Part II: How COVID upended the taboo on limiting constructive discussion about human biodiversity

The coronavirus crisis has brought to light the societal downside of ignoring patterned, population-based differences. Consider the latest research findings of “a specific gene” highly prevalent in South Asian populations (but not European ones) that “doubles the risk of respiratory failure from COVID-19”. COVID has also revealed numerous other examples of susceptibility differences, with study after study (after study after study, and yet more studies) indicating likely population-based (racial) variation in COVID-19 immunity.

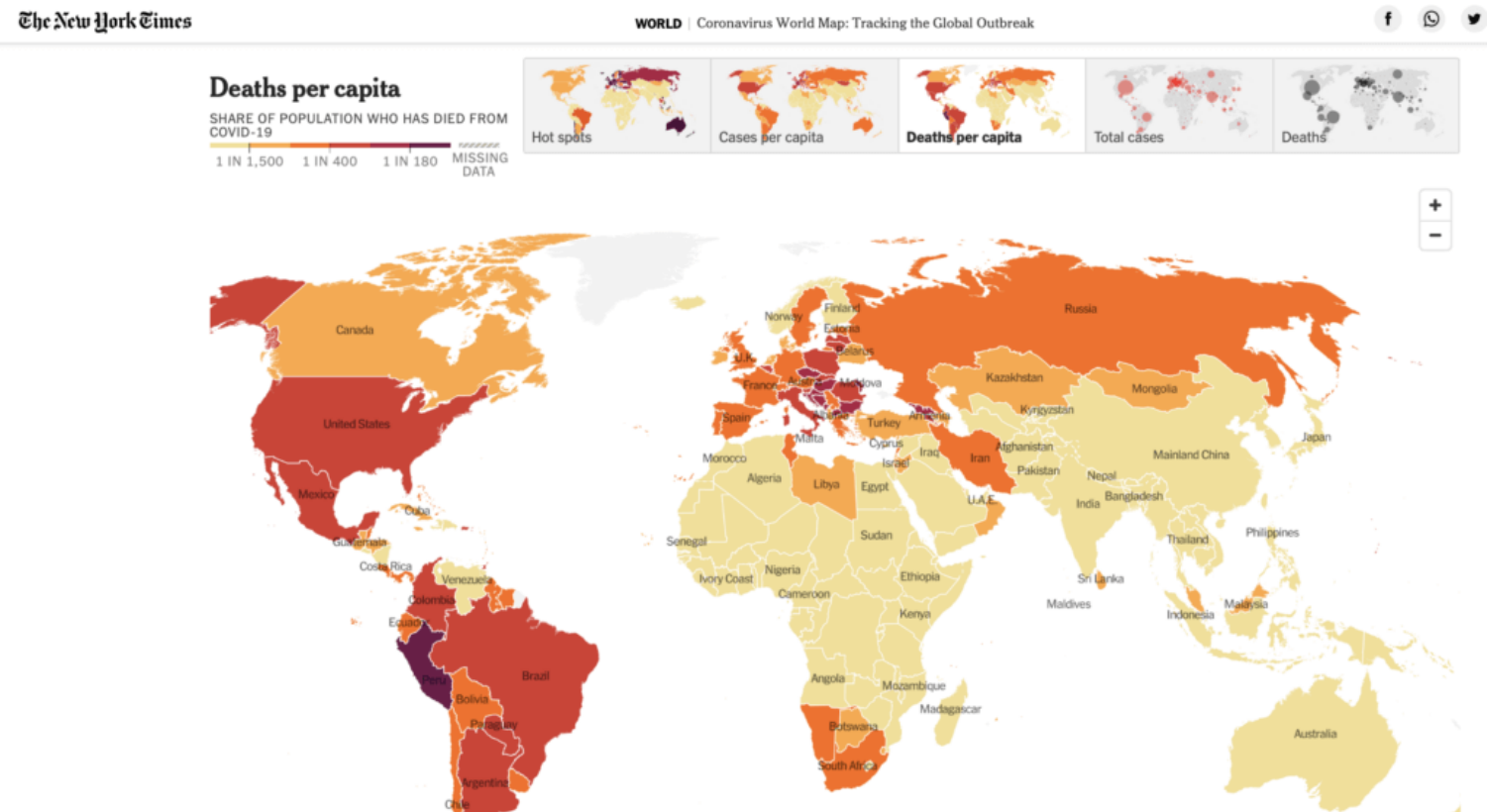
[su_panel color=”#3A3A3A” border=”1px solid #3A3A3A” radius=”2? text_align=”left”]This is part two of a four part series on the controversy over “human biodiversity.”

