

# The Role of Darwinism in Nazi Racial Thought

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## ABSTRACT

Historians disagree about whether Nazis embraced Darwinian evolution. By examining Hitler's ideology, the official biology curriculum, the writings of Nazi anthropologists, and Nazi periodicals, we find that Nazi racial theorists did indeed embrace human and racial evolution. They not only taught that humans had evolved from primates, but they believed the Aryan or Nordic race had evolved to a higher level than other races because of the harsh climatic conditions that influenced natural selection. They also claimed that Darwinism underpinned specific elements of Nazi racial ideology, including racial inequality, the necessity of the racial struggle for existence, and collectivism.<sup>1</sup>

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Many historians recognize that Hitler was a social Darwinist, and some even portray social Darwinism as a central element of Nazi ideology.<sup>2</sup> Why, then, do some historians claim that Nazis did not believe in human evolution? George Mosse argued that human evolution was incompatible with Nazi ideology, because Nazis stressed the immutability of the German race.<sup>3</sup> More recently Peter Bowler and Michael Ruse have argued that the Nazis rejected human evolution, because they upheld a fixed racial type and racial inequality.<sup>4</sup> Nowhere is this irony more pronounced than in the work of Daniel Gasman, who claimed that Hitler built his ideology on the social Darwinist ideas of Ernst Haeckel, but simultaneously argued that Nazis rejected human evolution.<sup>5</sup>

How is it possible to embrace social Darwinism, while rejecting Darwinism and human evolution? Anne Harrington suggests that the Nazis liked some elements of Darwinism, especially the struggle for existence, but not human evolution.<sup>6</sup> Robert Richards agrees, claiming that Nazi racial ideas "were rarely connected with specific evolutionary conceptions of the transmutation of species," even though they banded

about the term “struggle for existence.”<sup>7</sup> In another essay Richards went further, arguing that Hitler and the Nazis completely rejected biological evolution.<sup>8</sup> The notion that the Nazis could embrace racial struggle without believing in evolution seems plausible at first, especially since Houston Stewart Chamberlain, a forerunner of Nazi racial ideology, embraced this position.

However, the claim that the Nazis did not believe in the transmutation of species and human evolution runs aground once we examine Nazi racial ideology in detail. In this essay I examine the following evidence to demonstrate overwhelmingly that Nazi racial thinkers embraced human and racial evolution: 1) Hitler believed in human evolution. 2) The official Nazi school curriculum prominently featured biological evolution, including human evolution. 3) Nazi racial anthropologists, including SS anthropologists, uniformly endorsed human evolution and integrated evolution into their racial ideology. 4) Nazi periodicals, including those on racial ideology, embraced human evolution. 5) Nazi materials designed to inculcate the Nazi worldview among SS and military men promoted human evolution as an integral part of the Nazi worldview.

While examining these lines of evidence, I will highlight the ways that Nazi racial thought was shaped by Darwinism (defined as biological evolution through the process of natural selection). First, almost all Nazi racial theorists believed that humans had evolved from primates. Second, they provided evolutionary explanations for the development of different human races, including the Nordic or Aryan race (these two terms were used synonymously). Specifically, they believed that the Nordic race had become superior because harsh climatic conditions in north-central Europe during the Ice Ages had sharpened the struggle for existence, causing the weak to perish and leaving only the most vigorous. Third, they believed that the differential evolutionary development of the races provided scientific evidence for racial inequality. Fourth, they held that the different and unequal human races were locked in an ineluctable struggle for existence. Fifth, they thought that the way for their own race to triumph in the struggle for existence was to procreate more prolifically than competing races and to gain more “living space” (*Lebensraum*) into which to expand. Sixth, many argued that Darwinism promoted a collectivist ideal. These six points—derived from the view that humans and human races evolved and are still evolving through the Darwinian mechanism of natural selection—profoundly impacted Nazi policy. They formed the backdrop for eugenics, killing the disabled, the quest for “living space,” and racial extermination.<sup>9</sup>

Not only will my analysis help us understand better the rationale behind Nazi racial policies, which were intended to improve the human species biologically, but it will also help illuminate the interaction between German science and Nazi ideology. Despite many recent studies showing the close rapport of the Nazi regime and German scientists, and despite many recent works rejecting the notion that Nazi ideology

was pseudoscientific, as most historians used to think, even today some scholars are still loathe to entertain the idea that key elements of Nazi ideology could have been in harmony with the thinking of leading German scientists. Indeed the Nazi embrace of Darwinism in their racial ideology demonstrates the influence of science on Nazi ideology. Nazi racial ideology was largely consistent with the scholarship on race taught at German universities. This makes even clearer why so many German anthropologists and biologists supported Nazi racism—they were already committed to it before the Nazis came to power.

If this is so, why have some historians mistakenly argued that Nazis denied human evolution? First, we need to recognize that this issue has not received much attention. Many historians mention the Nazi embrace of social Darwinism, but they do not explore the scientific underpinnings of it. Paul Weindling points this out, stating that “historians have been loath to engage with the biological sciences. Historians of Nazi Germany have curiously not seen race within a scientific framework. . . . The biology of race remains relatively unexamined.”<sup>10</sup> This may seem odd in light of a spate of recent works arguing for the primacy of biology and race in the Nazi worldview and the many recent studies of scientists under Nazism. However, even if Weindling is overstating the case a little, he is largely correct: the study of Nazi racial ideology and of German biologists under the Nazi regime have not connected sufficiently.

Nonetheless, some historians have noticed the importance of human evolution in Nazi racial ideology. Christopher Hutton argues that Darwinism was a crucial element of Nazi racial ideology.<sup>11</sup> Uwe Hößfeld’s and Thomas Juncker’s important work on biologists and anthropologists under the Nazi regime also helps illuminate the connections between evolutionists and the Nazi regime, though their emphasis is on the scientists more than on Nazi ideology.<sup>12</sup>

One reason some historians (such as Mosse and Bowler) have erred is because of a mistaken belief that the Nazi insistence on hard heredity entailed a rejection of evolution. Hard heredity—the idea championed by German biologist August Weismann—is the idea that environmental influences cannot affect hereditary traits. Weismann rejected the Lamarckian idea that organisms can evolve by passing on acquired characteristics to their progeny. The Nazis continually insisted that heredity cannot be directly affected by the environment, charging that Lamarckism was a Marxist doctrine. The Nazis’ embrace of hard heredity is not antievolutionary, however, since Weismann was a leading evolutionist.

When the Nazis occasionally claimed that the Nordic race had been unchanged for thousands of years, they were not claiming that it had been immutable over geologic time. Walter Gross, head of the Nazi Racial Policy Office, clarified this point in an essay on “The Racial View of History.” After bashing Lamarckism, he reminded his readers that even though racial traits do not change over historical time, “selection and elimination” (*Auslese und Ausmerze*,” a phrase often used by German evolutionary

biologists to mean natural selection) do alter racial traits.<sup>13</sup> Most Darwinists admitted that as far as we could tell, humans had not changed significantly during the past several thousand years. The evolutionary anthropologist Otto Reche admitted that human races had not changed significantly in the past 20–30,000 years.<sup>14</sup> By rejecting Lamarckism and insisting on hard heredity, Nazi racial theorists were consistent with the best science of their day (in this case).

