* Paper presented at the Congress of the Latin American population Association (ALAP), Cordoba, Argentina, September 24–26.
- Cabella, W., Peri, A., and Street, M.C. (2004). *Dos orillas y una transicion ? La segunda transición demografica en Buenos Aires y Montevideo en perspectiva biografica.* Paper presented at the Congress of the Latin American Population Association (ALAP), Caxambu MG, Brazil, September 18–20.
- Castro-Martin, T. (2002). Consensual Unions in Latin America: Persistence of a Dual Nuptiality System. *Journal of Comparative Family Studies* 33(1): 35–55.
- Cherlin, A.J. (2004). The deinstitutionalization of American marriage. *Journal of Marriage and Family* 66(4): 848–861. doi:10.1111/j.0022-2445.2004.00058.x.
- Coale, A.J. and Watkins, S.C. (eds.) (1986). *The Decline of Fertility in Europe: The Revised Proceedings of a Conference on the Princeton European Fertility Project.* Princeton: Princeton University Press.
- Esteve, A., Lesthaeghe, R., and López-Gay, A. (2012). The Latin American Cohabitation Boom, 1970–2007. *Population and Development Review* 38(1): 55–81. doi:10.1111/j.1728-4457.2012.00472.x.
- Kennedy, S. and Bumpass, L.L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research* 19(47): 1663–1692. doi:10.4054/DemRes.2008.19.47.
- Kennedy, S. and Fitch, C.A. (2012). Measuring Cohabitation and Family Structure in the United States: Assessing the Impact of New Data From the Current Population Survey. *Demography* 49(4): 1479–1498. doi:10.1007/s13524-012-0126-8.

- Kenney, C.T. and Goldstein, J. (2012). *Too poor to marry? A cross-national comparison of the SES-gradient in non-marriage*. Paper presented at the Stockholm, European Population Conference, June 13–16.
- Klüsener, S., Perelli-Harris, B., and Sánchez Gassen, N. (2013). Spatial Aspects of the Rise of Nonmarital Fertility Across Europe Since 1960: The Role of States and Regions in Shaping Patterns of Change. *European Journal of Population* 29(2): 137–165. doi:10.1007/s10680-012-9278-x.
- Le Bourdais, C. and Lapierre-Adamcyk, É. (2004). Changes in conjugal life in Canada: Is cohabitation progressively replacing marriage? *Journal of Marriage and Family* 66(4): 929–942. doi:10.1111/j.0022-2445.2004.00063.x.
- Lesthaeghe, R.J. and van der Kaa, D.J. (1986). Twee demografische transitities? In: van der Kaa, D.J. and Lesthaeghe, R.J. (eds.). *Bevolking: Groei en krimp*. Deventer: Van Loghum Slaterus: 9–24.
- Minnesota Population Center (2011). Integrated Public Use Microdata Series International: Version 6.1 [electronic resource]. Minneapolis: University of Minnesota. <https://international.ipums.org/international/>.
- Perelli-Harris, B., Sigle-Rushton, W., Kreyenfeld, M., Lappegård, T., Keizer, R., and Berghammer, C. (2010). The Educational Gradient of Childbearing within Cohabitation in Europe. *Population and Development Review* 36(4): 775–801. doi:10.1111/j.1728-4457.2010.00357.x.
- Quilodran, J. (2022). Atisbos de cambios en la formación de las parejas conyugales a fines del milenio. *Papeles de Población* 6(25): 9–19.
- Van de Kaa, D.J. (1987). Europe's Second Demographic Transition. *Population Bulletin* 42(1): 3–57.
- Vignoli, J.R. (2005). *Unión y cohabitación en América Latina: modernidad, exclusión, diversidad?* Santiago de Chile: CEPAL.