Read part one: Many people believe ‘human biodiversity’ is alt-right code for embracing racism. Here’s why they are dangerously wrong

Read part three: Confronting the elephant in the room — the explosive issue of IQ

Read part four: Why it’s so critical to move beyond liberal rejectionism of human biodiversity [/su_panel]

Early in the COVID pandemic, we raised the possibility—likelihood really—that the genetic make-up of sub-Saharan Africans is the most plausible explanation for why that populous region remains the global ‘cold spot’ for both infections and deaths from COVID. This is an outcome wholly unanticipated by the medical establishment which unanimously believed the poorest continent in the world, with the worst health care systems, was likely to face catastrophic devastation from the disease. Instead, the opposite happened. Here is a visual representation of deaths per capita (as of March 14, 2022):



What genetic factors may be in play in Africa?

Combined with the fact that sub-Saharan Africa is the youngest region in the world—youth brings fewer co-morbidities and age is the most significant factor in contracting and dying from COVID-19—ancestry is likely a significant contributing factor to to the region's comparatively modest case and death count.

What genetic factors could be impacting COVID-19 infection and death rates? Research and informed speculation are already underway. An early study on the possible contribution of genetics to the SARS-CoV-2 infection found significant population-based differences in ACE2 receptors that modulate blood pressure in the cells located in the lungs, arteries, heart, kidneys, and intestines. Africans are considerably less likely than East Asians to express the ACE2 receptors, though slightly higher than Europeans, the researchers believe.

At least two studies show that blood type O could be associated with a lower risk of COVID-19 infection and reduced likelihood of severe outcomes, including organ complications. About 50 percent of Africans have blood group O, the highest in the world. Susceptibility to the coronavirus is negatively associated with having a genetic propensity to absorb Vitamin C, as is the case with black African populations. Across Africa, roughly 50 percent of people carry the Vitamin C-friendly variant and in some African countries, it is as high as 70 percent.

Do Neanderthal genes increase the risk of COVID-19? The answer is yes. In fact, the presence of a Neanderthal gene is the single biggest genetic risk factor for the novel coronavirus, roughly doubling the likelihood of getting the virus. This particular stretch of Neanderthal DNA is carried by around 50 percent of South Asians, 16 percent of those of European descent, but not in any native Africans.

Why have journalists mostly ignored this monumental story while health officials, well aware of this astonishing development, also remain mum? It's the stigma of being associated with those who acknowledge that human biodiversity is a reality—that there are population-based differences that impact disease susceptibility. In contrast to this deafening silence, we addressed the astonishing reality of the situation in Africa, and the strong social and ethical reasons why we should not ignore possible racial differences in susceptibility to COVID-19 (and other diseases).

"It is really mind boggling why Africa is doing so well, while in US and UK, the people of African ancestry are doing so poorly," Maarit Tiirikainen, a cancer and bioinformatics researcher at the University of Hawai'i Cancer Center, told us in an email. Dr. Tiirikainen is a lead researcher in a joint project at the University of Hawai'i and LifeDNA in what some believe is a controversial undertaking considering the taboos on "race" research. The scientists are attempting to identify "those that are most vulnerable to the current and future SARS attacks and COVID based on their genetics."

A spate of new ancestral-linked evidence was brought to light by the novel coronavirus, but a wider perspective shows decades of long-established research on the clear links between genetic ancestry and specific diseases. Because many disorders disproportionately affect poor or marginalized peoples, neglecting such findings can have the worst impact on those most in need. As the distinguished journal *Nature* has written:

> Genome-wide association studies (GWAS) have laid the foundation for investigations into the biology of complex traits, drug development and clinical guidelines. However, the majority of discovery efforts are based on data from populations of European ancestry.. In light of the differential genetic architecture that is known to exist between populations, bias in representation can exacerbate existing disease and healthcare disparities

For critics arguing to censor all talk of human biodiversity, are you willing to contend that such life-saving research should be supressed lest neo-Nazis begin bragging about both their lactose tolerance- *and* COVID-superiority? (That is in fact an argument advanced by some post-modernist sociologists and social equity promoting extremists.) Or, would it not be better to use data on genetic differences—that is, on human biodiversity—to advance science to help people who might otherwise die from coronavirus infection?

The growing evidence of the critical importance of pursuing the genetic analysis of populations brings to the fore a fascinating phenomenon in its own right: why many people who classify themselves as liberals or progressives remain reluctant to engage on the fact of evolved human biological diversity, despite overwhelming evidence. Even more startling, they not only won't talk about it, they reflexively attack anyone, including other liberals and progressives, who broach the subject.

