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# Adolf Hitler vs. Henry Ford: The Volkswagen, the Role of America as a Model, and the Failure of a Nazi Consumer Society

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**Abstract:** Modeling the consumer society of the United States, Nazi Germany planned to launch its own brand of consumerism with a family of "people's products," the most spectacular of which was the Volkswagen. This article demonstrates how and why the Nazi initiatives for consumer products failed.

On 24 April 1936, the New York correspondent for Kölnische Zeitung published an article with the headline "The Father of the Volkswagen," which discussed Henry Ford and his contribution to mass motorization. It concluded: "The Ford formula of mass production, low prices, and high wages created today's concept 'America'." The article evoked protests from the Reichsverband der Automobilindustrie (RDA), the German association of car manufacturers, which had prepared the design and production of the Volkswagen and possessed the rights to the brand name. The RDA addressed its complaints to Goebbels' Ministry of Propaganda: Ford's work and that of the Führer should not be considered equal as they represented "materialistic versus idealistic points of view." Goebbels' ministry reacted promptly and reprimanded the newspaper: "Such a presentation is completely impossible. ... in the future, only Adolf Hitler should be called the creator of the Volkswagen."

This episode demonstrates that the *Volkswagen* project was widely identified with American mass motorization and specifically with Henry Ford's Model T. Yet Nazi leaders were determined to disassociate the two. The *Volkswagen* was promoted as the chief example of a group of "people's products" being prepared or realized in order to raise consumption. The more or less concealed model for the desired high level of consumption was the United States, where consumerism was fairly developed in the interwar period. Historians agree that the United States has been a "consumer society" since the interwar period, but they disagree whether the term can be applied to earlier societies.<sup>5</sup>

The case of *Volkswagen* suggests that the Nazis' attempts to promote their own peculiar consumer society failed. They failed because they focused on mass production and neglected the prerequisites of a mass market. Henry Ford formulated the relationship between mass production and mass consumption in a ghostwritten article for *Encyclopaedia Britannica*: "The necessary, precedent condition of mass production is a capacity, latent or developed, of *mass consumption*, the ability to absorb large production. The two go together, and in the latter may be traced the

reasons for the former." It was in this respect, namely in the inability to generate mass consumption, that Hitler's *Volkswagen* and the other "people's products" missed the model of America and of Ford.

U.S. mass motorization affected the *Volkswagen* story in two ways. The first is symbolic and ideological. It was shaped by the Nazi views on American mass motorization and its proponents like Henry Ford. The second is concrete and practical. It relates to the question whether the *Volkswagen* and its factory imitated American car culture and American production methods. Here the role American car producers in Germany, namely General Motors's Opel Company and Ford Motor Company, played in the *Volkswagen* project was critical. When Hitler's Germany started the war, the *Volkswagen* project came to a halt and the *Volkswagen* factory was transformed into a military production plant, which turned out to be very inefficient. Recent research strongly suggests that the *Volkswagen* would have failed under peacetime conditions as well. The final part of the article will explore the probable reasons for the failure of Hitler's car.

#### German Motorization in the Interwar Period

In the interwar period, motorization in Germany clearly lagged behind that in Great Britain and France, not to mention the United States. Nevertheless, the number of cars increased, except during the years 1931 to 1933, and differences with the Western European countries diminished especially in the Nazi years. Car prices and operating costs decreased as a result of efficiency measures. Public opinion held American production methods and the Ford model in particular in high esteem. But car manufacturers recognized that the German market required appropriate strategies, which meant that a broader range of models, especially smaller, more economical cars had to be offered and production technology needed to be adapted to smaller series. In this transformation process, a number of companies merged, leaving only 10 producers by 1933.

Yet even with these economies, automobiles were out of reach for most people during the difficult times after World War I. Germans instead turned to the more affordable motorcycles, which thus increased their market share, while in Great Britain and the United States motorcycles sales experienced a relative decline. <sup>10</sup> From the mid-twenties on, the number of motorcycles in Germany surpassed that of cars—by 1938 at a ratio of 1.3 million cars to 1.5 million motorcycles, over two-thirds of which were lighter models. <sup>11</sup> In 1936, 35 percent of the world's motorcycles were running in Germany, in 1939 even 45 percent, <sup>12</sup> prompting one economic journal to comment, "The German people of the less affluent classes have thrown themselves on two wheels to become motorized because they are unable to pay for four." <sup>13</sup> Bicycles were even more widespread. <sup>14</sup> In 1939, approximately 20 million bicycles were counted. Statistically, every German family owned slightly more than one.

We do not know exactly how the cars and motorcycles were used. Estimates stated that approximately 80 percent of the automobiles were used in trade and industry for transportation and deliveries or visiting customers. <sup>15</sup> Only a minority were private cars for going to work, excursions, and vacation travel. Cars were thus primarily an investment and not a consumer good in Germany.

From the early twentieth century, hopes to motorize Germany were expressed in terms like *Volksautomobil*, *Volksauto*, and *Volkswagen*, meant to describe inexpensive cars for the broad masses. <sup>16</sup> In the 1920s, such cars were envisaged to cost around 2,000 Reichsmarks (RM), which was pretty much out of the reach of even the middle classes. The *Volkswagen* was in fact more a vision and a claim than a reality.

Between the wars, the German public argued about which company would be able to create a real *Volkswagen*. Much hope focused on the Ford Motor Company, which fed on the Ford myth, spread by Ford's ghostwritten autobiography and many other publications. One well-known automobile expert spelled out alternative approaches in a brochure called *Das Volksauto*, published in 1931.<sup>17</sup> German companies might merge to build a *Volkswagen*, it suggested. Since the German market could not absorb the minimum production of one to two hundred thousand cars a year alone, the writer suggested to design the *Volkswagen* for the European market. His favorite candidate for the production of this car was the Ford Motor Company, which at the time was erecting a new factory in Cologne. When General Motors acquired the Opel Company in 1929, others pent their hopes on the Rüsselsheim factory. While the acquisition was much criticized in the German economic press, trade unionists welcomed the deal as it might result in the "long desired cheap *Volkswagen*." 18

### The Idea of the Volkswagen and American Car Manufacturers in Germany

When the Hitler government was established in January 1933, the car industry was in a deep crisis in spite of some signs of recovery. Less than two weeks after his appointment, the new chancellor appeared at the opening of the Berlin Automobile Show to proclaim that the motorcar had introduced the second great transportation revolution (*Verkehrsumwälzung*) after the railroad. "The luxury car of former days has become the ordinary means of transportation of today." He announced the end of restrictions and political support for the car. He outlined four government tasks for the future: specific management of car traffic, a reduction of import duties on cars, construction of new roads, and state subsidies for car racing.

There is no doubt that Hitler was a motorcar enthusiast. The automobile lobby used to quote his phrase: "I like the motor car more than anything else because it opened Germany up to me." For Hitler, the number of cars and miles of road were a measure of one's nation's cultural standards. His personal advisor, the Daimler-Benz manager Jakob Werlin, called the "idea of motorization the symbol of national-socialist revolutionary development." Hitler's goal was, so Werlin, "to restore to the German people the position in the world to which its race, character, and history give it an inalienable right." Beyond this, Hitler's vision of mass motorization was an appropriate means to win recognition from the German population. Car manufacture was considered a means to achieve economic rebirth and overcome unemployment. Last but not least, the Nazis were acutely aware of the motorcar's military significance.