Another reason some historians have erred is because they think Nazis would have rejected a common ancestor for the various human races, because a common origin would imply human equality. This is an anachronistic view, for in the early twentieth century, most German Darwinists emphasized racial variation and inequality, not racial equality. Haeckel and many other Darwinists saw evolution as evidence against human equality, not supporting it. As I will show, many Darwinian biologists, such as Konrad Lorenz and Hans Weinert, argued that Darwinism supports racial inequality. Nazi racial theorists believed that the Nordic race had diverged from other races far enough in the past that it had diverged considerably from other races. They also explained that natural selection was the process driving the evolution of the allegedly superior Nordic race.

I need to stress from the outset, however, that Nazi racial ideology was not derived exclusively from Darwinism or evolutionary biology. Gobineau—who wrote before Darwin published *Origin of Species*—contributed the idea that the Aryan race was superior to all other races. He also claimed that racial mixing produced deleterious effects, leading many racial thinkers, including the Nazis, to oppose miscegenation. Hatred of the Jews had a long history predating Darwin and has nothing to do with Darwinism. Also, Mendelian genetics played a role in debates over racial ideology—especially about policy relating to miscegenation—within the Nazi regime.

However, in the decades preceding Hitler's rise to power, many German racial theorists had synthesized Gobineau, Mendel, and antisemitism with social Darwinism. Nazi racial theory generally embraced this synthesis. Racial thinkers, such as Ludwig Woltmann and Ludwig Schemann, had synthesized Gobineau and Darwin long before Hitler.<sup>15</sup> The leading anthropologist Eugen Fischer and the geneticist Fritz Lenz, both influential figures in racial science during the Nazi period, embraced both Gobineau and Darwinism. Hans-Walter Schmuhl perceptively notes that despite some contradictions between Gobineau's racism and social Darwinism, "Nonetheless toward the end of the nineteenth century formulations of Gobineauism and social Darwinism blended into syncretistic racial theories."<sup>16</sup> Some leading antisemitic thinkers in early twentieth-century Germany, such as Theodor Fritsch and Willibald Hentschel, incorporated Darwinism into antisemitic ideology.<sup>17</sup> Thus, many Nazi racial theorists interpreted the opposition between the Nordic and Jewish race as an episode in the Darwinian struggle for existence.

## Hitler and Darwinism

In his writings and speeches Hitler regularly invoked Darwinian concepts, such as evolution (*Entwicklung*), higher evolution (*Höherentwicklung*), struggle for existence (*Existenzkampf* or *Daseinskampf*), struggle for life (*Lebenskampf*), and selection (*Auslese*). In a 1937 speech he not only expressed belief in human evolution, but also endorsed Haeckel's theory that each organism in its embryological development repeats earlier stages of evolutionary history. Hitler stated, "When we know today that the evolution of millions of years, compressed into a few decades, repeats itself in every individual, then this [modernist] art, we realize, is not 'modern.'"<sup>18</sup> In his view, then, modernist artists were atavistic individuals who remained at a more primitive stage of evolution.

Evolution plays a central role in the chapter in *Mein Kampf* on "Nation and Race," which was the only chapter published as a separate pamphlet, thus circulating widely to promote Nazi ideology.<sup>19</sup> In that chapter Hitler explains why he thinks racial mixing violates evolutionary principles:

Any crossing of two beings not at exactly the same level produces a medium between the level of the two parents. This means: the offspring will probably stand higher than the racially lower parent, but not as high as the higher one. Consequently, it will later succumb in the struggle against the higher level. Such mating is contrary to the will of Nature for a higher breeding of all life. The precondition for this does not lie in associating superior and inferior, but in the total victory of the former. The stronger must dominate and not blend with the weaker, thus sacrificing his own greatness. Only the born weakling can view this as cruel, but he after all is only a weak and limited man; for if this law did not prevail, any conceivable higher evolution of organic living beings would be unthinkable.<sup>20</sup>

A few lines later he continues:

In the struggle for daily bread all those who are weak and sickly or less determined succumb, while the struggle of the males for the female grants the right or opportunity to propagate only to the healthiest. And struggle is always a means for improving a species' health and power of resistance and, therefore, a cause of its higher evolution.

Thus, Hitler opposed miscegenation because it hindered evolutionary progress, which for him was the highest good. Since the whole point of this passage is to apply these principles to human racial relations, it is apparent that Hitler believed that humans had evolved and were still evolving. Hitler's racial policy aimed at advancing human evolution.

Hitler clearly thought the Nordic race had evolved, as he explained in a 1920 speech, "Why We are Anti-Semites." The Nordic race, Hitler averred, had developed its key traits, especially its propensity for hard work and its moral fiber, but also its physical prowess, due to the harsh northern climate. He was not arguing that climate directly caused a change in biological traits (because he embraced hard heredity). Rather he thought that in the harsh climate only the strongest, hardest-working, and most cooperative individuals could survive and pass on their traits. The weak and sickly, as well as those who refused to labor diligently, perished in the struggle for existence. This struggle made the Nordic race vigorous and superior to races that evolved in more hospitable climes.<sup>21</sup> Clearly, then, Hitler did not think the Nordic race had always existed or was created in some pristine, unchanging state.

### **Darwinism in the Nazi Biology Curriculum**

Evolutionary biology had been well entrenched in the German biology curriculum long before the Nazis came to power (this is why it was so influential on Nazi ideologists). The Darwinian explanation for evolution was the most prominent theory taught in German schools, though it was not uncontested. The biology curriculum under the Nazi regime continued to stress evolution, including the evolution of humans and races. The Nazi curriculum and texts espoused Darwinism and rejected Lamarckism, which it sometimes castigated as Marxist, because it flew in the face of the Nazi stress on hard heredity.

In 1938 the Ministry of Education published an official curriculum handbook for the schools. This handbook mandated teaching evolution, including the evolution of human races, which evolved through "selection and elimination." It stipulated, "The student must accept as something self-evident this most essential and most important natural law of elimination [of unfit] together with evolution and reproduction." In the fifth class, teachers were instructed to teach about the "emergence of the primitive human races (in connection with the evolution of animals)." In the eighth class, students were to be taught evolution even more extensively, including lessons on "Lamarckism and Darwinism and their worldview and political implications," as well as the "origin and evolution of humanity and its races," which included segments on "prehistoric humanity and its races" and "contemporary human races in view of evolutionary history."<sup>22</sup>

The Ministry of Education's 1938 biology curriculum reflected the biology curriculum developed by the National Socialist Teachers' League in 1936-37, which likewise heavily emphasized evolution, including the evolution of human races. The Teachers' League document, authored by H. Linder and R. Lotze, encouraged teachers to stress evolution, because "The individual organism is temporary, the life of the species to which it belongs, is lasting, but is also a member in the great evolution of life in the course of geological times. Humans are also included in this life." Thus

evolution was supposed to support the Nazis' collectivist ideals—the importance of the species or race over the individual. This biology curriculum called for teaching plant and animal evolution in classes three and four and human evolution in class five. Of the ten topics required for biology instruction in the upper grades, one was evolution and another was human evolution, which included instruction on the origin of human races.<sup>23</sup>

All the biology texts published in Germany in the late 1930s and early 1940s needed official approval of the Ministry of Education, and all provided extensive discussion of evolution, including the evolution of human races. Jakob Graf's 1942 biology textbook has an entire chapter on "Evolution and Its Importance for Worldview." Therein Graf combated Lamarckism and promoted Darwinian evolution through natural selection. He claimed that knowing about human evolution is important, because it shows that humans are not special among organisms. He also argued that evolution substantiates human inequality. In the following chapter on "Racial Science" Graf spent about fifteen pages discussing human evolution and insisted that humans and apes have common ancestors.<sup>24</sup> Erich Meyer and Karl Zimmermann likewise discuss human evolution in their biology textbook. They state:

In this hard time [Ice Age] humans already lived. In the conflict with nature he improved physically and intellectually more and more. It bred him ever upward. We find him first as a half-animal prehuman, then as a primitive human who lived in caves and knew how to use fire and to make stone tools and hunting weapons.<sup>25</sup>

As seen in these examples, human evolution was standard fare in Nazi biology texts.