This is dangerous territory. Although it is certainly true that all ideas are filtered through a prism of personal beliefs and cultural biases, it's dangerous to hyperbolize that if some scientific evidence makes some uncomfortable, it should not be expressed. An overblown fear of racist misrepresentation of human genetics concedes the argument to bigots.

Indeed, by rejecting the fact of evolved human differences in some aspects of human development, well-meaning people undermine their own quest for greater social justice and racial equality. It's far more productive to openly, if carefully, embrace human genetic diversity in the same way we do with cultural diversity—a position inspired by biologist E.O. Wilson's emphatic belief that "we are not compelled to believe in biological uniformity in order to affirm human freedom and dignity".

Do differences equal divisiveness?

Those who question research into human genetic diversity believe that evidence of racial difference—beyond obvious superficial features such as skin color—is socially divisive. It leads inevitably,

they say, to racist musings about differences in intelligence and behavior. In the widely-held liberal view, humans are mostly a 'blank slate, with patterned human differences, random and mostly superficial. The idea that racial differences are more than skin deep is tantamount to promoting racialism (the belief "that race determines human traits and capacities"). And racialism, according to the analysis of liberal philosopher Michael Hardimon, provides a "rationale for racism, slavery, colonization, or genocide":

> It motivates the step from (a) representing another group as racially different to (b) taking these differences to be humanly important, to (c) regarding the other group as inferior, and (d) making it the object of hatred and contempt, to (e) imposing upon it involuntary servitude or (f) colonial rule, or (g) attempting the liquidation of all its members—a sequence of steps historically all too familiar.

In other words, if we begin by accepting racial difference, by this measure, critics say, we are on the slippery slope to justifying genocide. This goes to the heart of liberal concern about human biodiversity: the implicit belief that, if racial differences do exist and they are more than superficial, then racism (and worse) is nigh on inevitable. Unfortunately, casting the subject as totally off limits plays right into the hands of the racists themselves, letting them claim they are simply revealing the biological 'truths' that their opponents wish to hide.

Why does this have to be the case? Why should possible evidence of human patterned biological diversity inevitably encourage racism? In fact, history suggests that ignoring this evidence is as likely or more so to promote racist notions.

A tried and tested means to reduce inter-group tension, one enthusiastically adopted by authoritarian regimes throughout history, is to impose cultural uniformity upon the wider population (an obvious recent example being the forced Sinicization of Tibetans, Uighurs and other ethnic groups in modern-day China). In more open societies today, however, cultural homogenization goes against the cherished liberal ideals of freedom and self-expression, where difference is not just to be tolerated but extolled. Except, of course, when focusing on the vexed question of genetic difference, where the ideal of uniformity in the name of equity is strictly enforced.