It became routine for Hitler to deliver the opening speech at the automobile show in Berlin each year. One of his phrases was that the automobile had changed from a luxury to an ordinary good.<sup>23</sup> He referred to the experience of mass motorization,

which had first been made in the United States In his 1936 address, he made this context explicit: "The German people have exactly the same need to employ the motorcar as, let us say, the American."<sup>24</sup>

Hitler did not use the term *Volkswagen* in 1933 which had meant cheap cars generally since the turn of the century. Especially before the auto exhibitions people often wondered whether they could expect a *Volkswagen* to be exhibited. Even before the Nazis seized power, the journal of the German automobile club predicted that the 1933 exhibition would mark the "birth of the European *Volkswagen*." At the exhibition and in advertisements, several companies presented their cars as *Volkswagen*. However, it was not the Nazi motorization program but the introduction of the *Volksempfänger*, a cheap radio receiver, which revived the *Volkswagen*-craze. Goebbels' Ministry of Propaganda introduced the *Volksempfänger*, which was produced by all 28 German radio companies in the autumn of 1933. Thus many manufacturers, among them the American subsidiaries Opel and Ford, used the term *Volkswagen* for their cars at the automobile exhibition of 1934. Po

The government only became involved with the *Volkswagen* in response to this broad public resonance. In early 1934, intra-governmental negotiations on the issue started under the sponsorship of Goebbels' ministry.<sup>30</sup> One favorite plan was to subsidize mini-cars (*Kleinstwagen*), among them three-wheelers that were supposed to cost around 1,000 RM. This was the background for Hitler's opening speech at the 1934 auto show.<sup>31</sup> Even then, Hitler did not use the term *Volkswagen* but the context was obvious. He declared that the German people needed the motorcar. Industry's task would be to reduce prices to fit the incomes of millions of buyers. He mentioned the *Volksempfänger* explicitly as an example of what had to be done.

Hitler's *Volkswagen* speech resulted in a flood of articles, initiatives, and proposals.<sup>32</sup> Automobile journals tested existing models to see which deserved to be called *Volkswagen*. In the case of the 1.2 liter Opel, one journal's answer was positive; in the case of the 1-liter Ford, another one came to a negative conclusion.<sup>33</sup> The fact that American-owned subsidiaries, Ford and General Motors' Adam Opel Company, were considered primary candidates for the production of a "people's car," testifies not only to the importance of the American model of mass production and consumption, but also to the leading presence of U.S. companies in the German automobile industry since the mid-twenties, including six other American car manufacturers besides Ford and General Motors.

The Ford Motor Company had established its first foreign subsidiary in Berlin in 1925 and started assembling cars and tractors there in 1926—since 1931 in Cologne—primarily because tariffs on parts were lower than those on fully assembled cars.<sup>34</sup> After 1930, IG Farben became a junior partner in Ford-Germany with a 35 persent capital share.

Nazi policy towards Ford was ambivalent. On the one hand, the American automobile industry—and Ford in particular—was the model for what Hitler planned in Germany.<sup>35</sup> Henry Ford was held in high esteem for his contribution to mass production but also for his resentment of the Jews and capitalism.<sup>36</sup> Even before 1933, the Nazi party had unsuccessfully tried to garner financial support from

Henry Ford. In 1938, on Ford's 75<sup>th</sup> birthday, the German consul in Detroit conferred one of the highest Nazi decorations on him.<sup>37</sup> When Hitler visited the Ford Company at the Berlin automobile show, he praised the company and the man for what they had achieved. On the other hand, Hitler regarded the American automobile industry and the Ford Company as competitors in his great plans for Germany. There was much open and hidden discrimination against Ford. For instance, Hitler forbade all party offices to buy Ford cars in a secret order in 1936.<sup>38</sup> In 1938, Goebbels' Ministry of Propaganda stopped newspaper reports on a new cheap car Ford planned to produce in the United States, because this might degrade the *Volkswagen* in the German public.<sup>39</sup> In early in 1939 it ordered the press to ignore a ceremony held by Ford's representative office in Munich.<sup>40</sup>

Like Ford, General Motors had first opened a sales office in Berlin in 1925 and briefly assembled cars in Hamburg, then in Berlin.<sup>41</sup> GM's great coup was the acquisition of the Adam Opel Company in 1929, a company which had occupied a strong position in the German market, but suffered from a lack of capital. General Motors did much to maintain the company's image as German by keeping a majority of Germans in the management, including Wilhelm von Opel, a member of the founding dynasty. In 1932, the company's journal proclaimed that Opel cars were "built by German workers with German materials in Germany." 42 Opel profited from Nazi motorization policies as well as from the trend to smaller cars. In the mid-thirties, its market share was above 40 percent, far outstripping leading German companies like Auto Union with a bit over 20 percent and Adler, Daimler-Benz and Ford with less than 10 percent each. 43 Government restrictions on transferring profits to the United States provided the German subsidiary with the money to modernize production. Thus, Opel became the most modern automobile producer in Germany. Responsible for the majority of German car exports, Opel earned foreign currency, which the Nazi regime needed for its armament. After 1935, much of Opel's truck production at its modern factory in Brandenburg went to the German army. In the war, the Opel Blitz became the army's standard truck. With its image as German, its market share at home and abroad, and its role as a military supplier, Opel held a strong position in Nazi Germany. Nazi leaders may not have liked the American company, but they needed it to pursue their policies of motorization and armament.

In the hype around the "people's car" following Hitler's speech in 1934, 44 both Ford and Opel entered the race. Ford advertised its cars extensively as *Volkswagen*. 45 The Cologne model, the price for the cheapest version of which was below 2,000 RM, was given the official name *Volkstyp*. However Ford, which was regarded by the other companies as an outsider, had to give up the term *Volkswagen* in 1935 under pressure from the RDA. 46

The Opel Company, which led the market, was considered the most promising candidate to build a *Volkswagen*. The Rüsselsheim company was extremely strong in the small car class, which it actually presented as *Volkswagen* in 1934 and 1935. <sup>47</sup> The company journal reported on Hitler's visit to the Berlin auto shows on the assumption that the Führer would accept Opel's leading role in the development of the *Volkswagen*. In 1934, for example, it wrote: "The Führer was very interested in our *Volkswagen*, which he inspected in detail." <sup>48</sup> In 1935, the journal quoted him:

"Up to now, you have come nearest to the idea of the *Volkswagen*." Opel itself declared that the P4 model, introduced in November 1935, was a big step toward the *Volkswagen*. It caused a sensation when, in September 1936, Opel lowered the model's price to 1,450 RM. Some time later, the Opel sales manager reported that the P4 had a 61 percent market share in the 1-liter class. This prompted the Minister of Transportation to Hitler's *Reichskanzlei* in the summer of 1936: "Those companies that have manufactured small and cheap cars successfully up to now and have largely written off their plant equipment, such as for instance, Opel and Auto Union (DKW), will possibly be able, by using tried and tested parts, to launch a car to which the label *Volkswagen* could be conferred within 15 months." That was, in fact, just what the Opel managers thought. However, prompted by remarks of Hitler's, the RDA, by then in charge of the project, thus stopped inviting the Opel Company to meetings dealing with the *Volkswagen*.

In 1934, the government was far from agreement about how to achieve Hitler's Volkswagen wishes. Solutions ranged from small cars (Kleinwagen — four-wheelers with four-cylinder engines) to mini-cars (Kleinstwagen—three-wheelers with motorcycle engines). When the government met with the car manufacturers' association (RDA) in April 1934, this central question remained unanswered.<sup>54</sup> Nonetheless, the participants committed themselves to a maximum price of 1,000 RM. Later on, both Hitler and the RDA decided for different reasons for the small car over the mini-car. 55 For Hitler, the four-wheeled small car was appropriate for the cultural level of the German people. He was supported by a memorandum on the design of a German Volkswagen, which the automobile designer Ferdinand Porsche had provided to him.<sup>56</sup> The big German car producers also opted for the small car because they had no experience with mini-cars. The later difficulties with the Volkswagen resulted partially from the fact that the 1,000 RM price tag, which was initially applied to the mini-car, was transferred without discussion to the small car. The RDA and Porsche were aware that this price was impossible, but they did not want to risk conflict with Hitler. Once the price had been made public it could no longer be changed.

There was no agreement within the RDA whether or not to take over the *Volkswagen* project. <sup>57</sup> Most of the industrialists believed economic conditions in Germany to be unfavorable. In the end, however, they accepted the task. What they feared most was that individual companies or the state would achieve the *Volkswagen* beyond their influence. In June 1934, the RDA thus signed an agreement with Ferdinand Porsche on the design of a *Volkswagen*. <sup>58</sup> Porsche, an independent car designer, was not the RDA's favorite, but Hitler held him in very high esteem. By appointing Porsche, the RDA believed it was responding to the Führer's wishes.