A 1942 biology text by Hermann Wiehle and Marie Harm gave extended attention to human evolution. Of the ten main chapters, two were on evolution generally and another one was devoted exclusively to human evolution. One of the recommended activities for classes was a zoo visit to view the primates: "Since in the curriculum we have covered evolution and the origin of humanity, during a visit to the zoo the primates will especially grip us."<sup>26</sup> As this text and the accompanying activity make clear, German school children during the Third Reich were encouraged to see primates as their evolutionary relatives.

### **Nazi Anthropologists and Racial Evolution**

Germany's leading anthropologists in the Third Reich, including those in the SS, were uniformly Darwinian in their approach to the evolution of humans and races. The Nazi regime not only appointed many of these anthropologists to professorships, but recruited them to lecture to Nazi organizations and promoted their publications, many of which featured discussions about human and racial evolution. The Nazi regime promoted the work of Hans Weinert, a prominent evolutionary anthropologist who

joined the SS. He worked at the Kaiser Wilhelm Institute for Anthropology, Human Genetics, and Eugenics until 1935, when the Nazi regime appointed him professor of anthropology at the University of Kiel. Weinert published many books and articles during the Nazi period discussing human and racial evolution. In *Die Rassen der Menschheit* he explained the importance of evolution for anthropology: “Anthropology, however, is the history of all humanity, beginning with its origin from anthropoid ape ancestors and continuing to the dividing and re-mixing of all contemporary human races.”<sup>27</sup> He later claimed that the Nordic race had evolved to a higher level than other races, especially the Australian aborigines, whom he considered the lowest race.<sup>28</sup> This evolution of races occurred because some races were “eradicated or eclipsed by other races” that were better adapted.<sup>29</sup>

In his earlier book, *Biologische Grundlagen für Rassenkunde und Rassenhygiene* (1934), Weinert had dedicated an entire chapter to human evolution and another to the evolution of human races. After applauding the Nazi Party for introducing compulsory sterilization, Weinert stated, “Today any fear of not being allowed on the basis of national-political considerations to advocate evolutionary theory is completely unnecessary.” In his chapter on the evolution of races he explained that despite common ancestry, “these races also have different *value*. The scientific theory of the common origin [of races] offers no foundation for a political thesis of the equal value of all humans!”<sup>30</sup> The Ministry of Education, the Nazi Racial Policy Office, and Rosenberg’s *Nationalsozialistische Monatshefte*, all commended Weinert’s books on the evolution of human races as important books on racial theory.<sup>31</sup>

The anthropologist most influential on Nazi ideology was Hans F. K. Günther, who was not trained as a professional anthropologist, but became famous during the 1920s for his books on racial anthropology. When the Nazi leader Wilhelm Frick became Minister of Education in Thuringia in 1930, Hitler urged him to appoint Günther to a professorship in anthropology at the University of Jena. Frick did so over the opposition of the faculty. Hitler attended Günther’s inaugural address, and later the Nazi regime showered Günther with honors, even consulting him in formulating racial policy.<sup>32</sup> Günther’s Nordic racism was impregnated with Gobineau, but Darwinism also played an important role. Günther praised as his intellectual forebears Darwin, August Weismann, leading eugenicists, and social Darwinists, such as Ludwig Woltmann. Günther espoused human evolution, and he believed the Nordic race had originated in northern Europe and had spread through conquest. Günther supported eugenics to improve the Nordic race.<sup>33</sup>

Shortly after Hitler came to power, Günther expressed approval of Nazi eugenics policies in a lecture on the role of heredity and selection in the state. He claimed that Darwin was a crucial influence on the development of modern scientific conceptions of heredity and selection, in part by supplanting Lamarckism. The state, he argued, needed to found its policies on the firm Darwinian basis of selection, rather than

the Lamarckian teaching of environmental influence. He stated, “The only way to our goal is the Darwinian way, i.e., selection and elimination: The hereditarily valuable having many children, and the hereditarily inferior having few or no children.” Günther then applauded the social Darwinists Otto Ammon and Alexander Tille for calling for a “social aristocracy.”<sup>34</sup>

As with Günther, the University of Leipzig anthropologist Otto Reche was a devotee of Woltmann. Reche confessed that he was a zealous disciple of Woltmann, whom he identified as a “bold forerunner of the völkisch and the racial ideology, thus of the worldview that is the foundation of National Socialism.”<sup>35</sup> In 1936 Reche republished some of Woltmann’s books to make Germans aware of the contribution Woltmann had made to racial thought. In the foreword to Woltmann’s *Politische Anthropologie*, he noted that “every page was influenced by the spirit of Darwin.”<sup>36</sup> Reche obviously subscribed to Woltmann’s evolutionary view of racial anthropology.

Even before joining the Nazi Party in 1937, Reche lectured to Nazi Party organizations on racial anthropology. Later he eagerly offered his expertise to influence racial policy in the occupied Eastern territories.<sup>37</sup> In 1933–34 Reche was an instructor at training seminars at the State Academy for Physicians’ Continuing Education in Dresden, which indoctrinated 4000 professionals in 1933. In these lectures Reche expressed considerable enthusiasm for the Nazi regime, especially its racial ideology. The first of Reche’s three lectures was devoted entirely to human and racial evolution.<sup>38</sup>

The physician Karl Astel, who joined the Nazi Party in 1930 and the SS in 1934, helped make the University of Jena a bastion of Nazi racial ideology. In 1933 he was appointed head of the Thuringian Office for Racial Affairs, and the following year he became professor of human genetics at the University of Jena. As rector from 1939 to 1945 he aspired to build an “SS university.”<sup>39</sup> While in Jena, Astel held a number of Nazi Party and governmental positions, including head of the regional Racial Policy Office. His inaugural address at the University of Jena dealt with racial ideology and was published in *Nationalsozialistische Monatshefte*. This lecture explained the intersection of Darwinian evolution and Nazi racial ideology. Astel claimed that one of the greatest achievements of Nazism was its recognition that humans are subject to natural laws and can thereby further biological evolution. He stated that the Nordic race had evolved through the struggle for existence and intense selection caused by the Ice Age. The harsh conditions had caused the weak to perish, leaving only the more robust to reproduce.<sup>40</sup> Non-Nordic races, he maintained, were inferior because they had not endured as stringent a struggle.