Appendix A

Table A1: Share of cohabiting women (ages 25-29) by country and census round

Country	1970	1980	1990	2000	2010	Dif, 2010-1970
Argentina	11.1%	13.0%	22.5%	41.3%	66.6%	55.5
Bolivia	.	.	.	34.7%		
Brazil	7.6%	13.0%	22.2%	39.3%	51.0%	43.4
Canada			21.4%	36.1%	44.9%	
Chile	4.6%	6.7%	11.3%	24.6%		
Colombia	19.7%	33.2%	49.2%	65.6%		
Costa Rica	16.8%	19.4%	.	32.6%	48.5%	31.7
Cuba	.	.	.	55.8%		
Ecuador	26.9%	29.4%	30.1%	37.4%	47.4%	20.5
El Salvador			53.1%		54.0%	
Mexico	15.3%	.	15.2%	22.7%	37.1%	21.8
Nicaragua	42.7%		54.9%	55.5%		
Panama	58.9%	52.3%	53.2%	62.5%	73.9%	15.0
Peru	.	.	43.1%	69.8%		
Puerto Rico	8.5%	5.2%	12.0%			
United States			11.7%	18.4%	27.3%	
Uruguay	9.6%	14.0%	23.5%		70.8%	61.2
Venezuela	30.8%	32.6%	36.9%	51.6%		

Source: Own work from population censuses

Appendix B

Table B1: Summary of the census data, boundary files, and geographic details used to analyze the prevalence of consensual unions in the Americas in the 2000 census round

Country	Census Year	Census data provider*	Census sample	Denomination	Adm. level	Number of units	Average pop. per unit	Average surface area (km ²)
North America								
Canada	2001	STATCAN	20%	Census division	2	288	104,191	34,669
Mexico	2000	CELADE	100%	Municipality	2	2,443	39,711	803
United States	2000	IPUMS	5%	PUMA	3	2,071	135,887	4,744
Central America								
Belize	2000	CARICOM	100%*	Single division	0	1	232,111	21,989
Costa Rica	2000	CELADE	100%	District	3	459	8,301	112
El Salvador	2007	CELADE	100%	Municipality	2	262	21,924	77
Guatemala	2002	CELADE	100%	Municipality	3	331	33,949	327
Honduras	2001	CELADE	100%	Municipality	2	298	20,392	377
Nicaragua	2005	CELADE	100%	Municipality	2	153	33,609	787
Panama	2000	CELADE	100%	Corregimiento	3	592	4,793	126
South America								
Argentina	2000	CELADE	100%	Department	2	532	68,158	5,223
Bolivia	2001	CELADE	100%	Section	3	314	26,351	3,442
Brazil	2000	CELADE	100%	Municipality	3	5,507	30,847	1,543
Chile	2002	CELADE	100%	Commune	3	342	44,200	2,220
Colombia	2005	DANE	100%	Municipality	2	1,113	36,995	994
Ecuador	2001	CELADE	100%	Parish	3	995	12,218	255
French Guyana	2008	INSEE (FR)	100%*	Single division	0	1	219,266	83,299
Paraguay	2002	CELADE	100%	Census District	2	241	21,424	1,655
Peru	2007	CELADE	100%	District	3	1,833	14,955	702
Rep. of Guyana	2002	CARICOM	100%*	Single division	0	1	751,230	209,739
Uruguay	1996	CELADE	100%	Department	1	19	166,514	9,340
Venezuela	2001	CELADE	100%	Parish	3	1,116	20,658	830