Once in control, the RDA applied for trademark protection of the term *Volkswagen* to stop its members' *Volkswagen* ads. <sup>59</sup> In the spring of 1935, the patent office granted protection of the variants *RDA Volksautomobil*, *RDA Deutscher Volkswagen*, and *RDA Deutsches Volksautomobil*. Before this, the RDA demanded that its members declare they would no longer use the term *Volkswagen*. <sup>60</sup> The demand caused much trouble in the automobile industry, but most car manufacturers

finally signed. Several, consented with restrictions, such as Ford, which stipulated that they be able to employ the term again if the *Volkswagen* was built in its works.<sup>61</sup>

By 1936, however, the *Volkswagen* project ran into financial troubles. <sup>62</sup> Porsche had spent 1.75 million RM, but delivered only three prototypes, which had not been fully tested. More important, Porsche himself had no hope of achieving the 1,000 RM price tag, which had become Hitler's promise to the German people. The RDA was neither in a position nor willing to subsidize hundreds of thousands of *Volkswagens*. In this difficult situation, BMW's General Director, Franz Popp, pointed to the *Deutsche Arbeitsfront* (DAF) as a candidate for manufacturing the *Volkswagen*. The DAF was the Nazi "labor front," which included both employees and employers. It was supposed to end class struggle and win the workers for the regime. Using the property of the former trade unions and members' subscriptions, it developed into trust that owned housing and insurance companies, a banking house, and tourism facilities. DAF's leader, Robert Ley, was interested in the *Volkswagen* as a means of strengthening his position within the Nazi leadership. Hitler agreed in early 1937.

The transfer of the *Volkswagen* project from the car manufacturers' association to the Labor Front was a watershed in its history. The car manufacturers had accepted the project reluctantly, because they wanted to maintain control of the *Volkswagen*. They were prepared to produce the car in limited quantities that would not transform the market as a whole. Hitler's ambitious *Volkswagen* plans, however, and the enormous number of cars and low prices involved changed the RDA's strategy. The car manufacturers did not believe that the plans could be achieved and feared for their profits and very existence. Consequently they decided to withdraw from the project, accept the loss of control, and bow to future competition from a Nazi party-owned company.

The transfer to the DAF improved prospects that the car would come in good time. The carmakers knew that they could not compete with a cheap state-subsidized *Volkswagen* and that they had to change their own car programs. Opel cut back production of its successful P4 model and in 1938 replaced it with the modern but more expensive Opel *Kadett*. <sup>63</sup> Another result of the shift to the DAF was that people refrained from buying cars in anticipation of the *Volkswagen*. <sup>64</sup> The Opel management cited this repeatedly in its reports that orders for small and midsize cars had plummeted. <sup>65</sup> Since production could not be expanded anyway due to material shortages, this was actually no big problem for the company. Instead it concentrated on more expensive car models, which yielded greater profits. Car buyers were left with the worst of it. Delivery terms for small and cheap cars became more difficult and used-car prices increased. <sup>66</sup>

#### The Volkswagen Factory

In public, Hitler was considered the *Volkswagen's* initiator since he had ordered the RDA to develop the car. Over time, delays in the project reflected back on him. His remarks at the Berlin automobile shows thus became more and more urgent and aggressive. In 1935, he still showed understanding for long preparation time, but insisted that "the job has to be done and therefore will be done." <sup>67</sup> In 1936, he claimed

that he would bring the project "to a successful conclusion ... with ruthless determination." <sup>68</sup> In 1937, when the project was in a deep crisis, he promised that production should start as soon as possible. <sup>69</sup> He rejected industrial positions to create the *Volkswagen* by market competition: "There can only be *one Volkswagen* in Germany, not ten." When he proclaimed that "so-called free trade and industry will either be able to solve these problems or it won't be able to continue to exist as free," <sup>70</sup> he was referring to the production of substitute materials, but he could just as well have been discussing the *Volkswagen*.

The German public thus naturally regarded the *Volkswagen* as one of Hitler's "hobbies and pet ideas." The idea was to have occurred to him on a trip in the 1920s. When his car passed a cyclist and his partner during a rainstorm, he had decided to build a car for the people. Porsche himself credited decisive design ideas to Hitler. The obsequious flatteries reached their climax in the book, *The Automobile Conquers the World* by a leading official in Goebbels' Ministry of Propaganda, Wilfrid Bade: "Later works on the history of the automobile will also, like this one, mention three names above all others: Karl Benz, Gottlieb Daimler, and Adolf Hitler!"

Thus bound to the *Volkswagen* project, Hitler had no alternative but to agree to transfer the project to the DAF and do his best to achieve it. In May 1937, DAF founded the *Volkswagen* Company (*Gesellschaft zur Vorbereitung des Deutschen Volkswagens*). Bodo Lafferentz, a DAF official; Ferdinand Porsche; and Jakob Werlin, Hitler's personal advisor on automobiles and a Daimler-Benz manager, became the leading managers. By that summer, the company elected to locate the factory in modern Wolfsburg, and Hitler laid the cornerstone personally in May 1938. Due to the shortage of construction workers and building materials, however, the first section was not yet finished when Hitler attacked Poland. When it was completed provisionally during the war, the factory was integrated into the armament production and manufactured aircraft parts, bombs, ovens, and a military version of the *Volkswagen*, with a large slave-labor workforce. Since management regarded military production as transitory and continued preparations for civilian car production, the plant's technological potential and capacity was never effectively utilized.

In his plans and visions of mass motorization and mass consumption, Hitler's model was the United States. He attributed America's prosperity to that country's vast living space (*Lebensraum*) with its enormous resources and a huge domestic market, which Germans still had to win. <sup>75</sup> This, he claimed, made possible "production quotas and therewith production facilities" that resulted in tremendously low prices. To be sure, the Nazi view of the United States was ambivalent. <sup>76</sup> Nazi propaganda and Hitler's private views teemed with resentments derived from a blend of old stereotypes about American cultural inferiority with specifically Nazi racist hatreds. But when the German technicians were planning Hitler's project of mass motorization in 1937, Ford's Model T and his company's modern factories served as the unacknowledged model. <sup>77</sup> The *Volkswagen* imitated Ford's earlier one-model policy. In the beginning, *Volkwagens* could only be ordered in a single color, a dark bluish gray. In the autumn of 1936 and in the summer of 1937, Ferdinand Porsche

and other *Volkswagen* managers traveled to the United States and visited automobile factories, among them River Rouge. They were deeply impressed by American manufacturing technology. During their second trip, they hired away a good dozen engineers and skilled workers, mainly from Ford. Other leading personnel came from General Motors' Opel Company. It could be no surprise that the *Volkswagen* works bore a very strong resemblance to the most modern American car factories.

Volkswagen managers and Nazi leaders, of course, did not reveal the Volkswagen's American roots to the public. Nevertheless, the United States influenced German planning and propaganda as the Nazis attempted to surpass American production figures. Opel sold a maximum of 40,000 of its successful models per annum. 78 That was what the RDA expected from the Volkswagen. Porsche, however, imagined building 300,000 *Volkswagen* each year already in 1934.<sup>79</sup> Hitler went far beyond this. As a time when approximately one million cars were operating in Germany, he spoke of three to seven million that would exist in future. 80 The Volkswagen alone, was to bring millions of new buyers. 81 The Volkswagen company oriented its planning toward the Führer's predictions. Its management intended to construct a production site in three sections each with a capacity of nearly 500,000 cars per annum. 82 The propaganda, however, emphasized the figure of 1.5 million cars, which was greater than Ford's output. DAF-leader Robert Ley boasted that the Volkswagen plant would be "not only the largest automobile factory, but the largest factory in the world of any kind."83 One report on the Volkswagenwerk's cornerstone ceremony assembled a fair number of superlatives: Germany would have the world's best highways, be the world's leading country in car racing, and construct the world's largest and most modern car plant. "A plan of truly gigantic proportions is thus made reality on a scale unprecedented in the history of human development."84

The question remained who would be able to buy the Führer's *Volkswagen*. In 1937, the German Bureau of Statistics estimated that 80 percent of existing cars were used for trade and professional purposes. Only 1.1 percent of car buyers were workers and 13.7 percent employees. <sup>85</sup> In 1936, the Institute of Business Research found that the total car market could increase to 1.6 million. <sup>86</sup> Considered irrelevant, workers were not even mentioned in the institute's report. Nonetheless, Nazi leaders insisted that the *Volkswagen* was for the broad masses and workers in particular. <sup>87</sup>

Price and operating expenses were key factors for the future of the *Volkswagen*. Hitler had promised a price below 1,000 RM. After deciding on the design, testing the prototypes, and planning production, it became clear that the car could not be manufactured for this price. Nevertheless, Ley announced the *Volkswagen* in the summer of 1938 at a price of 990 RM. 88 One commentator remarked that this was \$200 below the price of the cheapest Ford car. 89 200 RM had to be added for an obligatory two-year insurance policy and car transfer fees. Still the price was a sensation. The problem for the future was that any such price would require enormous DAF or state subsidies.

