Carl H. Hahn My years at Volkswagen



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Dedicated to the people of Volkswagen

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Prologue

Why am I putting pen to paper at my age?

For half a century, I was lucky enough to live through and help shape industrial history. Volkswagen – which I very much feel a part of – grew in that time from nothing to become the fourth biggest automotive manufacturer in the world. For more than a decade, I stood at its helm as the chairman of the board.

Because I have never been one for "informal back-room conversations" with the press and never sought any publicity when I was attacked, keeping my silence now would mean taking a part of VW's history and the history of the postwar period with me to the grave.

I am writing down these recollections largely from memory, as I have never kept a diary. However, by concentrating mainly on strategically important decisions made during my time as chairman of the board between 1982 and 1992, I believe I am recounting the events in this book accurately, even if I cannot rule out the occasional error.

A wealth of materials that my tireless secretaries Lieselotte Grothe and Ute Krause gathered together from publications, interviews and other documents during my years in office have been a great help, as have additions, corrections and suggestions from colleagues and companions. Special mentions should go here to Karl Anker, Richard van Basshuysen, Kristian Ehinger, Peter Frerk †, Franz Hauk, Siegfried Höhn, Hans Holzer, Hans-Viggo von Hülsen, Anton Konrad, Wenpo Lee, Norbert Massfeller, Martin Posth, Werner P. Schmidt, Hans-Erdmann Schönbeck, Paul-Josef Weber and Peter Weiher. Manfred Grieger at Volkswagen Historical Communications was also a key help, as were Ute Krause with her wealth of experience, Michaela Hermann and Christina Mislak. I thank each and every one of them. Finally,

without the cooperation of my assistant Klaus-Dieter Kutscher, this book would probably never have come about. I would like to extend my particular gratitude to him.

1 Roots, education, rising through the ranks at Volkswagen

Volkswagen is active around the globe: to the benefit of hundreds and thousands of people and families, to the benefit of our German VW sites in Lower Saxony, Bavaria, Württemberg and Saxony, but also to the benefit of countries and regions far away. The Volkswagen Group has not only been a driving force in German business, it has also been an engine for the economies of many countries.

The fact that corporate activities often include a political component is highlighted with laser focus by VW commitments in Central Europe and China. As Wendell Willkie, nominee for President of the United States in 1940, wrote in his book *One World* more than fifty years ago: "Political internationalism without economic internationalism is a house built upon sand. For no nation can reach its fullest development alone." A sentiment that, given the current demonizing of globalization, should give us pause for thought.

How do you reach the pinnacle of a global corporation like this without having planned to do so?

I grew up in an entrepreneurial family. My maternal grandfather managed textile companies in the Ore Mountains region of eastern Germany. My father's father, on the other hand, was a senior forestry official in Bohemia, responsible for the Count of Buquoy's 30,000 hectares of agricultural and forestry holdings. Our connections to this family go right back to the Thirty Years' War. Karl Bonaventura Buquoy, in charge of the imperial armies, joined forces with the army of the Catholic League under Tilly at the Battle of White Mountain in 1620 to defeat Frederick V, Elector Palatine. Even before this, Emperor Ferdinand II had already rewarded him generously with lands for his services. Multiple generations of the Hahn family continued to serve the Counts of Buquoy up until 1932. In the 1920s and early '30s, my father managed DKW under Jørgen Skafte Rasmussen (1878–1964), the company's founder,

as it was on its way to becoming the world's biggest motorcycle factory. In 1932, the company amalgamated with the automobile manufacturers Audi, Horch and Wanderer to form Auto Union. It expanded rapidly. Directly across from the DKW factory in the narrow Zschopau Valley, Rasmussen had a house built for my parents at number 30, Südstraße. Even before I first went to school, my father would often take me down the valley to the motorbike factory on Sundays after Mass. While still knee-high to a grasshopper, I would pick up words of wisdom at the dinner table on everything from managing a company and dealing with salesmen, to product ranges, pay days and workplace conflicts. My father, with his humanist upbringing, remained a practicing Catholic his whole life long. His faith shaped my younger brother Wolfgang and myself. After Hitler signed the Reichskonkordat treaty with the Vatican in 1933, my father joined the National Socialist Party, while my sensitive, musical mother intuitively rejected the new regime.