Astel wrote to Himmler in 1937 to solicit help in recruiting Gerhard Heberer, an evolutionary anthropologist, to Jena. Himmler responded affirmatively, and Heberer was appointed associate professor of biology and human evolution in 1939, two years after he joined the SS Race and Settlement Main Office. Heberer gave lectures on

evolution to various Nazi organizations.<sup>41</sup> The Nazi Gauleiter of Thuringia, Fritz Sauckel, considered this professor of human evolution so important to the Nazi cause that in 1943 he implored the Nazi Minister of Education not to allow Heberer to be called to another university, because “I have fixed the goal of building the University of Jena to a National Socialist center of the first rank.”<sup>42</sup> Heberer abetted Nazi racial ideology by being one of the most vocal proponents of Nordic racism. In a 1943 booklet he explained that the Indo-Germanic people were identical with the Nordic race, and they originated during the Ice Ages in north-central Europe, just as the human species had earlier. Heberer clearly promoted the idea that races, including the Nordic race, had evolved.<sup>43</sup>

Heberer was a pivotal figure in Germany in the development of the neo-Darwinian synthesis, the theory that synthesized Darwinian evolution with Mendelian genetics while rejecting Lamarckism. He edited what some historians consider the most important work on evolutionary theory during the Nazi period, *Die Evolution der Organismen* (1943). Four of the eighteen essays were on human evolution by the anthropologists Christian von Krogh, Wilhelm Gieseler, Reche, and Weinert (all but Reche were in the SS).

Gieseler’s contribution to Heberer’s anthology was on “The Fossil History of Humans.” His vision of evolutionary history was consistent with the newly forming neo-Darwinian synthesis, since he explained that the most important mechanisms of evolution were mutations, selection, and isolation.<sup>44</sup> Gieseler, whom Junker calls one of the leading paleoanthropologists in the world from 1930–1970, was appointed by the Nazi regime to a professorship at the University of Tübingen, first in 1934 as associate professor of anthropology and racial science and four years later as professor of racial biology.<sup>45</sup> Gieseler served as an SS officer in the Race and Settlement Main Office. He also held a local leadership position in the Nazi Racial Policy Office, for whom he sometimes lectured on human evolution.<sup>46</sup> In 1936 Giesler wrote an entire book on human evolution, *Abstammungskunde des Menschen*. In sum, then, many of the leading evolutionary anthropologists in Germany were feted by the Nazis—they were given professorships, advanced in SS rank, and regularly lectured on racial ideology for Nazi organizations and training courses.

### Evolutionary Theory in Nazi Periodicals

Many Nazi periodicals featured articles discussing human evolution and its relationship to racial theory. In surveying many Nazi periodicals I have never discovered a single article that even called into question evolutionary theory. Some articles argued over the details of evolutionary theory, and they might even criticize Darwinism as too individualistic. Many rejected Lamarckism. However, these articles always embraced the common descent of organisms, and the vast majority taught Darwinian natural

selection through the struggle for existence. They also consistently accepted human evolution and the evolution of races.

The official Nazi Party newspaper, *Völkischer Beobachter*, published articles that honored Darwin and Haeckel for their contributions to evolutionary theory. A 1932 article, "Darwin," claimed that Darwin's theory was the theoretical foundation for eugenics and racial theory. The article explained that evolution was no longer debatable, and that Darwin's theory of natural selection had triumphed over Lamarckism.<sup>47</sup> Two years later, on the occasion of Haeckel's hundredth birthday, the *Völkischer Beobachter* ran a story lauding Haeckel for his contributions to evolutionary biology.<sup>48</sup> In 1939, on the twentieth anniversary of Haeckel's death, *Völkischer Beobachter* carried an article on Haeckel that honored him for promoting human evolution.<sup>49</sup> These three articles fully supported evolutionary theory, including human evolution, and presented Darwinism as an important ingredient of Nazi ideology and as an inspiration for their racial theory and eugenics.

Another important official Nazi Party publication, *Nationalsozialistische Monatshefte*, edited by Alfred Rosenberg, occasionally featured articles promoting evolution. In a 1935 article Heinz Brücher praised Ernst Haeckel for paving the way for the Nazi regime. In addition to mentioning Haeckel's advocacy of eugenics and euthanasia, Brücher highlighted Haeckel's role in promoting human evolution. Brücher reminded his readers that Haeckel's view of human evolution led him to reject human equality and socialism.<sup>50</sup> In 1941 Brücher published another article in *Nationalsozialistische Monatshefte* on evolution through natural selection. Several times he stressed that the principles of evolution were just as valid for humans as for other organisms. He closed the essay by explaining the practical application of evolutionary theory:

The hereditary health of the German *Volk* and of the Nordic-Germanic race that unites it must under all circumstances remain intact. Through an appropriate *compliance with the laws of nature*, through *selection* and planned *racial care* it can even be increased. The racial superiority achieved thereby secures for our *Volk* in the harsh *struggle for existence* an advantage, which will make us unconquerable.<sup>51</sup>

In Brücher's view human evolution is an essential ingredient of racial ideology, not a hindrance to it. In 1936 Heberer launched an attack on antievolutionists in *Nationalsozialistische Monatshefte*. He praised Haeckel and stressed the affinities of Darwinism and human evolution with Nazi ideology.<sup>52</sup>

Other official Nazi journals that carried articles promoting human evolution included *Der Schulungsbrief*; the Hitler Youth organ *Wille und Macht*; *Neues Volk*, a publication of the Nazi Party's Racial Policy Office; and *Volk und Rasse*. In *Wille und Macht* Ernst Lange argued that the "highest principles" of Nazism were derived from

Darwinian biology.<sup>53</sup> The Racial Policy Office listed recommended books in *Neues Volk*, which often included books on human evolution.<sup>54</sup> *Neues Volk* also reported on a 1938 training course for officials in the Racial Policy Office, during which the evolutionary anthropologist Gieseler lectured on “The Evolutionary Descent of Humans.”<sup>55</sup> Clearly, then, the Racial Policy Office saw human evolution as an integral part of their racial ideology.

The Racial Policy Office’s stance on evolution becomes even clearer when we examine the views of its head, Walter Gross. In 1943 Gross published an article in *Die Naturwissenschaften* discussing evolutionary theory. He affirmed that evolutionary theory is “one of the best-established theories of natural science.”<sup>56</sup> He then explained that based on modern genetics, scientists have rejected Lamarckism in favor of evolution by mutation and natural selection. Gross’s position was fully in line with what became known as the neo-Darwinian synthesis.<sup>57</sup>

*Volk und Rasse* was edited by Bruno Kurt Schulz, an SS officer whom Isabel Heinemann calls “one of the central figures” of the Race and Settlement Main Office. Himmler and many other high Nazi officials were listed on the masthead of the journal.<sup>58</sup> *Volk und Rasse* published several articles entirely devoted to human and racial evolution, including some by Heberer that combated creationism.<sup>59</sup> Eugen Fischer, director of the Kaiser Wilhelm Institute for Anthropology, Human Heredity, and Eugenics, also published an article on human evolution in Schulz’s journal. In his essay, “The Origins of Human Races,” Fischer stated that races that faced squarely “the pitiless struggle causing selection” in harsher environments had “bred the highest mental characteristics.” This was true of the “Nordic race in the harsh struggle for existence at the border of the Ice Age’s glaciers.”<sup>60</sup>

*Volk und Rasse* also carried a brief article in 1938 by Christian von Krogh describing a new display on “The Evolutionary and Racial Science of Humans” in Munich. Krogh, who contributed an essay on human evolution to Heberer’s *Evolution der Organismen*, was an avid Nazi, joining the Nazi Party in 1930 and later serving as an SS officer in the Security Service in France during World War II.<sup>61</sup> He received his doctorate in anthropology at the University of Munich in 1935 under Theodor Mollison, the organizer of this 1938 exhibition. The exhibit had two sections: evolutionary history and racial science. Krogh reported that dignitaries of the state and party attended the opening ceremony. This, he thought, was only fitting, since “With the foundational importance that the natural history of humans takes in our National Socialist worldview, it is right that it demands special attention.”<sup>62</sup> The perception from inside the Third Reich, then, was that evolution was not only compatible, but integral to Nazi racial ideology.