In August 1938, the DAF started a savings system for the *Volkswagen*. 90 With weekly payments of 5 RM over a period of four and a half years, one could acquire the car. The project's results were disappointing. 91 By the beginning of the war,

270,000 people were participating in the savings plan, 330,000 by 1945. That was less than the first section of the *Volkswagenwerk* could produce in a single year. Among savers, more than 40 percent came from the commercial establishment. They intended to increase their car fleets with the *Volkswagen*. 29 percent were employees, 17 percent public servants, and only 5 percent workers. Only 5.3 percent were families with four or more children, which the Nazis regarded as the minimum number for a complete family. <sup>92</sup> It was evident that people were willing to buy *Volkswagens*, but could not afford to do so.

The Nazis presented the Volkswagen as a car for free time and leisure. A DAF journal explained that Hitler would now be able "to satisfy the Germans' yearning for foreign parts, which is demonstrated in history by their urge to travel and discover."93 Pictures of the Volkswagen showed it in attractive vacation surroundings.<sup>94</sup> Happy leisure and vacation travelers gazed at the landscape or greeted people by the roadside. At the cornerstone ceremony, Hitler gave the Volkswagen the official name KdF-Wagen. KdF (Kraft durch Freude = Strength through Joy) was the DAF's leisure time organization. The name symbolized that the Volkswagen was interpreted primarily as a pleasure car. Bodo Lafferentz, Volkswagen manager and leader of the KdF, expected the Volkswagen to revolutionize KdF's free time and vacation services. 95 More and more vacationers would come with their own cars rather than on special KdF trains. Therefore, he concluded, KdF facilities should be equipped with parking lots and garages. KdF officers sought to develop more kinds of individualized travel. 96 The KdF set about to prepare maps and lodging lists for the car travelers. The Autobahnen were to develop into pleasure and sightseeing roads with KdF-owned roadhouses and lodging.97

## The Volkswagen's Failure and Its Causes

If the *Volkswagen* plans had succeeded, the character of the automobile in Germany would have completely transformed. The *Volkswagen* was supposed to shift the German car from the business to the private sector, from an investment to a consumer good. The United States was not or was seldom mentioned in the Nazi vision of free time and vacations. But it is obvious that there were similarities with the use of the car in America. While Nazi propaganda successfully produced consumer interpretations and symbols of the private car, Nazi policy failed to produce a sound economic basis for the *Volkswagen*.

Hitler's focus was on the *Volkswagen* price. He believed that by subsidizing it to decrease the price to 990 RM, the car would be within the reach of millions of buyers. This conflicted with the findings of many experts, who explained that the crucial point was not the initial cost but operating expenses. <sup>98</sup> Estimates were that three quarters of the expense of small cars consisted of operating expenses, and only one quarter of depreciation. <sup>99</sup> This meant that total costs would not change much with even a considerable decrease in the purchase price, as in the case of the *Volkswagen*.

The greatest proportion of the operating expense was for gasoline and oil, followed by the cost of the garage, and finally in equal proportion for tires, insurance, and repairs. <sup>100</sup> During the Nazi period, all costs decreased with the exception of gas,

oil, and tires, which increased substantially due to the Nazi autarky policy, which placed high duties on oil, gasoline, and rubber and used the money to construct a synthetic gasoline and rubber industry. <sup>101</sup> As one commentator put it: "The level of the gas price ... is the crucial factor in determining whether important and comprehensive progress in motorization will be possible in Germany." <sup>102</sup> Nazi policy did not heed the demands for price reductions, but mandated further increases at the end of 1936, around 60 percent of which went to the state. <sup>103</sup> This demonstrates Nazi policy deemed it more important to prepare for war through autarky than to supply goods for the people. For a long time, the resulting difficulties for the *Volkswagen* project were ignored or downplayed. The KdF discovered the importance of the *Volkswagen*'s operating costs only in 1938 and tried to lower them by arranging special rates with insurance companies and repair-shops, and building cheap garages (*Volksgaragen*). At the beginning of the war, however, these questions were far from being settled. Gas prices could not be challenged in the context of Nazi war policy.

The story of gas prices demonstrates contradictions within Nazi policy. Nazis deluded themselves that they could pursue autarky and armament and as well ambitious projects like the *Volkswagen*. However, economic resources in the form of capital, labor, and materials did not suffice to achieve all political goals. The Nazi economy was even less able to stimulate consumption than production. To finance armament, wages were kept low. Workers' incomes permitted them to purchase a motorcycle but not a car. In 1938, only 1.3 percent of car buyers but 48.7 percent of cycle buyers were workers. <sup>104</sup> In the 1930s, cycle manufacturers offered *Volks*-motorcycles (*Volksmotorräder*). <sup>105</sup> Commentators argued that only the motorcycle could provide for the complete motorization of the German people. <sup>106</sup> Nazi leaders ignored these voices. The motorcycle did not meet their standards of what was appropriate to the cultural level of the German *Volk*; and motorcycles did not fit their population policies.

During the war, allied airplanes dispersed leaflets claiming that savings for Volkswagen were being used for armament. <sup>107</sup> In reality, the savings were not drawn upon. Nazi leaders and Volkswagen managers never stopped envisioning the car's success after a victorious war. Victory would supply Germany with cheap foreign labor and unlimited resources, it was argued. This showed that the planning before the war had been unrealistic. Hitler continued to speak of production figures of 1 to 1.5 million Volkswagen per year, but now referred to a "European Volkswagen." 108 His Minister of Armament, Albert Speer, later said that Hitler planned to manufacture only the Volkswagen and no other cars after the war. 109 In his speeches at the Berlin auto exhibitions, Hitler had declared that Germany was able to motorize just as the United States had done. During the war, commentators gave a different interpretation of America's motorization. It supposedly resulted from the people's high income and the country's vast resources alone. Similarly, the war would provide Germany's motorization and the Volkswagen with a new basis: "a vast homogeneous continental economic space that includes Europe, Africa, and the connecting areas of the Near East."110

#### Conclusion

Consumer societies in the more affluent countries, in particular the United States and Ford's Model T, provided the material model for the Nazi conception for the *Volkswagen* and other people's products. Nazi policy, however, had to take various other, to some extent self-made, conditions into account. The German people's income was very low following the Depression. Hitler refused to increase wages and instead used productivity gains for autarky and armament. His hopes concentrated on reducing prices through extreme rationalization—a kind of miracle weapon based on faith in the Führer. Furthermore, the people's products and other consumer goods were to have been manufactured by industries that did not seek profits. Nazi demands, however, were so extensive that companies feared that they would fail and refused to cooperate. As a result, German car manufacturers, including the American-owned companies, withdrew from the *Volkswagen* project. The shift of the *Volkswagen* project to DAF did not change the essential problems of production costs and affordability for consumers. It just concealed them under a veil of propaganda.

