



Conceptual semantics, ethnicities, demonyms, scientific language, and political correctness

Semántica conceptual, etnias, demónimos, lenguaje científico y corrección política

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Science and scientific medicine must be expressed in the most pristine, precise, and straightforward language to describe even complex phenomena in the uttermost transparently and unmistakably conceivable way. Coloring and analogies confer formal richness, poetic licenses, and elaborate and elegant style to speech or literary writings in literature and daily language. However, not in science, where each word must coincide, without ambiguities, with the material and objective phenomenon that it discovers, describes, modifies, or interprets.

It is surprising that still in this new Century of Lights, the United States Census Bureau recognizes five «races» in the United States (US) population: White or Caucasian, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islanders (although accepting that this classification «reflects a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically»)¹ not only equally surprising but also preposterous is the fact that the term «race» continues to be present in modern medical literature to indicate and differentiate human populations into distinct ethnic groups.² This «racial» medical differentiation is understandable to a certain extent, as it is known that genetic inheritance and ethnic belonging often determine the risk or resistance to contracting a particular disease or pathological condition and the severity or modality of a clinical entity. Among ethnicities

are also contrasting biological behaviors of some systems, functions, or molecules. For example, in the «biracial» cohort study REGARDS,³ low concentrations of high-density lipoproteins cholesterol (HDL-c) increase coronary heart disease risk only in White people but not in Blacks.

Nevertheless, «race» is based on a handful of phenotypic visible physical features such as skin tone, eye color and shape, hair color and texture, height, etcetera, which depend on variations of 0.1% of our genome. Genetic studies (mainly the monumental effort known as the Human Genome Project) have proven that there is only one race, humans.^{4,5} The visible phenotypic differences among ethnic groups depend on climate, exposure to sunlight, isolation or interbreeding with other human groups, nutrition, epigenetics, and other social and environmental factors.⁶ As an example of what phenotypic variability signifies, dogs (descendants of primitive wolves) and modern gray wolves share 99.96% of their genome structure. Both species have changed through time due to hybridizations with jackals and coyotes, and among themselves, climate modifications, and in the case of dogs, the effects of domestication. However, despite their genetic homology, the physical differences between a wolf, a Great Dane dog, or a Chihuahua pet are remarkable.

Although «race» is not scientifically based, it is indeed a social and political construct.^{2,5} It is deeply enrooted in some racist-prone societies like the US, Germany, England,

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How to cite: Meaney E, Meaney A. Conceptual semantics, ethnicities, demonyms, scientific language, and political correctness. *Cardiovasc Metab Sci.* 2023; 34 (1): 4-7. <https://dx.doi.org/10.35366/110245>

Spain, Mexico, and Brazil. It has been used to explain and justify or normalize all kinds of injustices, dispossessions, discrimination, and barbaric acts.

Medicine and science must be apolitical but never anti-ethical. In these times of the apparent fading of globalism and the rebirth of nationalism everywhere, amid the universal struggle for the rights of all, especially minorities, we must be cautious in our medical texts to use words that can offend any national, ethnic, or minority group sensitivities. At the same time, scientific language obliges us to employ terms and concepts based on knowledge and common sense (although, as the classics say, it is the least common of all senses).

The division of the genus *Homo sapiens* into «subspecies» or «races» was the product of a disparate group of valuable scientists, limited by their time and Eurocentrism prejudices (Carl Linnaeus, Georges Cuvier, and Charles Darwin) and others that were, even if unintentionally, ideological precursors of White supremacism.⁵ For example, the word Caucasian (as a synonym of White or Europoid) is an old-fashioned, unscientific, and racist myth invented by Germans pseudoscientists Christoph Meiners and Johann Friedrich Blumenbach in the late 1700s following the absurd Linnaeus ideas to ascribe North and Western European individuals the more elevated intellectual and moral virtues «*Europaeus albus*», and at the same time, to describe Yellows (Asians, «*Asiaticus fuscus*»), Blacks (African Negroes, «*Africanus niger*») and Reds (Malaysians and Amerindians, «*Americanus rubescens*») as intellectual and moral inferior «races». Calling White individuals of European origin (because there are ethnically Arabs, Turks, and Iranians, among others, with white skin) Caucasians is an enormous error from genetic, anthropological, geographical, and historical points of view. The Caucasus is an ethnically kaleidoscopic region where Russians, Georgians, Armenians, Azerbaijanis, Turkish, Chechens, Iranians, Mongols, and other ethnic groups have mixed genetically, socially, and culturally for centuries. Modern Europeans are the result of a gigantic mishmash consequence of migratory flows from Africa in the first place and from the Middle East and Siberia lately.⁷⁻⁹ In conclusion, «Caucasian» must be excluded

from the medical and scientific language as unscientific, insulting, and racist.