*Der Biologe*, which from 1935 to 1939 was an official organ of the National Socialist Teachers’ League, before being taken over in 1939 by the SS Ahnenerbe, published

many articles attacking creationists, both before and after the SS took it over. One such article was by Konrad Lorenz, who expressed amazement that anyone could doubt evolutionary theory. He argued that evolutionary theory is the best antidote for belief in human equality and thus buttressed Nazi racial thought. Lorenz also argued that the Christian command to love your neighbor as yourself is an evolutionary imperative, too: “Since for us the race and *Volk* are everything and the individual person as good as nothing, this command is for us a completely obvious demand.” Lorenz clearly believed that evolutionary theory reinforced Nazi racial doctrines, including racial inequality and racial solidarity (collectivism).<sup>63</sup> In 1939 the journal carried a chart showing the areas of research undertaken by the SS Reich League for Biology. The first category listed was phylogeny, and anthropology was included as a specialty under this category.<sup>64</sup> Thus evolution, including human evolution, was front and center in their research program.

Another scientific journal, *Zeitschrift für die gesamte Naturwissenschaft*, published various articles discussing and debating evolutionary theory. However, in all these articles, including those by Kurt Hildebrandt and G. Hecht that Robert Richards discusses in his Haeckel biography, the debate was not about whether evolution had occurred, but rather about evolutionary mechanisms.<sup>65</sup> Hildebrandt and Hecht were full-fledged evolutionists. Hecht, for instance, stated in his article, “The fundamental idea of evolution—according to which every living thing on our earth descends from predecessors and ancestors, and in the course of the earths’ history gradually grows from older and simpler forms—is founded on a reality that is totally uncontroversial today.” Later in the article he claimed, “Viewed today from the standpoint of worldview and science the age of Darwin and Haeckel in biology was essentially the age of the final triumph of the (correct) theory of evolution and descent, in which both scientists played a decisive role.”<sup>66</sup> Richards’ use of these articles as evidence that German biologists did not embrace evolution is untenable.

A much stronger piece of evidence that Richards and others have brought forward to contest the view that Nazis were Darwinists is a list of categories of forbidden books published in the periodical *Die Bücherei* in 1935.<sup>67</sup> This list, compiled for libraries in Saxony, included several categories of works that should be banned, including: “Works of worldview or biological character whose content is the superficial scientific enlightenment of a primitive Darwinism and monism (Haeckel and those emulating him, as well as Ostwald).”<sup>68</sup> Richards insists that this evidence seals his case that the Nazis rejected Darwinism.<sup>69</sup> But does it? First of all, most historians recognize that the Nazi system was polycratic and Nazis often disagreed among themselves. Thus a Saxon official issuing a banned book list is important, but not decisive, evidence; it must be weighed in light of other evidence. Secondly, this statement does not ban Darwinism per se, but “primitive Darwinism and monism.” Many Nazis rejected Haeckel’s

and Ostwald's monism, not because it contained evolutionary theory, but because Haeckel's Monist League, especially in the 1920s and early 1930s, had tilted toward socialism, pacifism, feminism, and other doctrines contrary to the Nazi worldview.<sup>70</sup>

Finally, the same periodical that published the banned book list also published book reviews and recommended books that libraries should buy. In 1934 they published an article on books dealing with race and eugenics. They recommended that libraries acquire books expressly teaching biological evolution, such as Martin Staemmler's *Rassenpflege im völkischen Staat*, the famous Baur-Fischer-Lenz work on human genetics and eugenics, and Günther's *Rassenkunde des deutschen Volkes*.<sup>71</sup> This journal also approved many other works that promoted evolutionary theory.<sup>72</sup> Apparently the journal *Die Bücherei* not only did not think books should be banned simply because they contain Darwinism or evolutionary theory, but, on the contrary, they recommended that libraries acquire books teaching Darwinism.

### Importance of Evolution in Nazi Racial Propaganda

In order to demonstrate the important role Darwinism played in Nazi racial propaganda, I will examine three more important sources: the SS pamphlet *Rassenpolitik*, the SS curriculum for worldview training, and a propaganda pamphlet written for the German military during World War II, *Wofür kämpfen wir?*. All of these sources explicitly endorsed Darwinian evolution, including (and especially!) the evolution of humans. Further, these sources do not just mention Darwinism in passing, but accord it a prominent place in Nazi racial ideology.

Darwinism played a central role in the anonymously written SS racial propaganda pamphlet, *Rassenpolitik*. As indicated on the final page, where the material is divided into eleven class periods, this pamphlet was used for training in Nazi ideology. The opening pages explained that the central concepts underlying racial ideology are hard heredity and racial inequality. Then it claimed that racial inequality has come about because evolution proceeds by struggle. Different races simply do not evolve at the same pace, so they are at different levels. The authors then asserted that the three main human races—European, Mongolian, and Negro—were subspecies that branched off from a common ancestor about 100,000 years ago. They argued that races evolved through selection and elimination, and the Nordic race became superior because it had to struggle in especially harsh conditions. Throughout this pamphlet the terms “higher evolution,” “struggle for existence,” and selection are core concepts that occur repeatedly. They also mention mutations as a source of evolutionary novelty.<sup>73</sup> In a section of the book entitled, “The Purpose of Life,” the authors explained,

To preserve and multiply oneself is the deepest purpose of life . . . The preservation and multiplication of life, however, includes the drive for improvement, for higher evolution and perfection, which exists within all life. . . . The all-encompassing life

on the earth arises and perishes as species, it takes on ever new forms with the goal of growing perfection of the individual and the species, its higher evolution, and the improvement of functions.<sup>74</sup>

This quotation exudes a teleology that runs contrary to the ideas of most German Darwinists, but it nonetheless demonstrates the importance of human evolution in Nazi ideology.

Another SS training manual aimed at inculcating a Nazi worldview into SS members was *Lehrplan für die weltanschauliche Erziehung in der SS und Polizei*, written sometime after 1941. The section of this training course on “The Laws of Life Foundational to Our World View” contained an entire class period on evolution. It stated therein, “The theory of evolution, that is the knowledge of the connection of all living things, places humans in the whole of nature and determines for us anew our attitude and behavior toward the living world.”<sup>75</sup> This section explained that the evidence for evolution is overwhelming. Another class period had a subsection on “Struggle for Existence (Selection),” which taught that humans arose through the struggle for existence in the Ice Ages.<sup>76</sup> SS training, then, included significant doses of teaching about human evolution and the evolutionary origins of human races.

Another important pamphlet for Nazi ideological indoctrination was *Wofür kämpfen wir?*, a work published by the German military in 1944. Hitler personally wrote a letter approving of the booklet, asking officers not only to read it, but also to use it in ideological training sessions for their troops.<sup>77</sup> This pamphlet repeatedly stressed the importance of the racial struggle for existence and selection to preserve and improve the human species. The Nazi commitment to “higher evolution” of humans is a major theme. The authors argued that the Nordic race was already the highest evolved race, but they aimed at improving the human species yet more. “The means to produce this new human type,” they averred, “is instruction managed in the spirit of the National Socialist worldview. The precondition for it is maintaining purity [of blood] and advancing the evolution of our blood through breeding.”<sup>78</sup> Whoever wrote this pamphlet stressed the importance of human evolution to Nazi racial ideology.