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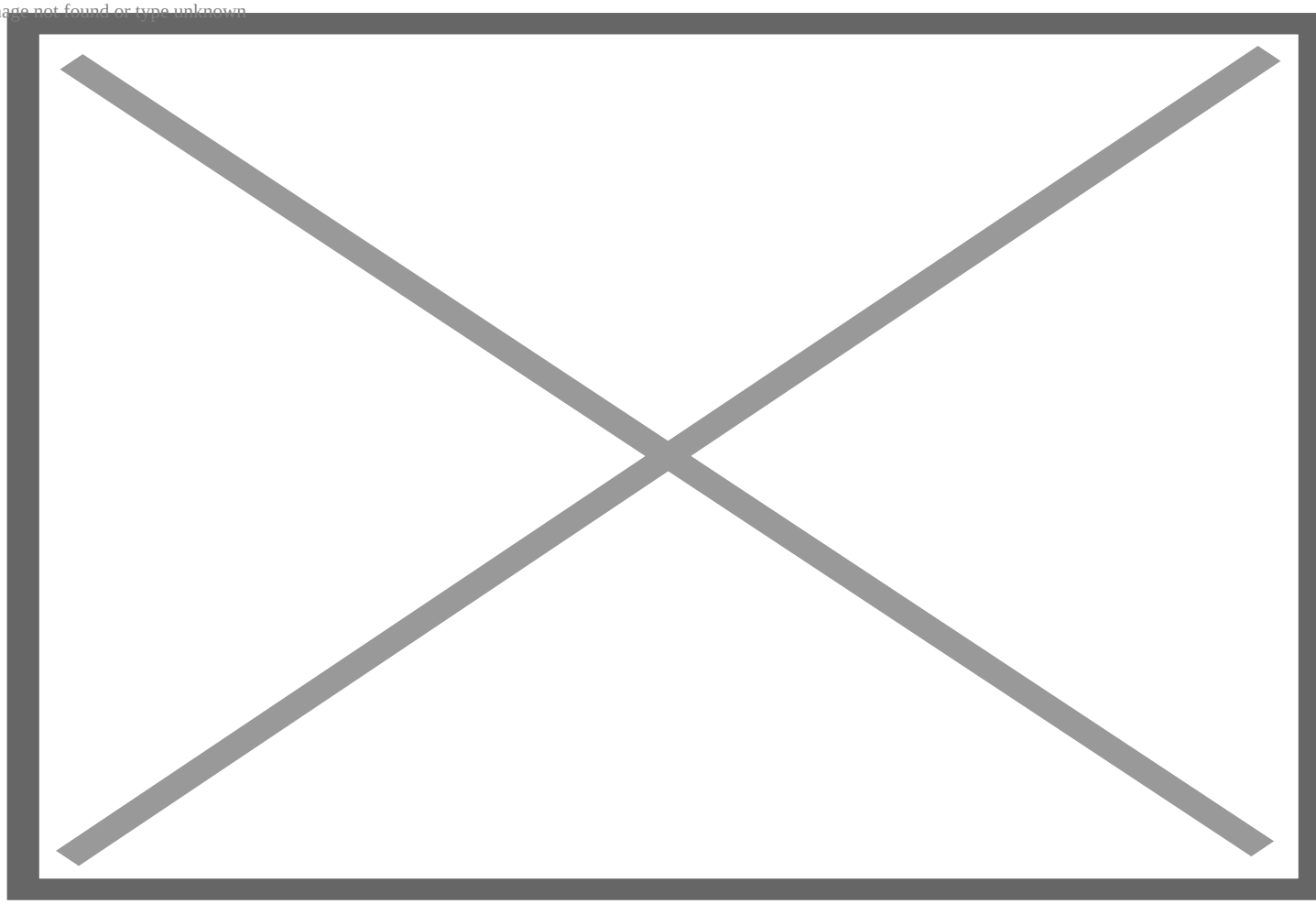

Uyghur protestors fighting China's forced labor camps. Credit: Onur Dogman/NurPhoto

It needn't be this way. If we can come to value cultural difference—despite the troubling potential for social discord—should we not do the same with biological diversity? Here we can return to the broadminded moral arguments of the late E.O. Wilson:

> Perhaps the time has come," he suggested, "to adopt a new ethic of racial and hereditary variation, one that places value on the whole of diversity rather than on the differences composing the diversity. It would give proper measure to our species' genetic variation as an asset …. Humanity is strengthened by a broad portfolio of genes that can generate new talents, additional resistance to diseases, and perhaps even new ways of seeing reality. For scientific as well as for moral reasons, we should learn to promote human biological diversity for its own sake instead of using it to justify prejudice and conflict.

So what would it mean if we adopted Wilson's idealistic "new ethic" and came to promote rather than to deny deeper human genetic difference? Different human groups, ones that sometimes, but not always, raggedly match the folk categorizations of 'race', can indeed be genetically distinguishable due to their divergent evolutionary histories. Yet Australian Aboriginals, say, and northern Europeans (and indeed North American Inuit)—populations that are almost literally poles apart—also share common ancestry;

they are living proof of Wilson's point that, far from being isolated in distinct races, our species is "one great breeding system through which genes flow and mix in each generation". Humans move around and fool around.

Here we can begin to address the question with which we began: Is it racist to research or write about human biodiversity? The short answer is 'no'. While modern genomics does reveal broad populations that sometimes overlap with popular racial categories, the wider picture shows fuzzy-edged human groupings, sometimes with meaningful phenotypic distinctions and sometimes not. Depending upon how one organizes the data, there could be dozens or hundreds of population groups, with some meaningful connections among groups.

This might appear a good point to conclude. There are numerous scientific and moral reasons to embrace rather than reject human biodiversity in the same way we do or try to do with human cultural diversity. To end here, however, would be to avoid the central, but often unacknowledged, liberal objection to the concept of human racial and hereditary variation—what it suggests about possible differences in cognitive abilities and behavior. Everyone can acknowledge some patterned human differences shaped by the serendipity of evolution, such as Inuit body shape, say, or East African domination of long distance running driven by their unique physique and physiology. The subject becomes most toxic, however, when it extends to prickly yet nebulous issues such as human intelligence or 'character'. We will explore these issues with care, underscoring each individual's uniqueness. As Wilson himself noted, "Hope and pride and not despair are the ultimate legacy of our genetic diversity".

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