The concept of people's products remained a blend of propaganda and illusionary politics. In order to win the support of the people, the Nazis propagated consumer goods that were much sought after. They symbolized what the regime would give the people in a future Nazi society. In his illusion, Hitler actually believed that Germany could be transformed into a consumer society under the conditions of autarky and armament—and in contravention to Ford's formula of mass production, low prices, and high wages. It was not until the Federal Republic of Germany that the consumer society became a reality in the economic context of an open and free world market. 112

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- <sup>1</sup> "Der Vater des Volkswagens," in: Hans Bohrmann and Gabriele Toepser-Ziegert, ed., NS-Presseanweisungen der Vorkriegszeit. Edition und Dokumentation, 7 vols. (Munich, 1984-2001), vol. 4, 469.
- <sup>2</sup> "Die Ford-Formula der Massenherstellung, der niedrigen Preise und hohen Löhne schuf den heute gültigen Begriff 'Amerika'," in Bohrmann/Toepser-Ziegert, NS-Presseanweisungen, vol. 4, 469.
- <sup>3</sup> Unternehmensarchiv Volkswagen (UVA), VDA-Depositum 73/27/1, Ford, 30 April and 25 May 1936.
- <sup>4</sup> "Eine derartige Darstellung ist völlig unmöglich. ... kann als Schöpfer des deutschen Volkswagens in späterer Zeit nur Adolf Hitler genannt werden." Bohrmann/Toepser-Ziegert, NS-Presseanweisungen, vol. 4, 468.
- <sup>5</sup> The literature on American consumer society is massive, starting with early classics like Hazel Kyrk, A Theory of Consumption (Getting and Spending: The Consumer's Dilemma) (Boston/New York, 1923) and David M. Potter, People of Plenty: Economic Abundance and

the American Character (Chicago, 1954) to more recently: Susan Strasser, Satisfaction Guaranteed: The Making of the American Mass Market (New York, 1989); William Leach, Land of Desire: Merchants, Power and the Rise of a New American Culture (New York, 1993); David E.Nye, Consuming Power. A Social History of American Energies (Cambridge/Massachusetts/London, 1998); Gary Cross, An All-Consuming Century: Why Commercialism Won in Modern America (New York, 2000); Wolfgang König, Geschichte der Konsumgesellschaft (Stuttgart, 2000). Proponents for an earlier use of the concept go back to Joan Thirsk, Economic Policy and Projects. The Development of a Consumer Society in Early Modern England (Oxford, 1978) and Grant McCracken, Culture and Consumption. New Approaches to the Symbolic Character of Consumer Goods and Activities (Bloomington/Indianapolis, 1988); and recently Neil McKendrick/John Brewer/J. H. Plump, The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England (London, 1998).

<sup>6</sup> Classic works on the history of mass production are: Alfred D. Chandler Jr., The Visible Hand. The Managerial Revolution in American Business (Cambridge, MA/London, 1977); David A. Hounshell, From the American System to Mass Production, 1800-1932. The Development of Manufacturing Technology in the United States (Baltimore/London, <sup>3</sup>1987); Michael J. Piore/Charles F. Sabel, The Second Industrial Divide: Possibilities for Prosperity (New York, 1984); Volker Benad-Wagenhoff, Industrieller Maschinenbau im 19. Jahrhundert. Werkstattpraxis und Entwicklung spanabhebender Werkzeugmaschinen im deutschen Maschinenbau 1870-1914 (Stuttgart, 1993); Philip Scranton, Endless Novelty: Specialty Production and American Industrialization 1865-1925 (Princeton/New York, 1997). A helpful reader: Steven Tolliday, ed., The Rise and Fall of Mass Production (Cheltenham/Northampton, 1998).

<sup>7</sup>Henry Ford, "Mass Production," *Encyclopaedia Britannica* 13<sup>th</sup> edition, vol. 2 (1926): 821. 
<sup>8</sup> The older literature is superseded by the monumental work by Hans Mommsen and Manfred Grieger, *Das Volkswagenwerk und seine Arbeiter im Dritten Reich* (Düsseldorf, 1996). This article owes much to this book, but goes beyond it by treating the *Volkswagen* more in the context of the German automobile industry and culture.

<sup>9</sup>The best overviews are: Heidrun Edelmann, *Vom Luxusgut zum Gebrauchsgegenstand: Die Geschichte der Verbreitung von Personenkraftwagen in Deutschland* (Schriftenreihe des Verbandes der Automobilindustrie e.V. [VDA] 60) (Frankfurt am Main, 1989); Reiner Flik, *Von Ford lernen? Automobilbau und Motorisierung in Deutschland bis 1933* (Köln, 2001). <sup>10</sup> The best source on the history of motorcycles in Germany to date is the unpublished master's thesis by Frank Steinbeck, "Die Motorisierung des Straßenverkehrs im Deutschen Reich 1918 bis 1939 unter besonderer Berücksichtigung des Motorrades," M.A. Thesis, TU Berlin, 2001.

- 11 Flik, Von Ford lernen?, 280.
- <sup>12</sup> Die Deutsche Volkswirtschaft, 5 (1936): 182; Kraftfahrzeug. Handel und Bewirtschaftung (1939): 543.
- <sup>13</sup> "Das deutsche Volk der weniger zahlungsfähigen Schichten hat eben, weil es vier Räder nicht bezahlen kann, sich auf die zwei Räder geworfen, um motorisiert zu sein." *Die Deutsche Volkswirtschaft* 5 (1936): 182.
- <sup>14</sup> Hellmuth Wolff, *Die Fahrrad-Wirtschaft* (Schriften des Seminars für Verkehrswesen an der Martin Luther-Universität Halle-Wittenberg 15) (Halle, 1939), 10.

- <sup>15</sup> Herbert Weinberger, *Der Inlandsmarkt der deutschen Automobilindustrie*, Ph.D. Diss. (Munich, 1936), 16-17; *Die Deutsche Volkswirtschaft*, 6 (1937): 1030-31.
- <sup>16</sup> Anette Gudjons, Die Entwicklung des "Volksautomobils" von 1904 bis 1945 unter besonderer Berücksichtigung des 'Volkswagens': Ein Beitrag zu Problemen der Sozial-, Wirtschafts- und Technikgeschichte des Automobils (Diss. Hannover, 1988); Bernd Wiersch, Die Vorbereitung des Volkswagens (Diss. Hannover, 1974); Heidrun Edelmann, "Der Traum vom 'Volkswagen'," in Geschichte der Zukunft des Verkehrs: Verkehrskonzepte von der Frühen Neuzeit bis zum 21. Jahrhundert (Deutsches Museum. Beiträge zur Historischen Verkehrsforschung 1), ed. Hans-Liudger Dienel and Helmuth Trischler (Frankfurt and New York, 1997), 280-88.
- <sup>17</sup> L(ouis) Betz, Das Volksauto: Rettung oder Untergang der deutschen Automobilindustrie? (Automobilia. Grundlegende Schriften über Automobilbau und Automobilwesen 1) (Stuttgart, 1931).
- <sup>18</sup> "... längst erwünschten wohlfeilen Volkswagen." Edelmann, Vom Luxusgut, 118.
- <sup>19</sup> "Aus dem Luxusfahrzeug von einst ist das nüchterne Verkehrsmittel von heute geworden." Kraftfahrt tut not! Zwei Reden zur Eröffnung der Internationalen Automobil- und Motorrad-Ausstellung Berlin am 11.2.1933 gehalten v. R. Allmers und A. Hitler, ed. Reichsverband der Automobilindustrie (Berlin, 1933), 8.
- <sup>20</sup> "Ich liebe den Kraftwagen über alles, denn er hat mir Deutschland erschlossen!" J(akob) Werlin, "Fünf Jahre Motorisierung im nationalsozialistischen Deutschland: Ein Rückblick und Ausblick," *Der Vierjahresplan*, 2 (1938): 79-80.
- <sup>21</sup> "... Motorisierungsgedanke als Symbol der nationalsozialistischen revolutionierenden Zukunftsentwicklung ..." Jakob Werlin, "Acht Jahre Motorisierung acht Jahre Vorsprung," *Der Vierjahresplan*, 5 (1941): 315-17, 316.
- <sup>22</sup>"...dem deutschen Volke wieder diejenige Stellung in der Welt zu schaffen, auf die es nach Rasse, Charakter und Geschichte einen unabdingbaren Anspruch hat." J(akob) Werlin, "Forderung des Führers: Motorisierung," *Die Deutsche Volkswirtschaft*, 10 (1941): 1228-32, 1228.
- <sup>23</sup> Schrittmacher der Wirtschaft: Vier Reden zur Internationalen Automobil- und Motorrad-Ausstellung Berlin 1936 (Berlin, 1936), 13-14; Das Kraftfahrzeug: Verkehrsmittel des ganzen Volkes. Vier Reden zur Internationalen Automobil- und Motorrad-Ausstellung Berlin 1938 (Berlin, 1938), 19; Kräfte sammeln, Kräfte lenken, Kräfte sparen. Drei Reden zur Internationalen Automobil- und Motorrad-Ausstellung, ed. Reichsverband der Automobilindustrie (Berlin, 1939), 15.
- <sup>24</sup> "Das deutsche Volk hat genau dasselbe Bedürfnis, sich des Kraftwagens zu bedienen, wie, sagen wir, das amerikanische." *Schrittmacher der Wirtschaft*, 15.
- <sup>25</sup> See note 16 above.
- <sup>26</sup> "Geburtsstunde des europäischen Volkswagens," Allgemeine Automobil-Zeitung, 14 January 1933, 4.
- <sup>27</sup> Edelmann, Vom Luxusgut, 157; Betz, Das Volksauto, 75; Mitteilungen des Reichsverbandes des Kraftfahrzeughandels und –gewerbes E.V. 1933: 137.
- <sup>28</sup> On the Volksempfänger and its context in NS radio politics: Heinz Pohle, Der Rundfunk als Instrument der Politik: Zur Geschichte des deutschen Rundfunks von 1923/38 (Hamburg, 1955); Ansgar Diller, Rundfunkpolitik im Dritten Reich (Munich, 1980); Inge Marßolek and

Adelheid von Saldern, eds., Radiozeiten: Herrschaft, Alltag, Gesellschaft (1924-1960) (Potsdam, 1999).