## Conclusion

The historical evidence is overwhelming that human evolution was an integral part of Nazi racial ideology. It held a prominent place in the Nazi school curriculum and in training courses in the Nazi worldview. Nazi officials and SS anthropologists agreed that humans, including the Nordic race, had evolved from primates. They believed that the Nordic race had evolved to a higher level of intelligence, physical prowess, and social solidarity than other races, in large part because they had faced what biologists today would call greater selective pressure. This selective pressure was caused by the Ice Ages, which had weeded out the weak and sickly, leaving only the brightest and

best to propagate the Nordic race. They saw eugenics and racial policy as a means to help the Nordic race evolve to even greater heights. On the whole, these ideas were not just Nazi ideas, but were in line with the thinking of many of the leading German biologists and anthropologists before the Nazis came to power.

Nazi racial ideology—and the many policies based on it—were profoundly shaped by a Darwinian understanding of humanity. Certainly many non-Darwinian elements were synthesized with Darwinism: Aryan supremacy, antimiscegenation, antisemitism, and many more. Nonetheless, Nazi racial ideology integrated all these factors into a worldview that stressed the transmutation of species, the evolutionary formation of the human races, the need for advancing human evolution, the inevitability of the human struggle for existence, and the need to gain *Lebensraum* to succeed in the evolutionary struggle. Reche connected the dots between evolutionary ideology and praxis in the conclusion of his essay in Heberer's anthology:

To sum up: All the mentioned events in the origin of humans and the cultivation of his races can be explained genetically. Without the emergence of hereditary differences, without selection and elimination it could never have come to the formation of highly evolved races and tribes able to accomplish the highest tasks, and never [have come] to a higher human culture.

This knowledge obligates us to take up the task, in conscious selection to provide for a racially fit, hereditarily healthy, culture-creating people of the future and thus for the preservation of everything that lifts the life of humans above that of the animals.<sup>79</sup>

Reche's vision was shared by the Nazi regime, whose policies ultimately aimed at one supreme goal: improving the human species biologically, i.e., advancing human evolution.

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#### Notes

1. Thanks to Mitchell Ash, Robert Richards and his seminar at the University of Chicago, and anonymous reviewers for helpful comments on earlier versions of this essay.
2. Many note the importance of social Darwinism for Hitler: Richard Weikart, *Hitler's Ethic: The Nazi Pursuit of Evolutionary Progress* (New York: Palgrave Macmillan, 2009); Ian Kershaw, *Hitler*, 2 vols. (New York: Norton, 1998–2000), 1: 290, 2: xli, 19, 208, 405, 780; Richard Evans, *Coming of the Third Reich* (New York: Penguin, 2004), 34–35, and *Third Reich in Power* (New York: Penguin, 2005), 4, 708; Eberhard Jäckel, *Hitler's World View* (Cambridge, MA: Harvard University Press, 1981), ch. 5; Mike Hawkins, *Social Darwinism in European and American Thought, 1860–1945* (Cambridge: Cambridge University Press, 1997), 277–78; Rainer Zitelmann, *Hitler: Selbstverständnis eines Revolutionärs* (Hamburg: Berg, 1987), 15, 466; Neil Gregor, *How to Read Hitler* (New York: Norton, 2005), 40; a longer list is in Weikart, *Hitler's Ethic*, 205–6, n. 6.

3. George L. Mosse, *The Crisis of German Ideology: Intellectual Origins of the Third Reich* (New York: Dunlop and Grossett, 1964), 103.
4. Peter Bowler, "Darwin's Originality," *Science* 323 (9 January 2009): 226; Tristan Abbey, "The Impact of Darwinism," Interview with Michael Ruse, *Stanford Review Online Edition*, 22 April 2008, <http://stanfordreview.org/article/impact-darwinism/>.
5. Daniel Gasman, *Scientific Origins of National Socialism: Social Darwinism in Ernst Haeckel and the German Monist League* (London: MacDonald, 1971), 173.
6. Anne Harrington, *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler* (Princeton, NJ: Princeton University Press, 1996), 262, n.2; Werner Maser takes a similar position in *Hitlers Briefe und Notizen* (Düsseldorf: Econ, 1973), 301.
7. Robert J. Richards, "That Darwin and Haeckel Were Complicit in Nazi Biology," in *Galileo Goes to Trial and Other Myths about Science and Religion*, ed. Ronald Numbers (Cambridge, MA: Harvard University Press, 2009), 177.
8. Robert Richards, "Was Hitler a Darwinian?" Paper delivered to The Society of Fellows, University of Chicago, October 2011, <http://home.uchicago.edu/~rjr6/articles/Was%20Hitler%20a%20Darwinian.pdf>.
9. Many historians discuss the linkage between evolutionary theory and eugenics or euthanasia: Peter Weingart et al., *Rasse, Blut, und Gene: Geschichte der Eugenik und Rassenhygiene in Deutschland* (Frankfurt am Main: Suhrkamp, 1988), 18, 74–75, 171; Hans-Walter Schmuhl, *Rassenhygiene, Nationalsozialismus, Euthanasie* (Göttingen: Vandenhoeck und Ruprecht, 1987), 18–19, 106; Sheila Faith Weiss, *The Nazi Symbiosis: Human Genetics and Politics in the Third Reich* (Chicago: University of Chicago Press, 2010), 23; Paul Weindling, *Health, Race and German Politics between National Unification and Nazism, 1870–1945* (Cambridge: Cambridge University Press, 1989), ch. 1.
10. Paul Weindling, "Genetics, Eugenics, and the Holocaust," in *Biology and Ideology from Descartes to Dawkins*, ed. Denis Alexander and Ronald Numbers (Chicago: University of Chicago Press, 2010), 205.
11. Christopher Hutton, *Race and the Third Reich: Linguistics, Racial Anthropology and Genetics in the Dialectic of Volk* (Cambridge: Polity, 2005), 212; see also 9, 180.
12. Uwe Hoßfeld, *Geschichte der biologischen Anthropologie in Deutschland* (Stuttgart: Franz Steiner, 2005); "Staatsbiologie, Rassenkunde und Moderne Synthese in Deutschland während der NS-Zeit," in *Evolutionbiologie von Darwin bis heute*, eds. Rainer Brömer et al. (Berlin: VWB, 2000), 249–305; "Von der Rassenkunde, Rassenhygiene und biologischen Erbstatistik zur Synthetischen Theorie der Evolution," in "Kämpferische Wissenschaft": *Studien zur Universität Jena im Nationalsozialismus*, eds. Uwe Hoßfeld et al. (Cologne: Böhlau, 2003), 519–74; Thomas Junker, *Die zweite Darwinische Revolution: Geschichte des Synthetischen Darwinismus in Deutschland 1924 bis 1950* (Marburg: Basiliken-Press, 2004).
13. Walter Gross, "Rassische Geschichtsbetrachtung," in *Europas Geschichte als Rassenschicksal*, ed. Rolf L. Fahrenkrog (Leipzig: Hesse und Becker, n.d.), 14.
14. Otto Reche, "Die Genetik der Rassenbildung beim Menschen," in *Die Evolution der Organismen: Ergebnisse und Probleme der Abstammungslehre*, ed. Gerhard Heberer (Jena: Gustav Fischer, 1943), 700.
15. Richard Weikart, *From Darwin to Hitler: Evolutionary Ethics, Eugenics, and Racism* (New York: Palgrave Macmillan, 2004), discusses Woltmann, Schemann, and other German thinkers who synthesized Gobineau and Darwinism.
16. Hans-Walter Schmuhl, "Eugenik und Rassenanthropologie," in *Medizin und Nationalsozialismus: Bilanz und Perspektiven der Forschung*, ed. Robert Jütte (Göttingen: Wallstein, 2011), 31. Robert Richards' claim in "Was Hitler a Darwinian?" that the Nazi embrace of Gobineau proves that Nazis were anti-Darwinian is untenable.
17. Richard Weikart, "The Impact of Social Darwinism on Anti-Semitic Ideology in Germany and