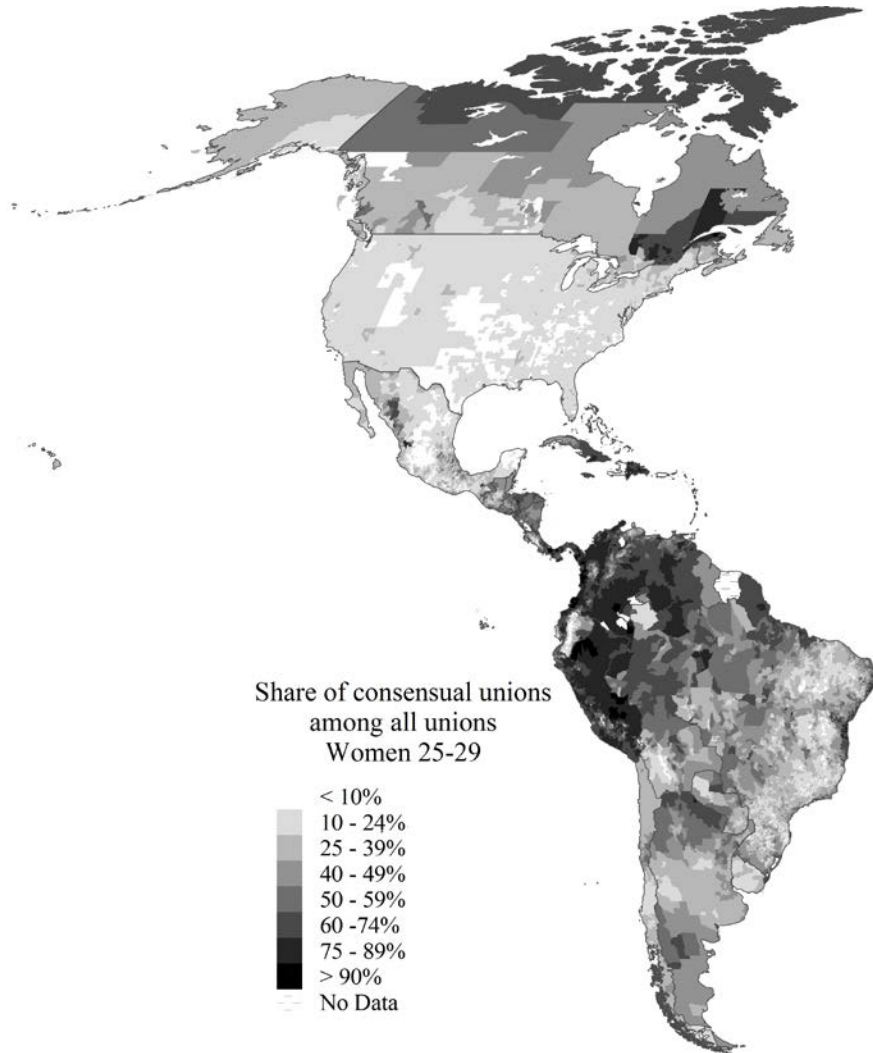
Table B1: (Continued)

Country	Census Year	Census data provider*	Census sample	Denomination	Adm. level	Number of units	Average pop. per unit	Average surface area (km ²)
Caribbean								
Anguilla	2001	CARICOM	100%*	Single division	0	1	11,430	83
Antigua and Barbuda	2001	CARICOM	100%*	Single division	0	1	63,863	436
Bahamas	2000	CARICOM	100%*	Single division	0	1	303,611	13,388
Barbados	2000	CELADE	100%	Parish	1	11	22,728	74
Cuba	2002	IPUMS	10%	Parish	1	15	745,845	7,382
Dominica	2001	CARICOM	100%*	Single division	0	1	69,775	754
Dominican Republic	2002	CELADE	100%*	Municipality	3	225	38,056	212
Grenada	2001	CARICOM	100%*	Single division	0	1	103,137	360
Guadeloupe	2008	INSEE (FR)	100%*	Single division	0	1	401,784	1,731
British Virgin Islands	2001	CARICOM	100%*	Single division	0	1	23,161	169
Jamaica	2001	CARICOM	100%*	Single division	0	1	2,607,635	11,000
Martinique	2008	INSEE (FR)	100%*	Single division	0	1	397,693	1,118
Montserrat	2001	CARICOM	100%*	Single division	0	1	4,303	101
Saint Kitts and Nevis	2001	CARICOM	100%*	Single division	0	1	46,325	267
Saint Vincent and the Grenadines	2001	CARICOM	100%*	Single division	0	1	106,253	398
Saint Lucia	2001	CARICOM	100%*	Single division	0	1	156,741	614
Trinidad and Tobago	2000	CELADE	100%	Parish	1	15	74,318	344

Source: Own work. *Aggregate data in the Census Samples

Appendix C

Table C3: Share of consensual unions among all 25- to 29-year-old women in a union based on census data from the 2000 census round (black-and-white version)



Source: Authors' own work based on census microdata from the represented countries (see Appendix B for the exact sources).