- <sup>29</sup> Edelmann, "Der Traum vom 'Volkswagen'," 284; Kraftverkehrs-Wirtschaft, 25 January 1934.
- <sup>30</sup> Mommsen/Grieger, Das Volkswagenwerk, 56-60.
- <sup>31</sup> Vollgas voraus! Drei Reden, gehalten aus Anlaß der Internationalen Automobil- und Motorrad-Ausstellung 1934, ed., Reichsverband der Automobilindustrie (Berlin, 1934), 7-13.
- <sup>32</sup> Allgemeine Automobil-Zeitung 35 (1934), #14, 13, 17, 3; ibid. 36 (1935), #7, 13; Kraftverkehrs-Wirtschaft, 10 and 17 May, and 21 June 1934; Mitteilungen des Reichsverbandes des Kraftfahrzeughandels und –gewerbes E.V. 1934: 650, 770; W. E. Fauner, "Zur Frage des Volkswagens," Zeitschrift des Vereines Deutscher Ingenieure, 78 (1934): 1243-45; Erwin Gottschalk, "Volksauto und Autobahn," Die Autobahn: 15 July 1934, 522-23; Bundesarchiv Berlin (BA) R 6/8000, 305-6; R 43 II/753, 15-25, 36 and 93; Heiber, Akten der Parteikanzlei, #124 01143-4; Motor und Sport, 11/12 (1934): 7; 11/24 (1934): 21; Der deutsche Volkswirt 8 (1933-34): 1228.
- <sup>33</sup> Motor und Sport, 11/23 (1934): 23-24: Allgemeine Automobil-Zeitung, 35/29 (1934): 8-9, and 35/33: 13-14 respectively.
- <sup>34</sup>On Ford in Germany: Simon Reich, *The Fruits of Fascism: Postwar Prosperity in Historical Perspective* (Cornell Studies in Political Economy; Ithaca/London, 1990); Hanns-Peter Rosellen, "...und trotzdem vorwärts": Die dramatische Entwicklung von Ford in Deutschland 1903 bis 1945 (Frankfurt, 1986); Stephan H. Lindner, Das Reichskommissariat für die Behandlung feindlichen Vermögens im Zweiten Weltkrieg: Eine Studie zur Verwaltungs- und Wirtschaftsgeschichte des nationalsozialistischen Deutschlands (Stuttgart, 1991): 121-22; Flik, Von Ford lernen?, 169-82, 187-90. According to its Inventory of Contents transmitted, the Ford Motor Company Archives has no important material on Ford and the Volkswagen.

  <sup>35</sup> Cf. Paul Roggatz, "Die Automobilisierung: Ihre Ursachen am Beispiel der USA und ihre Auswirkungen auf den Raumbedarf der Wohnstrassen," Der soziale Wohnungsbau in Deutschland, 2 (1942): 463-74 and 489-501.
- <sup>36</sup> Philipp Gassert, Amerika im Dritten Reich: Ideologie, Propaganda und Volksmeinung 1933-1945 (Stuttgart, 1997); Rüdiger Hachtmann, "Die Begründer der amerikanischen Technik sind fast lauter schwäbisch-alemannische Menschen": Nazi-Deutschland, der Blick auf die USA und die 'Amerikanisierung' der industriellen Produktionsstrukturen im 'Dritten Reich'," in Amerikanisierung: Traum und Alptraum im Deutschland des 20. Jahrhunderts (Transatlantische Historische Studien. Veröffentlichungen des Deutschen Historischen Instituts Washington, DC 6), ed. Alf Lüdtke, Inge Marßolek, and Adelheid von Saldern (Stuttgart, 1996), 37-66; Albert Lee, Henry Ford and the Jews (New York, 1980). Heinrich Himmler, leader of the SS, also admired Henry Ford. See Michael Thad Allen, The Business of Genocide: The SS, Slave Labor, and the Concentration Camps (London, 2002), 14.
- <sup>37</sup> Das Archiv 52 (1938): 522. Reich, The Fruits of Fascism, 116 and Tilman Harlander, Zwischen Heimstätte und Wohnmaschine: Wohnungsbau und Wohnungspolitik in der Zeit des Nationalsozialismus (Basel, 1995): 130, falsely, say that Ford received the decoration in Berlin. Lee, Henry Ford, 113, falsely, states that this was in 1933.
- <sup>38</sup> H(elmut) Heiber, comp., Akten der Parteikanzlei der NSDAP. Rekonstruktion eines verlorengegangenen Bestandes. Sammlung der in anderen Provenienzen überlieferten

Korrespondenzen, Niederschriften von Besprechungen usw. mit dem Stellvertreter des Führers und seinem Stab bez. d. Partei-Kanzlei, ihren Ämtern, Referaten u. Unterabteilungen sowie mit Heß und Bormann persönlich, ed., Institut für Zeitgeschichte. Part I, 3 vols., Regesten und Register, Part II, 2 vols., Microfiches (Vienna/Munich et al. 1983-1985), #117 03911.

- <sup>39</sup> Bohrmann/Toepser-Ziegert, ed., NS-Presseanweisungen, vol. 6, 787-8 and 957. <sup>40</sup> Ibid., vol. 7, 29.
- <sup>41</sup> On General Motors' Opel Company: Reich, *The Fruits of Fascism*; Lindner, *Das Reichskommissariat*, 122-24; Flik, *Von Ford lernen*?, 172-73, 180-87; Hans-Jürgen Schneider, *Autos und Technik: 125 Jahre Opel* (Cologne, 1987); Günter Neliba, *Die Opel-Werke im Konzern von General Motors (1929-1948) in Rüsselsheim und Brandenburg: Produktion für Aufrüstung und Krieg ab 1935 unter nationalsozialistischer Herrschaft (Frankfurt am Main, 2000). General Motors did not answer my requests for information on GM and the <i>Volkswagen*.
- <sup>42</sup> "... von deutschen Arbeitern aus deutschem Material in Deutschland hergestellt ...." *Der Opel-Geist*, 3/7 (1932): 3.
- <sup>43</sup> Figures in Rundschau Technischer Arbeit, 21 October 1936; Die Deutsche Volkswirtschaft 5 (1936): 677; Wilhelm Dohrn, "Der deutsche Personenkraftwagenmarkt nach der Wirtschaftskrisis," Weltwirtschaftliches Archiv, 44 (1936): 613-32, 620; Tatsachen und Zahlen 1938: 40.
- 44 Motor und Sport, 11/24 (1934): 21.
- <sup>45</sup> Rosellen,"... und trotzdem vorwärts," 93 and 107; Edelmann, "Der Traum vom 'Volkswagen'," 284; UVW, VDA-Depositum 73/27/1, Ford.
- <sup>46</sup> UVW, VDA-Depositum 73/26: 21 and 22 June, 2 July 1934; 73/27/1, Ford, 29 May 1934.
- <sup>47</sup> Der Opel-Geist 4 (1933): no. 2, 4; 5 (1934): no. 1, 3; Stadtarchiv Rüsselsheim (StA Rüsselsheim) (Municipal Archives Rüsselsheim), Opel Collection I, 3.3.3.
- <sup>48</sup> "Großes Interesse bei dem Führer fand unser Volkswagen, den er genauestens besichtigte." *Opel-Werksgemeinschaft*, 5 (1934): no. 4, 2.
- <sup>49</sup> "Sie sind der Idee des Volkswagens bisher am nächsten gekommen." *Der Opel-Kamerad*, 7/2 (1936): 2.
- <sup>50</sup> Stadtarchiv (StA) Rüsselsheim, Opel Collection I, 14.1.
- <sup>51</sup> "Diejenigen Firmen, welche bisher kleine und billige Wagentypen mit gutem Erfolge hergestellt haben und über weitgehend abgeschriebene Fabrikationseinrichtungen verfügen, also etwa Opel und Auto-Union (DKW), würden möglicherweise unter Verwendung bewährter Aggregate in 15 Monaten in der Lage sein, einen Wagen herauszubringen, dem das Prädikat 'Volkswagen' zugebilligt werden könnte." BA, R 43 II/ 753, 41-42.
- <sup>52</sup> Paul Kluke, "Hitler und das Volkswagenprojekt," Vierteljahrshefte für Zeitgeschichte, 8 (1960): 341-83,355; Mommsen/Grieger, Das Volkswagenwerk, 100; Hans Pohl, Stephanie Habeth, and Beate Brüninghaus, eds., Die Daimler-Benz AG in den Jahren 1933 bis 1945: Eine Dokumentation (Stuttgart, 1986): 52.
- <sup>53</sup> Mommsen/Grieger, Das Volkswagenwerk, 107.
- <sup>54</sup> DaimlerChrysler Konzernarchiv (DCK), Kissel files, 11.15 "Aktenvermerk über die Besprechung am 11. April 1934, betreffend Schaffung eines Volkswagens"; cf. Mommsen/Grieger, Das Volkswagenwerk, 56-60.