- Austria, 1860–1945,” in *Jewish Tradition and the Challenge of Evolution*, ed. Geoffrey Cantor and Marc Swetlitz (Chicago: University of Chicago Press, 2006), 93–115.
18. Hitler speech, July 19, 1937, in J. Noakes and G. Pridham, *Nazism 1919–1945: A Documentary Reader*, vol. 2 (Exeter: University of Exeter Press, 2000), 205–6; for many other examples demonstrating Hitler’s belief in evolution, see Weikart, *Hitler’s Ethic*, especially ch. 2.
  19. Othmar Plöckinger, *Geschichte eines Buches: Adolf Hitlers “Mein Kampf” 1922–1945* (Munich: R. Oldenbourg, 2006), 12, 414.
  20. Adolf Hitler, *Mein Kampf*, 2 vols. in 1 (Munich: NSDAP, 1943), 312. Unless otherwise noted, all translations of German texts are mine. The translation of this passage is based on Ralph Manheim’s translation, but I alter his translation of *Entwicklung* to “evolution,” just as most English translators of *Mein Kampf* do.
  21. Hitler, “Warum sind wir Antisemiten?” August 13, 1920, in *Hitler: Sämtliche Aufzeichnungen, 1905–1924*, ed. Eberhard Jäckel (Stuttgart: Deutsche Verlags-Anstalt, 1980), 184–86.
  22. *Erziehung und Unterricht in der Höheren Schule: Amtliche Ausgabe des Reichs- und Preussische Ministeriums für Wissenschaft, Erziehung und Volksbildung* (Berlin: Weidmannsche Verlagsbuchhandlung, 1938), 141, 148–49, 157, 160; Änne Bäumer-Schleinkofer, *NS Biologie und Schule* (Frankfurt am Main: Peter Lang, 1992), 57–59, 66, 81, 89, recognizes that Nazis believed in evolutionary theory, but she only cursorily deals with it.
  23. H. Linder and R. Lotze, “Lehrplanentwurf für den biologischen Unterricht an den höheren Knabenschulen. Bearbeitet im Auftrag des NSLB. Reichsfachgebiet Biologie,” in *Der Biologe*; this was a separate supplement without pagination in vol. 6 (1937); an earlier draft is in *Der Biologe* (1936): 239–46.
  24. Jakob Graf, *Biologie für Oberschule und Gymnasium*, vol. 4: *Ausgabe für Knabenschulen* (Munich: J. F. Lehmanns, 1942), chs. 9–10.
  25. Erich Meyer and Karl Zimmermann, *Lebenskunde: Lehrbuch der Biologie für höhere Schulen*, vol. 2 (Erfurt: Verlag Kurt Stenger, 1940), 2: 333.
  26. Hermann Wiehle and Marie Harm, *Lebenskunde für Mittelschulen*, vol. 6: *Klasse 6 für Jungen* (Halle an der Saale: Hermann Schroedel, 1942), 132.
  27. Hans Weinert, *Die Rassen der Menschheit* (Leipzig: B. G. Teubner, 1935), 4.
  28. Weinert, *Die Rassen der Menschheit*, 21.
  29. Weinert, *Rassen der Menschheit*, 136.
  30. Hans Weinert, *Biologische Grundlagen für Rassenkunde und Rassenhygiene* (Stuttgart: Ferdinand Enke, 1934), 4, 30.
  31. “Wertvolle Bücher,” *Neues Volk* 3, no. 2 (1935): 46–48; Heinz Brücher, “Lebenskunde,” *Nationalsozialistische Monatshefte* 8 (1937): 190–92; “Verzeichnis der zur Beschaffung für Schulbüchereien geeigneten Bücher und Schriften,” *Deutsche Wissenschaft Erziehung und Volksbildung: Amtsblatt des Reichsministeriums für Wissenschaft, Erziehung und Volksbildung und der Unterrichtsverwaltungen der Länder* 2 (1936): 64; see also Ute Deichmann, *Biologists under Hitler* (Cambridge, MA: Harvard University Press, 1996), 270.
  32. Uwe Hoßfeld, “Die Jenaer Jahre des Rasse-Günther von 1930 bis 1935,” *Medizinhistorisches Journal* 34 (1999): 47–103; Hans F. K. Günther, *Mein Eindruck von Adolf Hitler* (Pähl: F. von Bebenburg, 1969), 59, 100–101.
  33. Hans F. K. Günther, *Rassenkunde des deutschen Volkes*, 3rd ed. (Munich: J. F. Lehmanns, 1923), 21–24, 246, 279–80, ch. 22.
  34. Hans F. K. Günther, *Volk und Staat in ihrer Stellung zu Vererbung und Auslese*, 2nd ed. (Munich: J. F. Lehmanns, 1933), 17–18, 24–26.
  35. Otto Reche, “Ludwig Woltmann,” in *Woltmanns Werk*, vol. 1: *Politische Anthropologie* (Leipzig: Justus Dörner, 1936), 7–8.
  36. Otto Reche, “Vorwort des Herausgebers,” in *Woltmanns Werk*, vol. 1: *Politische Anthropologie* (Leipzig: Justus Dörner, 1936), 32.
  37. For more on Reche and Nazism, see Katja Geisenhainer, “Rasse ist Schicksal”: *Otto Reche*