Another matter that goes against logic, history, physical geography, and anthropology is the word used to name the people from the nation known as the United States of America (US or USA). US people called themselves «Americans», and beyond the demonym, the word is also used as an adjective to name things, institutions, customs, qualities, and virtues from that nation: «the American way of life», the «American Heart Association», the «American Government», the «American literature», the «American democracy», and the like. Nonetheless, America is a vast continent stretching from the easternmost part of the Aleutian archipelago to Patagonia. Indeed, Americans are all the inhabitants of this continent, its surrounding islands, and archipelagos of the Caribbean, the Pacific, and the South Atlantic Oceans, comprising 35 sovereign states and 14 territories still under colonial dominion. The noun North American, sometimes applied to the US people, is also incorrect because North America, geopolitically speaking, is the northernmost part of the continent. It encompasses the Aleutian Islands, Greenland, Alaska, Canada, the continental US, and most of the Mexican territory until the strait of Tehuantepec. However, some also add the Caribbean islands and signal the Panama strait as the limit of the northern part of the continent. The Spanish term «estadounidense» (literally United Statesman, «*états-unien*» in French, and «*statunitense*» in Italian) is almost proper but less utilized. The correct demonym for the US's inhabitants (that comprises all the elements of that nation's official name) must be US Americans (as it is in German, for example, *US-Amerikaner*). Other mistakes emerge from the initial error of appropriating the name of an entire continent. Calling persons of Mexican origin living in the United States «Mexican Americans», apart from being redundant, is tantamount to inferring that Mexicans do not belong to the American continent. Correct denominations must refer to them as *US inhabitants or citizens of Mexican origin or ancestry*. In the same order of ideas, to name Black persons, Afro-Americans (as if Black or Negro, were derogatory words, while White

and Brown are not) is another anti-geographical and anti-anthropological term. Africa, a big continent, houses a considerable number of ethnic groups. There are Arabs in the north and Whites mainly in the Republic of South Africa (but with sizable White communities in Kenya, Zimbabwe, Namibia, Angola, Mozambique, and Congo, among others). Also exists a complex mixture of ethnic groups that compose Ethiopians, Somalis, and Eritreans (mainly Afro-Asiatic and Nilo-Saharan ethnic groups), and of course, a significant number of countries with a majority Negro population. With the current denomination, an Egyptian or a White South African residing in the US could be appropriately named «Afro-American». The same mistake is made in Mexico when the population of Black origin is called «Afro-Mexicans». They are indeed Mexicans of Black descent.

The term United States has been used by other nations as a shameful copycat. For example, in Mexico, the term «Estados Unidos Mexicanos» was adopted as the country's official name after the promulgation of the 1917 Constitution currently in force. After a long dispute, the constituents' legislators gave our country the unfortunate name of the United Mexican States as an unimaginative imitation of the one they had taken for themselves, our northern neighbors, since the beginning of their independent life. There is currently an initiative in the Chamber of Deputies to restore the ancestral name of Mexico, which is how our country is known abroad and the one that all Mexicans use.

What does it mean, ethnically, to be Mexican? There is no Mexican «race» or a specific ethnic group that could characterize us. Referring to Mexicans as Aztecs, as a second or nickname demonym, is improper because it leaves out other great native cultures, the Olmecs, the Teotihuacans, the Mayans, the Mixtec-Zapotecans, and the like, and denies our entire genetic lineage. In effect, Mexico is a clear-cut example of ethnical diversity and admixture, being mestizo, the more significant proportion of our population.¹⁰ The three main genetic trunks admixed in the composition of the current Mexican population are European (64.9%), Amerindian (30.8%), and Black

(4.2%), according to a study that examined the paternal lineage through the analysis of the non recombining region of the Y-chromosome.¹⁰ Nevertheless, there is significant heterogeneity in the proportion of these three ancestral origins, with a north-south gradient, according to which European ancestry predominates in the northern and western States of the Republic.¹⁰ In contrast, Amerindian ancestry is more important (37-50%) in Central and Southeastern Mexico. The Black genetic contribution was low and more homogeneous in all the territorial zones (0-8.8%).¹⁰

However, studying the maternal inherited mitochondrial DNA, the Amerindian contribution to the genetic composition of the current Mexican population was almost omnipresent (more than 90% of the mitochondrial DNA, related exclusively to maternal lineage, pertains to one of the main Pan-American indigenous haplogroups).¹¹ That means that the contribution of female Europeans to our genetic ancestry was relatively small, contrasting with the significant genetic ancestry of European males. This phenomenon indirectly indicates the sexual domination Mexican women suffered during the conquest and colonial consolidation. So, as the more substantial proportion of the Mexican population is of mixed origin, the term Hispanic is only partially accurate, genetically speaking.

