

REVIEW

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Final Solutions: Biology, Prejudice, and Genocide by Richard M. Lerner is an important book about the way in which biological determinist views of human behaviour have shaped social policy and have been used to justify persecution of certain groups, even to the ultimate horror of extermination of Jewish people by the Nazis. Lerner traces genetic explanations for human behaviour from Darwin, through scientists of the Nazi era to contemporary sociobiologists. He finds a continuous thread of ideas and alerts us to the political dangers of the impact of such thinking on social attitudes and policies.

Lerner discusses in detail the era of history in which scientists voiced arguments for the genetic inferiority of Jewish people. This ideology was co-opted to justify, on the one hand, elevating the status of Aryans and, on the other hand, ridding society of "bad genes" by sending Jews to the gas chambers. Lerner presents evidence that these ideas did not die with the end of World War II, but rather they have continued to form the basis of contemporary sociobiology. Indeed, today we see sociobiological arguments incorporated into the political platforms of the extreme right, such as the National Front in UK and the neo-Nazis in various European countries. As Lewontin points out in a foreword to the book, right now "Europe is in the process of turning back the pages of history": national chauvinism is rising again, "foreign" minorities are being blamed for the level of unemployment and attacked, racism is being violently expressed, and more. Sociobiological explanations for human behaviour justify these actions. Belief that there are "good genes" and "bad genes" and that certain groups of people are genetically inferior to others has, throughout history, justified the most barbaric social practices and political programs. It is essential that we become familiar with the source of these ideas and their influence on society, as they so strongly shape it today.

Lerner begins by discussing not only biological, or genetic, determination but also social, or cultural, determinism. The former is "nature

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over nurture” and the latter “nurture over nature.” He sees either of these views as too extreme, and both as scientifically inadequate. The book elaborates on these scientific inadequacies, but primarily those of biological determinism. The inadequacies of cultural determinism are merely touched upon by some poorly discussed examples of oppressive social policies that have stemmed from belief in environmentalism, such as the “Cultural Revolution” in the People’s Republic of China. Lerner’s own position is that we should avoid the extremes of the nature-nurture debate and see the interaction, or rather *fusion*, of the biological processes which occur within the person with the social context which occurs outside the person. His theory of *developmental contextualism* is discussed in the last chapter of the book.

But, first Lerner traces the relationship between biological determinist thinking and racism, pointing out that for at least two thousand years of recorded history social actions have been carried out on the basis that certain people are inherently different (have something in their blood or, later, in their genes) and considered to be less than human. Consequently, it was argued that they deserved to have inferior social and economic status, to suffer persecution or even death. In the mid-nineteenth century science entered into this line of thinking. The most important scientist at first was Charles Darwin with his theory of evolution by natural selection. Social Darwinists incorporated his theory of survival of the fittest into social policy. In fact, some cultures were seen to be “fitter” to survive over others, and the use of certain groups as slaves was justified by seeing them as less fit, and less than human.

There was a progression of these ideas through to the scientists of Nazi Germany and on to present-day sociobiology. Lerner states that biological determinists are not necessarily racist or politically conservative, or adherents of Nazi ideology, whereas Nazis *are* racist and *in addition* they adopt the ideology of biological determinism in order to legitimize their political views. He accepts what sociobiologists say of themselves when, as many do today, e.g., Richard Dawkins, they claim that they are not politically conservative, let alone fascist. That is a fair and open-minded position, and it clearly has merit if we define racism in terms of practice. Yet, one might ponder whether it is possible to be a “theoretical racist” or whether a scientist could be called racist if his or her ideas can be used to support racist acts and policies. However, Lerner remains magnanimous by saying that the scientists themselves are not directly at fault, but rather genetic determinism is co-opted to serve the political agenda of fascism, and that if such biological ideology did not already exist fascists would have invented it.

The book gives a comprehensive analysis of how biology was applied to politics prior to and during the Nazi era, beginning with the influence of Ernst Haeckel in the late nineteenth and early twentieth century. Haeckel built on standard Darwinian ideas to put forward a “scientific”

(in quotes, because the reasoning was flawed) basis for the ideal of the German *Volk*. He categorised people into different “races” and saw these as separate species. Haeckel’s views were taken up by the German anti-Semitism movement and implemented by the German Racial Hygiene Movement. It is frightening to read how scientists and physicians of the time became part of the “new science” of racial hygiene in the lead up to Hitler’s Germany. They were cornerstones in the path from prejudice to genocide. Hitler successfully engaged the cooperation of vast numbers of German physicians, who joined both the Nazi party and the SS. The aim was to revitalise the German “race” by purification of the genes, and that meant exterminating the Jews and some other social groups considered to be genetically inferior.

Lerner devotes an entire chapter to the ideas of Konrad Lorenz, who was actively writing during the Nazi era and went on to lay the basis of sociobiology, and also to receive the Nobel Prize. Lerner explains how the works of Lorenz are the chief link between present day sociobiology and biological determinism of the 1930s. If you hold an image of Konrad Lorenz as the white-haired, kindly gentleman strolling a country lane followed by a group of goslings that are imprinted on him, you are in for a shock. Through a series of citations of Lorenz’s writings, Lerner shows that Lorenz used the terminology of the Nazis during their era and that his thinking was congruent with Nazi ideology. In 1938 Lorenz wrote of the high value of species-specific and innate social behaviour patterns and how these are the backbone of “racial health and power.” He proceeded to say that health of the whole *Volk* depended on the elimination of “invirent types” (cited on p. 61 of the book), which like the cells of a tumor threaten the whole body of the *Volk*. This, and other cited examples, paint Lorenz as clearly following Nazi ideology of the time. Apparently, these views were never relinquished throughout his life, although they were toned down. By clever quotation of appropriate passages from Lorenz’s writing, Lerner illustrates the continuity of Lorenz’s beliefs, beliefs which developed into the “new” subject of sociobiology in the 1960s.