Despite joining the party, my father did not get away scot-free either. Constant friction with the chairman of Auto Union's supervisory board, Martin Muschmann, the *Gauleiter* of Saxony, caused by my father's Catholic faith, resulted in him moving to Bremen in 1934/35 and taking up a position as chairman of the Martin Brinkmann tobacco company. There, I lost the last traces of my Saxon dialect and accent.

However, after just one successful year in the historic port city, my father returned to Auto Union. He missed the excitement of building vehicles. At that time, the German Imperial Association of the Automotive Industry (RDA) was discussing and developing the Volkswagen Project. My father was vehemently opposed to the idea – to no avail – fearing the competition.¹

After war broke out, I – still just an eager whippersnapper – worked on a voluntary basis at Auto Union during the school

¹ See Hans Mommsen/Manfred Grieger, *Das Volkswagenwerk und seine Arbeiter im Dritten Reich*, 1996, p. 65 et seq.

vacations, wanting to play my part in the Final Victory. This vacation work would come to play a decisive role in my later life. It gave me an insight into our workers' minds: I learned about their hard work, their camaraderie, their sense of responsibility and their worries. Besides, from my father's example I had learned respect for our fellow human beings, and an appreciation of the responsibilities and duties that came with our privileged position. From him, I also learned early that capital is there to serve people, and entrepreneurs should increase it for that purpose.

Starting in 1941, I would regularly accompany my father on Sundays when he visited the barracks for the foreign workers at the Germania factory, in which we owned fifty percent of the shares. Most of these workers came from Central Europe. As a former officer in the Imperial Austro-Hungarian Army, he was familiar enough with their languages and attitudes to find the right words to say. We brought them newspapers from their home countries, sometimes even cigarettes, although this was strictly forbidden.

After the overthrow of Mussolini in Italy in the summer of 1943, my father was appointed an authorized representative of the Italian automotive industry under General Hans Leyers. Within the space of less than a year, however, conflicts with Berlin brought his stay in Italy to an end, and he returned to Auto Union, where he had been on the board since the company was founded.

By that time, I had completed my classical German primary schooling and reached the top of the class at grammar school. I ended up being drafted as an auxiliary to the air force at Anti-aircraft Battery 211 in Fürth, near Chemnitz, where at the age of just fifteen I was made camp captain of 110 teenagers. At the same time, I was a gunner captain commanding an 88 millimeter Krupp Bertha gun, nicknamed the "Russian Flak."

Back then, we boys were especially keen on film screenings by the army entertainment division, and English dance music, because as members of the military, age restrictions did not apply to us. At that time, we were under the fatherly care of Major Wolff.

The 88 millimeter artillery shells were too heavy for teenage boys, so Russian prisoners of war carried them for us. We may have been unfamiliar with the Geneva convention, but we were surprised by how much our "voluntary helpers" knew about German literature, a knowledge we were unable to match. And no wonder: when our teachers turned up to teach their uniformed charges on the mornings after the air raid sirens had gone off in the anti-aircraft battery, school was canceled. And this was no rare event. In an emergency, such as when a test was due, our sergeant Alwin Hartsch was even known to set off an air raid siren to order. That meant no school for the day. Unfortunately, we only partially made up in later life for all the schooling we missed. On the other hand, men like Wolff and Hartsch set us up for life with many lessons that are not taught at any school.

After working on the anti-aircraft gun, it was time for fatigue duty. Within the strictly regulated procedure for shoveling, which was officially divided into six sections, I discovered a seventh stage of movement. Fundamentally, this made little difference, but it did bring me to the attention of a fatigue duty general. But the greatest test for me as a seventeen-year-old was sitting across from two SS officers over the course of an hourlong interview and giving them the answer "No" – my parents had prepped me well – to their request to "voluntarily" join the *Waffen-SS*.

I had registered for the tank corps, but instead, I was called up for infantry duty in Leipzig in early 1944. When we disembarked near Krakow in the summer of 1944, I discovered that I had been reassigned to the tank corps in the meantime. That meant marching back to Leipzig immediately to join a unit with one of the lowest life expectancies in the German Army. Having said that, I was never to hear from my recent comrades in the infantry again: they were about to go into battle on the Vistula Bend.

On the way to Leipzig, I managed to make a detour to my

home town of Chemnitz. On my eighteenth birthday, I had a conversation with my mother in the kitchen that I can remember clearly to this day. From then on, I was sure that the war was lost and the day of vengeance was almost upon us.

