

**21A.240**  
**Race and Science**  
**Spring 2004 MIT**

**PART 1:**  
**THE ALCHEMY OF RACE: MAKING AND UNMAKING SCIENTIFIC RACISM**  
**Lecture 6. March 11**

PAPER # 1 questions?

**Health and Hygiene: Latin American Lamarckism, Nazi German Darwinism**

Stepan, Nancy Leys. 1991. Eugenics in Latin America: Its Origins and Institutional Ecology, Racial Poisons & The Politics of Heredity in Latin America in the 1920s. In *The Hour of Eugenics: Race, Gender and Nation in Latin America*. Ithaca, NY: Cornell University Press, pp. 35-101.

Nancy Leys Stepan's book, *The Hour of Eugenics: Race, Gender and Nation in Latin America* is a nice companion to the history Kevles gave us in *In the Name of Eugenics*. We see how eugenic ideas articulated to *very different* racial formations in diverse places.

One useful thing Stepan does here is refuse to see Latin American eugenics simply as a shadow of — or worse, a kind of *degeneration* of — European and U.S. eugenic discourse. Using the metaphor of "ecology," she wants us to see Latin American eugenics on its own terms, in its own history, located with respect to particularly Latin American concerns and institutions, not as a scientific formation whose shape is simply the result of Latin American science *lagging* behind science in Europe and the U.S., which are somehow seen to lead the way to real truths behind heredity and race.

Her book presents three case studies: Brazil, Mexico, and Argentina — of which I've had you read one, about Brazil. I'd like to discuss this a little bit and then tell you something about the Mexico case. Then we'll get to the Nazis.

BRAZIL.

What are factors that form the context for Brazilian eugenics?

1. WWI (concern about national regeneration)
2. underdevelopment and neo-colonial inequality: the creation of an extremely poor underclass in a highly racialized and class-stratified nation.
3. state and concerns of science and medicine also conditioned Brazilian Eugenics. Here, eugenics was associated not with biometrics or Mendelian genetics, but rather with medicine — including psychiatry (mental hygiene), legal medicine (linked to concerns about "criminality"), and obstetrics.

4. racial ideologies already in place. The idea that Brazil was a mixture of European, Indian and African "races". Brazil was also interpreted by Europeans as a site of tropical decay and racial degeneration (remember the humours?). Brazilian eugenics had to engage with these ideas, either by embracing them, sidestepping or complicating them, or somehow reversing them.

Perhaps a good way into discussing Brazilian eugenics — and its differences from the US and European versions we've looked at is to reflect on Stepan's quotation of a contemporary British author's reflection on the matter (p. 64)

"Apparently the Brazilians interpret the word 'eugenics' less strictly than we do, and make it cover a good deal of what we should call hygiene and elementary sexology, and no very clear distinction is drawn between congenital conditions due to prenatal injury and diseases which are strictly genetic."

Stepan argues that this was not simply the result of Brazilian science being "behind" European and U.S. science. In European and US eugenics remember, genes and environment had been differentiated into distinct domains.

CULTURE/BIOLOGY: the division in the US around which people would fight.

Weismann had shown the germ line to be independent of somatic line

Mendel had supplied the rules by which genes sort themselves in heredity. Latin American eugenics didn't fully buy into these findings.

Boas had tried to DIFFUSE RACE as a category, arguing that BIOLOGY is plastic.

What happened in Latin America, and in Brazil more specifically?

Exploring the idea of RACIAL POISON might be a useful way to get at this stuff. *What was a "racial poison"?*

"These poisons were called 'racial' because, though the habits and diseases were often first acquired in one individual's lifetime, they were believed to lead to permanent, hereditary degeneration that in the long run could affect entire populations or nations" (p. 85).

How was this poison to be understood to affect heredity?

Tradition of "Peuriculture": "poisons" present at the moment of conception had negative effects on the germinal materials" (p. 78) mother-child unit the focus of attention (this idea from France).

"Eschewing a hard and fast distinction between heredity and the environment, [Latin American doctors] paid considerable attention to the milieu in which reproduction occurred, because it was seen as a source of reproductive poisons that could have disastrous consequences for future generations. So, eugenics became linked to obstetrics, population policies,

and infant welfare and made common cause with campaigns against alcoholism, tuberculosis and VD" (p. 81) (intoxicants as sources of racial decay. Alcoholism) Eugenics came to mean health in general.