From his earliest writings, Lorenz considered that domestication introduced degenerate genes into a species because it removed the forces of natural selection. Throughout his life he adhered to the notion that, similar to other animals, human social problems were a result of a reduction of natural selection acting to eliminate “bad” genes. In 1974 he stated that domestication had eroded humans’ sense of the normal, their ability to discriminate pathological from nonpathological, and that this was leading to the moral deterioration. Lerner believes that this position did indeed lead Lorenz to support the “final solution,” even though he attempted to mask this view in the post-World War II area. In other words, to Lerner there was an evident Nazi-era/post-Nazi-era continuity in the writings of Lorenz. For this analysis alone the book is worth

reading. After all, Lorenz is considered by many to be the father of Animal Behaviour, and he was awarded the Nobel Prize!

Contemporary sociobiologists accept the core ideas of Lorenz and they have built on them to formulate their own theories. Chapter 4 of the book is an excellent summary of sociobiology from its basic assumptions to its ramifications into aggression, sex roles, IQ and so on. The works of Wilson, Dawkins, Konner, van den Berghe and Barash receive special attention. To these sociobiologists, the genes (or "replicator units") are the driving force of behaviour, and indeed all of society: according to Dawkins, humans are only "survival machines" programmed by the genes, which (or should we say, who?) are selfishly programmed to get themselves into the next generation. All human interaction, all culture and political systems are merely "by-products of the genes." Here we find another form of justification for aggression (genes must compete and so increase their inclusive fitness) and for natural selection which leads to the elimination of certain genotypes.

Sociobiology extends its rubric to include explanations for sex differences in behaviour and morality. Women and men are seen to differ in their potential for transmitting their genes in the future. Because men make less biological investment in the next generation (they do not bear the offspring and their gametes are smaller in size), they are said, by sociobiologists, to increase their fitness by mating with as many women as possible. Women, on the other hand, should optimize survival of the children which they bear and limit their mating to carefully chosen men. Thus, present-day sex roles are justified: men out in the world seeking their fortunes, women tied to the kitchen sink and to raising children. Beyond that sociobiology justifies greater aggression in men (more gametes and more competition) and explains polygamy, hypergamy and double standards of sexual morality for men and women. Similarly, Nazi philosophy encouraged Aryan women to reproduce, and relegated unmarried women and Jews to the same subordinate category.

Lerner does not leave discussion of contemporary sociobiology here, but goes on to discuss the misinterpretations of the concept of "heritability," particularly as used in the IQ debate, pointing out that heritability is a statistical estimate of genetic variability, not a commonality, as many wrongly deduce. Heritability scores refer to differences between people, not the extent to which a characteristic is either genetically or environmentally determined *within* a person. Other words used by sociobiologists, such as "optimization" and "homology," are also frequently misinterpreted when they are applied to social policy, and the book discusses these problems.

A congruence is drawn between the biological ideas of the scientists of the Nazi era and contemporary sociobiologists. Parallel views are held by both about the roles of women and Blacks, culminating today in the claims of J. Phillippe Rushton that Blacks are a subspecies, less evolu-

tionary advanced than Whites. His nonsensical claims are based on reproduction strategies, modelled on false assumptions and take no cognizance of sociological data. Thus, Lerner takes us through a history of ideas, sketching their roots and links with stark, menacing reality. The so-called scientific theories are stripped of their cloaks of respectability and stand naked with their flaws exposed. With Lerner we share the concern that the message of these sociobiological theories might actually be aimed at a political, not a scientific, audience. And yet, we further contemplate, they are extolled by members of the world's leading scientific institutions (Harvard and Oxford, for example). Of this we must be aware, for fear that history might repeat itself.

It makes depressing reading, but Lerner does not leave us here. Rather, he moves on to present his view of developmental contextualism, in which the genes are not considered to be the primary cause of behaviour. Instead, they act in the context of the environment. Genes and environment are seen as having equal influences on behaviour. Some genes are expressed in only certain environments: nature and nurture are considered to be mutually permissive and mutually constraining in their influence on behaviour. He suggests that genes and environment do not simply *interact*, but that they *fuse*. That is, genes and environment are not considered to be two independent entities which interact, but rather they are intermeshed components involved in *dynamic* interactions.

The same genes express different behavioural patterns in different environments, and the environment is in dynamic register with the individual, changing throughout the life-span and actively acted upon by the individual. Individuals actively shape their environments and so contribute to their own context. Contrast this to the Social Darwinist position of the genes determining specified social roles, and it is easy to see how differently these positions affect the making of social policy. The book is indeed valuable reading, particularly in the present climate in which genetic determinism is, yet again, being co-opted for social/political purposes. My only criticism is that the book is North American-centric; some excellent books and papers, e.g., by Steven Rose and S. A. Barnett, have been written on this topic by people outside of North America, but these have not been cited.