- (1879–1966)—*ein Leben als Anthropologe und Völkerkundler* (Leipzig: Evangelische Verlagsanstalt, 2002).
38. Otto Reche, “Entstehung des Menschen und seiner Rassen,” in *Rassenhygiene für Jedermann*, ed. Ernst Wegner (Dresden: Theodor Steinkopff, 1934), 11–29.
  39. Hoßfeld, *Geschichte der biologischen Anthropologie*, 217, 220, 231–33; Paul Weindling, “‘Muster-gau’ Thüringen: Rassenhygiene zwischen Ideologie und Machtpolitik,” in “*Kämpferische Wissenschaft*,” eds. Uwe Hoßfeld et al., 1013–26; and Uwe Hoßfeld, “Menschliche Erblehre, Rassenpolitik und Rassenkunde (-biologie) an den Universitäten Jena und Tübingen von 1934–45,” in *Ethik der Biowissenschaften: Geschichte und Theorie*, eds. Eve-Marie Engels et al. (Berlin: VWB, 1998), 361–92.
  40. Karl Astel, “Rassendämmerung und ihre Meisterung durch Geist und Tat als Schicksalsfrage der weissen Völker,” *Nationalsozialistische Monatshefte* 6 (1935): 194–95, 202–3.
  41. Uwe Hoßfeld, *Gerhard Heberer (1901–1973): Sein Beitrag zur Biologie im 20. Jahrhundert* (Berlin: Verlag für Wissenschaft und Bildung, 1997), 60–62, 67, 186–87; Hoßfeld, *Geschichte der biologischen Anthropologie*, 261; Deichmann, *Biologists under Hitler*, 272–73, 274.
  42. Hoßfeld, *Gerhard Heberer*, 85–86.
  43. Gerhard Heberer, *Rassengeschichtliche Forschungen im indogermanischen Urheimatgebiet* (Jena: Gustav Fischer, 1943), 1–4.
  44. Wilhelm Gieseler, “Die Fossilgeschichte des Menschen,” in *Die Evolution der Organismen: Ergebnisse und Probleme der Abstammungslehre*, ed. Gerhard Heberer (Jena: Gustav Fischer, 1943), 615.
  45. Junker, *Die zweite Darwinische Revolution*, 258–59.
  46. Geisenhainer, “*Rasse ist Schicksal*,” 475; “Wissenschaft und Weltanschauung,” *Neues Volk* 6, no. 12 (1938): 27.
  47. Prof. Dr. B., “Darwin,” *Rasse, Volk und Staat: Rassenhygienisches Beiblatt*, in *Völkischer Beobachter* (15 June 1932).
  48. V. Franz, “Das Göttliche im Gottesverneiner,” *Völkischer Beobachter*, no. 47 (16 February 1934).
  49. A. C., “Um die Abstammung des Menschen: Zum 20. Jahrestage Ernst Haeckels,” *Völkischer Beobachter* (9 August 1939): 6.
  50. Heinz Brücher, “Ernst Haeckel, ein Wegbereiter biologischen Staatsdenkens,” *Nationalsozialistische Monatshefte* 6 (1935): 1088–96; “Ernst Haeckel und die ‘Welträtself’-Psychose römischer Kirchenblätter,” *Nationalsozialistische Monatshefte* 7 (1936): 261–65.
  51. Heinz Brücher, “Rassen- und Artbildung durch Erbänderung, Auslese und Züchtung,” *Nationalsozialistische Monatshefte* 12 (1941): 676. Emphasis in the original.
  52. Gerhard Heberer, “Abstammungslehre und moderne Biologie,” *Nationalsozialistische Monatshefte* 7 (1936): 874–90.
  53. Ernst Lange, “Ludwig Woltmann,” *Wille und Macht* 6, no. 5 (1936): 8–11; see also review of Ludwig Woltmann, *Das Rassenwerk*, in *Wille und Macht* 6, no. 14 (1936): 62.
  54. “Wertvolle Bücher,” *Neues Volk* 3, no. 2 (1935): 46–47; “Bücher, die zu empfehlen sind,” *Neues Volk* 3, no. 6 (1935): 46.
  55. “Wissenschaft und Weltanschauung,” *Neues Volk* 6, no. 12 (1938): 27.
  56. Walter Gross, “Paläontologische Hypothesen zur Faktorenfrage der Deszendenzlehre,” *Die Naturwissenschaften* 31, no. 21/22 (1943): 237.
  57. Gross, “Paläontologische Hypothesen,” 237–245.
  58. Isabel Heinemann, “*Rasse, Siedlung, deutsches Blut*: Das Rasse- und Siedlungshauptamt der SS und die rassenpolitische Neuordnung Europas (Göttingen: Wallstein, 2003), 162–63, 634–35.
  59. Gerhard Heberer, “Neuere Funde zur Urgeschichte des Menschen und ihre Bedeutung für Rassenkunde und Weltanschauung,” *Volk und Rasse* 12 (1937): 422–27, 435–44; see also Gerhard Heberer, “Jesuiten und Abstammungslehre,” *Volk und Rasse* 13 (1938): 377–78; Gerhard Heberer, “Die genetischen Grundlagen der Artbildung,” *Volk und Rasse* 15 (1940): 136–37.
  60. Eugen Fischer, “Die Entstehung der Menschenrassen,” *Volk und Rasse* 13 (1938): 236.

61. Junker, *Die zweite Darwinische Revolution*, 256–57.
62. Christian von Krogh, "Schausammlung für Abstammungs- und Rassenkunde des Menschen in München," *Volk und Rasse* 13 (1938): 193–94.
63. Konrad Lorenz, "Nochmals: Systematik und Entwicklungsgedanke im Unterricht," *Der Biologe* 9 (1940): 24, 32.
64. Walter Greite, "Aufbau und Aufgaben des Reichsbundes für Biologie," *Der Biologe* 8 (1939): 233–41.
65. Robert Richards, *The Tragic Sense of Life: Ernst Haeckel and the Struggle over Evolutionary Thought* (Chicago: University of Chicago Press, 2008), 446; Richards, "Was Hitler a Darwinian?"
66. Kurt Hildebrandt, "Die Bedeutung der Abstammungslehre für die Weltanschauung," *Zeitschrift für die gesamte Naturwissenschaft* 3 (1937–38): 15–34; G. Hecht, "Biologie und Nationalsozialismus," *Zeitschrift für die gesamte Naturwissenschaft* 3 (1937–38): 282, 285.
67. Richards, *Tragic Sense of Life*, 446–47; Richards, "Was Hitler a Darwinian?"
68. "Richtlinien für die Bestandsprüfung in den Volksbüchereien Sachsens," *Die Bücherei: Zeitschrift für deutsche Schrifttumspflege* 2 (1935): 279–80.
69. Richards, "Was Hitler a Darwinian?" For a critique, see Richard Weikart, "Was Hitler Influenced by Darwinism?: A Response to Robert Richards," at [www.csustan.edu/history/faculty/weikart/hitler-darwinism.htm](http://www.csustan.edu/history/faculty/weikart/hitler-darwinism.htm).
70. Richard Weikart, "'Evolutionäre Aufklärung'? Zur Geschichte des Monistenbundes" in *Wissenschaft, Politik, und Öffentlichkeit: Von der Wiener Moderne bis zur Gegenwart*, ed. Mitchell G. Ash and Christian H. Stifter (Vienna: WUV Universitätsverlag, 2002), 131–48.
71. "Zu unserm Sonderverzeichnis: Rassenpflege, warum und wie?" *Die Bücherei* 1, no. 1 (1934): 46.
72. Review of Edgar Dacqué, *Urweltkunde Süddeutschlands*, in *Die Bücherei* 3 (1936): 278; Hermann Eisner, review of Erich Schneider, *Entwicklungsgeschichte der naturwissenschaftlichen Weltanschauung von der griechischen Naturphilosophie bis zur modernen Vererbungslehre*, in *Die Bücherei* 4 (1937): 67–68; Hermann Propach, review of Theodor Schmucker, *Geschichte der Biologie: Forschung und Lehre*, in *Die Bücherei* 5 (1938): 626–27; Margarethe Kölle, review of Bruno Gebhard, ed., *Wunder des Lebens*, in *Die Bücherei* 5 (1938): 620.
73. *Rassenpolitik* (Berlin: Der Reichsführer SS, SS-Hauptamt, n.d. [approx. 1943]), 11–16, 21, 24–25, 27–28, 40, 50, 52, 64, 66.
74. *Rassenpolitik*, 61.
75. *Lehrplan für die weltanschauliche Erziehung in der SS und Polizei* (Berlin: SS-Hauptamt, n.d.), 78.
76. *Lehrplan für die weltanschauliche Erziehung in der SS und Polizei*, 78–79, 84.
77. *Wofür kämpfen wir?* (Berlin: Heerespersonalamt, 1944), iv–vi.
78. *Wofür kämpfen wir?*, 70.
79. Reche, "Die Genetik der Rassenbildung," 705.