However, racist orientation often yields blatant senselessness. The US Census authorities use the term «Hispanic» to designate any «person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race». ¹² Curiously, people from Spain do not receive that appellation but are named Spaniards. The people from The Philippines, a former Spain colony where Spanish is not the predominant language, are not considered Hispanics. Neither the Portuguese-speaking people from Brazil, whose territory was colonized by another Iberian country, Portugal. The Roman conquerors named Hispania the entire Iberian Peninsula and Hispanicus to their original inhabitants. Spain (España, in Spanish) derives from the Latin noun Hispania. Although this term enclosed all the peninsular territory, in less ancient times, it was awarded exclusively

to Spain, which as a country, was born at the end of the 14th century. The Spanish term Hispanoamérica (or obsolete Spanish America) leaves again out Brazil, the biggest non-English-speaking country on our continent, and other Caribbean or South American countries or colonized enclaves, where French or Dutch are the dominant languages.

Although the terms *Iberoamerica* and *Iberoamericans* include all the countries derived from the Spanish-Portuguese conquest, they leave out the other Caribbean or continental national entities colonized by France and the Netherlands. On the other hand, the noun Latino is used by the US Census Bureau as a synonym for Hispanic. It is another kind of nonsense! Latin was the language of ancient Rome, and relevant modern occidental idioms (Italian, French, Portuguese, Spanish, and Rumanian) derive from the vulgar original Roman tongue. Furthermore, a lot less extended idioms (unfairly called «regional») like Catalan, Galician, Corso, Ladino, Calabrese, and Napolitano, among many others, are also Latin-derived romances tongues. Amazingly, neither Italians nor other European national groups with Latin-derived languages are named Latinos, just those from the Americas! Instead of all this nonsense, the correct terms Latin America (and Latin Americans) encompass most of our countries and populations from Spain, Portugal, and France's ancestry and cultural heritage, combined with our original Amerindian settlers' splendorous native cultures and the significant African Black contribution. We share the same geographic space, the Americas, with Caribbean nations and peoples with mixed ancestry and idioms (as other continental enclaves or countries such as the Guyanas and Belize), some Spanish-speaking, and others who speak English, French, or Dutch. Except for the latter, all of them fall into the definition of Latin Americans, the name that the components of the second most numerous ethnic block in the US (more than 62 million people representing 19% of the total population of that country) should receive. To identify the different Latin Americans residing in the US it is necessary to indicate which country they come

from: US inhabitants of Mexican, Bolivian, Haitian, Argentinian, or whatever descent.

Political correctness must be based on wisdom and rationality, not prejudices or convenient false politeness. Finally, each ethnic group, nation, and population, without exception, must hold a healthy pride in its values, traditions, culture, and language, as all belong to that diverse, multifaceted, and great fraternity called humanity.

REFERENCES

1. The United States Census Bureau. About the topic of race. [Visited on November 30, 2022] Available in: <https://www.census.gov/topics/population/race/about.html>
2. Witzig R. The medicalization of race: the scientific legitimization of a flawed social construct. *Ann Intern Med.* 1996; 125: 675-679.
3. Zakai NA, Minnier J, Safford MM, Koth I, Irwin MR et al. Race-dependent association of high-density lipoprotein cholesterol levels with incident coronary artery disease. *J Amer Coll Cardiol.* 2022; 80: 2104-2115.
4. Mccann-Mortimer P, Augoustinos M, Lecouteur A. 'Race' and the Human Genome Project: constructions of scientific legitimacy. *Discourse Soc.* 2016; 15 (4).
5. Mohsen H. Race and genetics: Somber history, troubled present. *Yale J Biol Med.* 2020; 93: 215-219.
6. Bateson P. Why are individuals so different from each other? *Heredity.* 2015; 115: 285-292.
7. Montinaro F, Pankratov V, Yelmen B, Pagani L, Mondal M. Revisiting the out of Africa event with a deep-learning approach. *Am J Hum Genet.* 2021; 108: 2037-2051.
8. Lamnidis TC, Majander K, Jeong C, Salmela E, Wessman A, Moiseyev V et al. Ancient Fennoscandian genomes reveal origin and spread of Siberian ancestry in Europe. *Nat Commun.* 2018; 9: 5018.
9. Gibbons A. There's no such thing as a 'pure' European—or anyone else. *Science.* 2017. Available in: <https://www.science.org/content/article/theres-no-such-thing-pure-european-or-anyone-else>
10. Martínez-Cortés G, Salazar-Flores J, Fernández-Rodríguez LG, Rubí-Castellanos R, Rodríguez-Loya C, Velarde-Félix JS, et al. Admixture and population structure in Mexican-Mestizos based on paternal lineages. *J Hum Genet.* 2012; 57: 568-574.
11. Bodner M, Perego UA, Gomez JE, Cerda-Flores RM, Migliore NR et al. The mitochondrial DNA landscape of modern Mexico. *Genes.* 2021; 12 (9): 1453.
12. U.S. Census Bureau, Population Estimates Program (PEP). Hispanic or latino origin. [Visited on Dec 1st, 2022]. Available in: <https://www.census.gov/quickfacts/fact/note/US/RHI725221>

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