55 BA, R 43 II/753, 6; DCK, Kissel files, 11.15, 4 April 1934, Allmers, "Gedanken zum Problem Volkswagen"; cf. Mommsen/Grieger, Das Volkswagenwerk, 69.

- <sup>56</sup> "Exposé betreffend den Bau des deutschen Volkswagens": Wiersch, *Die Vorbereitung*, 15-17; Mommsen/Grieger, *Das Volkswagenwerk*, 76-77.
- <sup>57</sup> DCK, Kissel files, 11.15, 4 April 1934, Allmers, "Gedanken zum Problem Volkswagen"; Karl Roth and Michael Schmid, Die Daimler-Benz AG 1916-1948, Schlüsseldokumente zur Konzerngeschichte (Nördlingen, 1987), 153-54; Mommsen/Grieger, Das Volkswagenwerk, 70.
- <sup>58</sup> Mommsen/Grieger, Das Volkswagenwerk, 78-84.
- <sup>59</sup> UVW, VDA-Depositum 73/26: 11 December 1934, 3 April 1935; cf. Edelmann, "Der Traum vom 'Volkswagen'," 285.
- 60 UVW, VDA-Depositum 73/26: 13 October 1934; 73/27/1.
- 61 Ibid., 73/27/1: Ford, 20 November 1934.
- 62 Mommsen/Grieger, Das Volkswagenwerk, 83-93.
- 63 P4 production figures in: StA Rüsselsheim, Opel Collection I, 4; cf. Der Opel-Kamerad 9 (1938): 7, 12; Johann Heinrich v. Brunn, Ein Mann macht Auto-Geschichte: Der Lebensweg des Robert Allmers (Stuttgart, 1972), 257, 266; Die Deutsche Volkswirtschaft 7 (1938): 619.
- <sup>64</sup> Die Deutsche Volkswirtschaft 4 (1935): 82; Der deutsche Volkswirt 13 (1938-39): 759.
- <sup>65</sup> Hessisches Wirtschaftsarchiv (HWA), 112/548 "Monthly Reports ...," in particular May 1937, June, August, and September 1938.
- <sup>66</sup> Die Deutsche Volkswirtschaft 8 (1939): 530; Kraftfahrzeug. Handel und Bewirtschaftung (1940): 417.
- <sup>67</sup> "die Aufgabe muß gelöst werden und daher wird sie auch gelöst." Wille wirkt Wunder. Drei Reden zur Internationalen Automobil- und Motorrad-Ausstellung Berlin 1935 (Berlin, 1935), 14.
- <sup>68</sup>"...mitrücksichtsloser Entschlossenheit ... zum erfolgreichen Abschluß ...." In: *Schrittmacher der Wirtschaft*, 16.
- <sup>69</sup> "Es kann ... in Deutschland nur einen Volkswagen geben und nicht zehn." In: Kraft des Motors. Kraft des Volkes. Sechs Reden zur Internationalen Automobil- und Motorrad-Ausstellung Berlin 1937 (Berlin, 1937), 16.
- <sup>70</sup> "Entweder die sogenannte freie Wirtschaft ist fähig, diese Probleme zu lösen, oder sie ist nicht fähig, als freie Wirtschaft weiterzubestehen." Ibid., 20.
- <sup>71</sup> "Steckenpferde und Lieblingsideen." Klaus Behnken, ed., *Deutschland-Berichte der Sozialdemokratischen Partei Deutschlands (Sopade) 1934-1940*, 7 vols. (Salzhausen/Frankfurt am Main, 1980), 1939: 488.
- <sup>72</sup> For instance: *Motor-Schau* 2 (1938): 494; J(akob) Werlin, "Zur Grundsteinlegung der deutschen Volkswagenfabrik" *Völkischer Beobachter*, North German edition, 26 May 1938: 1.
- <sup>73</sup> Ferdinand Porsche, "Der KdF-Wagen als konstruktive Aufgabe." *Völkischer Beobachter*, 17 February 1939, 1.
- <sup>74</sup> "Auch spätere Werke werden wie dieses in der Geschichte des Automobils drei Namen vor allen anderen nennen: Karl Benz, Gottlieb Daimler, Adolf Hitler!" Wilfrid Bade, *Das Auto erobert die Welt: Biographie des Kraftwagens* (Berlin, 1938), 362.
- <sup>75</sup> Gassert, Amerika im Dritten Reich, 91-92; Rainer Zitelmann, Hitler: Selbstverständnis eines Revolutionärs (Hamburg et al. 1987), 321-24; Hachtmann, "Die Begründer."

- <sup>76</sup>Gassert, "Amerika im Dritten Reich", In: Dan Diner, Verkehrte Welten: Antiamerikanismus in Deutschland: Ein historischer Essay (Frankfurt am Main, 1993), 89-116; Hans Dieter Schäfer, Das gespaltene Bewusstsein: Deutsche Kultur und Lebenswirklichkeit 1933-1945 (Munich, Wien, <sup>2</sup>1982), 114-37; Hans Dieter Schäfer, "Amerikanismus im Dritten Reich," Nationalsozialismus und Modernisierung, Michael Prinz and Rainer Zitelmann, eds. (Darmstadt, 1991), 199-215; James V. Compton, Hitler und die USA: Die Amerikapolitik des Dritten Reiches und die Ursprünge des zweiten Weltkrieges (Oldenburg, Hamburg, 1968), 9-27.
- Mommsen/Grieger, Das Volkswagenwerk, 167-71, 250-66; Manfred Grieger, "River Rouge am Mittellandkanal. Das Volkswagenwerk während des Nationalsozialismus." In: Zukunft aus Amerika: Fordismus in der Zwischenkriegszeit: Siedlung—Stadt—Raum, ed., Stiftung Bauhaus Dessau und der Rheinisch-Westfälischen Technischen Hochschule Aachen (Dessau, 1995), 163-73. At the Society for the History of Technology's conference in Munich in 2000, Karl E. Ludvigsen delivered a paper with the title Considerations in the Creation and Survival of the VW Works at Wolfsburg. He argued, without convincing evidence, however, that Ford's English factory in Dagenham was more the model for the Volkswagen Works than River Rouge. Cf. on the American car plants: Lindy Biggs, The Rational Factory: Architecture, Technology, and Work in America's Age of Mass Production (Studies in Industry and Society, 11; Baltimore, London, 1996).
- <sup>78</sup> StA Rüsselsheim, Opel Collection I, Opel Production 1929-1944.
- <sup>79</sup> Mommsen/Grieger, Das Volkswagenwerk, 81-82.
- <sup>80</sup> Schrittmacher der Wirtschaft, 15; Max Domarus, ed., Hitler: Reden und Proklamationen 1932-1945, Kommentiert von einem deutschen Zeitgenossen, 2 vols., (Wiesbaden, 1973 [first published 1962-63]), 867.
- 81 Kraftfahrzeug. Handel und Bewirtschaftung 1939, 18.
- 82 Mommsen/Grieger, *Das Volkswagenwerk*, 166, 173, 190, 251-52.
- 83 "... nicht nur die größte Automobilfabrik, sondern die größte Fabrik der Welt überhaupt ..." Das Archiv, 53 (1938): 625.
- <sup>84</sup> "Damit ist eine Planung wahrhaft gigantischen Ausmaßes in die Tat umgesetzt worden, wie sie in der Entwicklungsgeschichte der Menschheit bisher ohne Beispiel ist." *Deutsches Nachrichtenbüro*, second morning edition: 27 May 1938.
- 85 Die Deutsche Volkswirtschaft 6 (1937): 1030-31; Weinberger, Der Inlandsmarkt, 16-17.
- <sup>86</sup> Wochenbericht des Instituts für Konjunkturforschung, 9/19 (1936): 1-6.
- <sup>87</sup> Vollgas voraus!, 11; Wille wirkt Wunder, 14; Schrittmacher der Wirtschaft, 16; Kraftfahrzeug. Handel und Bewirtschaftung 1939, 19; Domarus, Hitler: Reden, 867; Das Archiv 53 (1938): 625-26; 59 (1939): 1798.
- 88 Das Archiv 53 (1938): 26.
- 89 Kraftfahrzeug. Handel und Bewirtschaftung 1938, 605.
- 90 Mommsen/Grieger, Das Volkswagenwerk, 189-202.
- <sup>91</sup> Ibid., 1024.
- 92 Wiersch, Die Vorbereitung, 164.
- <sup>93</sup> "... die Sehnsucht der Deutschen nach der Ferne, die sich in ihrem Wander- und Entdeckertrieb in der Geschichte immer wieder zeigt ...." Der soziale Wohnungsbau in Deutschland 2 (1942): 83.