Principles of public health were extended into the sciences of heredity. Goal was "the prevention of the environment from being a source of hereditary degradation in humans and the sanitization and civilization of the reproductive instinct" (p. 80)

So, what was RACE here in this notion of the RACIAL POISON?  
Population/nation that could be transformed by proper social hygiene. How would you compare this to the eugenic projects we looked at in the Kevles?

### **LAMARCKISM**

Why was Lamarckism popular in Latin America? (p. 64)

Belief that social environment and health care could affect germ plasm was congenial to the medical sciences, which dominated scientific discussion in Brazil.

Desire to believe that changes in social environment would have lasting effects (p. 73).

"Politically, neo-Lamarckism also often came tinged with an optimistic expectation that reforms of the social milieu would result in permanent improvement, an idea in keeping with the environmentalist-sanitary tradition that had become fashionable in the area" (p. 73).

A complex mixture emerged, with Darwinism responsible for natural selection and Lamarckism responsible for the "origin of the fittest" Human effort had meaning, progress could occur. This was embedded in the Brazilian ideology of "order and progress"

It ALSO provided a flexible model of disease etiology that underscored the physician's own agency. (p. 75) Also seemed to explain heredity of congenital syphilis and alcoholism.

Why else might this be important in Brazil at this time? And Latin America more generally?

Brazil had been used as an example of the deleterious effects of "race mixing"

Lamarckism was an interesting way to argue against geographical determinist views of tropical climates leading to degeneration (itself a kind of Lamarckism!)

"many Latin American hygienists turned to the gains made in sanitation to challenge the traditional view that race and climate in Latin America combined to produce degraded and backward nations" (p. 89)

The Brazilians said: The tropical environment itself might actually be a salutary force. It's only dysgenic social surrounds that produce degeneration.

this view also serves to encourage white immigration, which was desired (p. 90). The argument here is that tropics aren't bad for white people!

Moreover, it allowed Brazilian doctors to argue, as some did, that "race mixing" could be healthy — if races were exposed to proper environments!

Lamarckism could account for degeneration as well as regeneration seemingly without essentializing either.

Compare this Lamarckian model to what we've seen with Boas, the opponent of the Mendelian, genetically essentialist eugenics movement? Was Boas a Lamarckian?

No, not really, not at all. The malleability he located was in the phenotype, not the genotype.

### MEXICO.

Mexican eugenics emerged in the aftermath of the Mexican revolution, from 1910-20, in a leftist revolutionary context. And the socialist eugenics that was emerging in other parts of the world was an inspiration to the Mexican context.

But one of the more interesting features of Mexican eugenics and its views on race was the idea that there could be such a thing as "constructive miscegenation" — that national populations for example, might be *strengthened* by race mixing. This turned dominant stereotypes of racial degeneration in Latin America on their head. Argued against ideas of Latin America as a zone of decay through mixture.

Where did this come from? Boasian influence was important.

Manuel Gamio was an important Mexican anthropologist. He was a student of Boas and argued that there were no "racial differences" between different indigenous groups in Mexico, just cultural differences. However, these had common histories and might be brought back together, assimilated into a common national identity.

This idea of fusion was racialized in the work of Jose Vasconcelos who forwarded the idea of the RAZA COSMICA.

José Vasconcelos (minister of education, revolutionary, 1920's) accepted the argument that the difference between Indians and mainstream was cultural, but far from encouraging detailed study of the differences like Boas and Gamio, he proposed that policies be developed to "mexicanize" the Indians as soon as possible. He urged the immediate learning of Spanish and the almost mystical goal of developing a "mestizo culture" in which all Mexicans would participate as equals (from Stepan)

But in spite of his culturalist view, he imagined this mestizo identity in a BIOLOGICAL IDIOM. Interbreeding would produce a hybrid race that took the

best from each stock. (this idea later took hold in Brazil, too...more Boas-trained scientists...)

cosmic race would be (p. 147):

NEW a final stage in race formation

COSMIC all races would be fused into a new racial unity

LATIN AMERICA was the logical place for this to happen, since it was already well advanced and all races were present

spiritual eugenics: the most beautiful of each race would seek mates like themselves (Darwin's sexual selection!)

*Similarities/differences from ideas in UK and US eugenics and race thinking?*

still maintained that race existed and that homogeneity was the answer. While ennobling the indigenous people, they hoped to assimilate and eliminate the biological type of the Indian

also denigrated "Negroes" and Chinese.

Proctor, Robert. 1993. Nazi Medicine and the Politics of Knowledge. In *The "Racial" Economy of Science: Toward a Democratic Future*, Sandra Harding, ed. Bloomington: Indiana University Press, 344-358.

German eugenics was, like Brazilian based on medicine, and on the notion of hygiene.