<sup>94</sup> Ernestine Bennersdorfer, "Social Advertising' im Nationalsozialismus: am Beispiel der Deutschen Arbeitsfront 1933-1939," *Relation. Medien—Gesellschaft—Geschichte* 2 (1995): 87-136, 118-19; *Allgemeine Automobil-Zeitung* 41 (1940): 650; *Die Woche*, 7 September 1938, 24-25.

- 95 BA, R 43 II/ 556 b: 19.
- 96 Ibid. NS 22/333, Organization Plan: 22 January 1941 and no. 10.
- <sup>97</sup> Erhard Schütz and Eckhard Gruber, Mythos Reichsautobahn: Bau und Inszenierung der "Straβen des Führers" 1933-1941 (Berlin, 1996), 122-50.
- 98 Some examples: E. v. Mickwitz, "Einkommensgestaltung und Automobilabsatz," Wirtschaftsdienst. Weltwirtschaftliche Nachrichten, Zeitschrift für deutsche Wirtschaftspolitik 19 (1934): 235-37, 236; Helmut Kienlen, "Der 'Volkswagen' ein klärungsbedürftiges Problem," Wirtschaftsdienst. Weltwirtschaftliche Nachrichten. Zeitschrift für deutsche Wirtschaftspolitik 19 (1934): 237-39, 239; Der deutsche Volkswirt 10 (1936): 945; 12 (1937-38): 965; Die Deutsche Volkswirtschaft 5 (1936): 135; 7 (1938): 1150; Der Angriff, 16 February 1936, 5; Haltungskosten von Personenkraftfahrzeugen. Bearb. im Institut für Konjunkturforschung, Verkehrswissenschaftliche Abhandlungen. Schriftenreihe des Verkehrswissenschaftlichen Forschungsrats beim Reichsverkehrsministerium 7 (Jena, 1938), 3; Helm Wienkötter, "Die deutsche Kraftfahrzeugwirtschaft und ihre Werbung: Eine Vorschau zur Internat. Automobil-Ausstellung Berlin 1935," Die deutsche Werbung. Die Zeitschrift für Wirtschaftswerbung und Werbefachwelt 28 (1935): 725-29, 726.
- 99 Flik, Von Ford lernen?, 300; Dohrn, "Der deutsche Personenkraftwagenmarkt," 628.
   100 Flik, Von Ford lernen?, 300; cf. 55-61.
- <sup>101</sup> Flik, Von Ford lernen?, 300; Edelmann, Vom Luxusgut, 180; Der Angriff, 16 February 1936, 5; Die Deutsche Volkswirtschaft 7 (1938): 1150.
- 102 "Die Höhe des Treibstoffpreises ... entscheidet über die Frage, ob in Deutschland gewichtige und umfassende Fortschritte in der Motorisierung erzielt werden können." Kienlen, "Der 'Volkswagen'," 239.
- <sup>103</sup> Franz Angelberger, "Der Treibstoffpreis," Wirtschaftsdienst. Weltwirtschaftliche Nachrichten. Zeitschrift für deutsche Wirtschaftspolitik 19 (1934): 246-48, 247; Flik, Von Ford lernen?, 76, 78; Haltungskosten, 82.
- <sup>104</sup> Kraftfahrzeug. Handel und Bewirtschaftung 1939, 543.
- <sup>105</sup> Der Angriff, 20 February 1933, 2nd supplement; 20 March 1934; Kraftfahrzeug. Handel und Bewirtschaftung 1939, 863.
- <sup>106</sup>Das Motorrad 16 (1936),479-80; Kraftfahrzeug. Handel und Bewirtschaftung 1939,605-
- <sup>107</sup> Heinz Boberach, ed., Meldungen aus dem Reich 1938-1945. Die geheimen Lageberichte des Sicherheitsdienstes der SS, 18 vols. (Herrsching, 1984-85), 854-55.
- <sup>108</sup> Henry Picker, Hitlers Tischgespräche im Führerhauptquartier 1941-1942. Vollständig überarbeitete und erweiterte Neuausgabe mit bisher unbekannten Selbstzeugnissen Adolf Hitlers, Abbildungen, Augenzeugenberichten und Erläuterungen des Autors: Hitler, wie er wirklich war (Stuttgart, 1983), 374.
- <sup>109</sup> Following Edelmann, Vom Luxusgut, 215.
- <sup>110</sup>"... ein gewaltiges, einheitliches kontinentales Wirtschaftsgebiet, das Europa, Afrika und die verbindenden Teile des nahen Ostens umschließt ...." Roggatz, "Die Automobilisierung," 471.

111 Concerning the relationship between industry and NS politics, one can differentiate typologically between the producers of investment goods and the producers of consumer goods. Producers of investment goods profited from the Nazi politics of armament and autarky, producers of consumer goods suffered from it. Well-known examples for the first are the chemical, aircraft, automobile industries, and iron and steel. Examples for the latter are the textile and leather industries and the manufacturers of musical instruments. For the first group see for instance: Peter Hayes, Industry and Ideology. IG Farben in the Nazi Era (Cambridge, 2001); Neil Gregor, Stern und Hakenkreuz. Daimler Benz im Dritten Reich (Berlin, 1997); Lutz Budraß, Flugzeugindustrie und Luftrüstung in Deutschland 1918-1945 (Düsseldorf, 1998); for the second: Hartmut Berghoff, Zwischen Kleinstadt und Weltmarkt. Hohner und die Harmonika 1857-1961. Unternehmensgeschichte als Gesellschaftsgeschichte (Paderborn, 1997); Petra Bräutigam, Mittelständische Unternehmer im Nationalsozialismus. Wirtschaftliche Entwicklungen und soziale Verhaltensweisen in der Schuh- und Lederindustrie Badens und Württembergs (München, 1997); Anne Sudrow, "Das 'deutsche Rohstoffwunder' und die Schuhindustrie. Schuhproduktion unter den Bedingungen der nationalsozialistischen Autarkiepolitik," in Blätter für Technikgeschichte 60 (1998): 63-92.

<sup>112</sup>Continuities and discontinuities between *Volkswagen* in the Nazi period and in the Federal Republic are discussed by Steven Tolliday, "Enterprise and State in the West German Wirtschaftswunder: *Volkswagen* and the Automobile Industry, 1939-1962," *Business History Review* 69 (1995): 273-350.