The Germans were also concerned with the idea of being PURE OF BLOOD.

They adhered to the Weismannian view of CULTURE/BIOLOGY and assigned everything to BIOLOGY, which they called RACE. And, as we've seen, there are disturbing connections between eugenic movements in the United States and those in Germany, with the scientists talking to each other. The readings I assigned also point out that Franz Boas was involved in trying to mobilize scientists against Nazi race science.

And this proved difficult. And this connects, I think to the question that always comes up in the wake of the Holocaust, which is:

*the question of COMPLICITY, which often comes up in two ways:*

A. WHY didn't ordinary citizens DO anything?

often the argument is about what Hannah Arendt called the "banality of evil." notions of essential human inequality became part of everyday life, part of the most everyday ways of thinking.

this argument gets extended in recent writing about the continuing place of BLOOD IMAGERY in GERMANY; the symbolism that sustained Nazism is STILL in circulation in the German imaginary. The argument here is that it has become part of the CULTURE, part of the LEGACY (we can see what we think of that).

NOW, we're NOT going to work this question out; the question of WHY the Holocaust happened is perennial — was it modernity, capitalism, misreadings of Darwin, fascism, human nature, Germanness? We won't be able to get at that. We cannot in this class answer WHY the unspeakable horror of the Holocaust happened in any definitive way.

what we might be able to speculate a bit more on — what is more germane to our purposes — is *another* question about COMPLICITY:

B. WHY didn't SCIENTISTS/ANTHROPOLOGISTS do anything? Or WHY did it take them so long? What was the role of anthropology and human biological science in Nazi Germany?

These are the questions taken up by the Proctor and the Barkan. Proctor argues, against the grain of the usual scholarship, that Nazi notions of race science were not completely different from ideas in circulation elsewhere. Indeed, he argues that our attempts to label Nazi "race science" as "pseudo-science" excuses us from giving a proper historical account of how science functions in social and political context. I'd like us to start, then, with the Proctor.

PROCTOR: begins by asking: "How could it happen?" (p. 199).

"*Anthropologie* had come to be seen as providing a "cure" for many of the ills facing German society" (p. 145). Mendelian genetics was used as a warrant for the idea that these ills were fixed in different lineages of people, were essential to racial germ plasms.

Characterize Eugen Fischer's ideas about RACE (p. 146).

Fischer believed that physical and spiritual racial traits were inherited according to "classical Mendelian inheritance by independent assortment"

Races mix without blending. Races might mix, but they could never blend. So, "the Jews were a mixture of the Oriental and the African"

INTERESTING that the dominant traits are those from the "lower races" (see chart on p. 159). THIS is what leads to degeneration.

What's striking here is the incredible flexibility of the "race" concept. Different stereotypes can be deployed at different moments.

And of course, in order to do this kind of "racial science," there must be categories. And here we see what Bowker and Star characterized as the mixing of Aristotelian and prototypical categories.

Eugen Fischer said that it was dangerous to advance a political cause in the name of science or to conflate science with political doctrine (p. 173).

Obviously, this is hypocrisy. But it actually rephrases Proctor's argument that Nazi "race science" was not an anomaly insofar as it was shot through with

politics; so was the counter-argument. But this of course doesn't make them completely symmetrical, either.

Barkan, Elazar. 1988. Mobilizing Scientists against Nazi Racism, 1933-1939. In *Bones, Bodies, Behavior*. George Stocking, ed. Madison: University of Wisconsin Press, 180-205.

what obstacles did Boas meet in trying to get a statement about race made by the associations of which he was a part and by the scientific community in general?

people to whom he turned did not want these issues brought into the realm of politics. And Boas, as a Jew, kept disqualifying himself from committees... in order to be seen as "objective"

What finally turned the tide and allowed many scientists to feel they could speak against Nazi race science was an article, about physics published in *Nature* "The Pragmatic and Dogmatic Spirit in Physics" (see p. 197). Why was THIS seen as offensive?

Now, scientists could fasten on the idea that science was *not* to be based on national ideas and could flourish only where there was intellectual freedom. THIS is of course is about PROTECTING the perceived apolitical character of science, RATHER than any kind of acknowledgment that the science of human races was political in and of itself.

So, Nazi ideas about race could be indirectly denounced as "pseudo-science." Physical anthropology in the US did not have to speak as one about the "facts" of what "race" was or was not in order to condemn German anthropological theories of race. (indeed, many physical anthropologists had ideas about race not dissimilar from German anthropologists)

NEXT TIME: We're going to travel into the realm of the genomic.