From Leipzig, I went to Tank Replacement and Training Regiment 18 (under Group Captain von der Decken) in Kamenz. There, in the fall of 1944, I found in my bed an edition of Erich Maria Remarque's *All quiet on the Western Front*, a book that stirred up many feelings in me. I never found out how this antimilitary book found its way into my hands.

As a young candidate reserve lance corporal,² I was part of a group who had been selected for Hitler Youth divisions. Hitler was looking for fresh cannon fodder. Our papers were sent straight to army high command in Berlin; we were to receive our orders directly from there. And so we were taken on as trainers. Our much-admired officer cadet father at that time, Lieutenant Feut, was later transferred to Montecasino, where he fell.

I started working in my preferred occupation: tank driving instructor, with an Imbert system wood gas generator. More and more frequently, groups of refugees would arrive on foot from the east. At the same time, imprisoned English officers were setting off towards the west. Some of them spent the night in our barracks, and we organized meals for them. In exchange, they offered us their watches, which we refused.

Finally, we were loaded onto a train bound for Halle together with our decrepit "Panzer IV" tank. It must have been after March 5, 1945 – we were stopped on sidings in some freight yard or other – when my father managed to track us down en route. He was dressed in scruffy old clothes and told us about the annihilating air raid on Chemnitz.

A few days later, our unit was deployed above a village in Thuringia. After entrenching our tank, we helped protect a heavy anti-aircraft battery and its crew of air force auxiliaries. It was

² Reserveoffiziersbewerber-Gefreiter.

under attack from aircraft sent to clear the way for the tanks following from behind.

Together with a couple of comrades, I volunteered for a special operation: we occupied the tiny village and its farm buildings down the hill from us. It had been almost completely abandoned by its civilian population, and so we made ourselves at home in the village. As always, I had instant pudding powder with me, and a farmer's wife offered to prepare it for us. When I went to collect the finished pudding the next morning, I was crossing the village street half naked when I saw a Sherman tank at the crossing just 100 meters away. A short while later, a messenger arrived carrying orders for us to return to the anti-aircraft gun. After reaching the top of the hill, it was not long before the white flag was being flown. Our unit surrendered.

My comrades from the special operation and I decided to make a run for it, and so began our night march right across the familiar Ore Mountains. In Jöhstadt (near Annaberg), we finally caught up with our own side again. We were now under the orders of Colonel General Schörner, who was in command of one of the last tail ends of the Greater German Reich.

My friends and I were given orders to set up what was known as a tank observation point outside Adorf, near Chemnitz, just next to the Chemnitz–Zwickau highway and only a few kilometers from my parents' house. For the Americans, the war normally only started after breakfast, and it went on until dinner time. And so, after dinner my father rattled along in a DKW RT 125 motorbike to where we were billeted with a farmer's family, his backpack full of wines from his precious cellar.

On May 6, two days before the final capitulation, we were marched off to the Protectorate of Bohemia and Moravia. As the five of us who had been thrown together in a motley bunch were unusually well armed, we enjoyed a special status and spent the night before crossing the border not in a school, like all the others, but next door instead. The plan was to continue marching at seven the next morning. When we showed up at the muster

point at half past six, we found out that our squad had already set off an hour and a half earlier. At that point, trusting in our firepower, we decided to return to Adorf. Everything went smoothly. The then-general secretary of Auto Union, Gerhard Müller, who lived in the suburbs of Chemnitz, gave us civilian clothes, and on May 8, 1945, we began our march into the postwar period along the highway towards Zwickau.

After five days, on a Sunday, we dared enter a town for the first time. It was the town of Auerbach, near Zwickau. Rather than die in ignorance, we wanted to read the endless proclamations issued by the Allied forces. When I reached the last poster, I suddenly realized I was standing behind my father. "How do you do, sir?" were my first words, in English, after I finally recovered the power of speech. The Americans had put him and his colleague Richard Bruhn, together with both their families, in a hotel, where we were not to show our faces, for obvious reasons. And so we set off on foot once more.

My father had drawn up documents for me and my comrades on Auto Union stationery with the note: "Foreign workers on their way back to Vienna." This piece of paper was as good as a passport, as the Americans thought that "Auto Union" referred to an automobile labor union, although we didn't realize this until later. After 400 kilometers, we reached the castle of Sandizell near Ingolstadt. It may not have been served to me in the dining hall – for which the mistress of the castle was most apologetic – but the asparagus that I ate in the small library was the best I have ever had. After almost all transport had broken down, this area was not just drowning in asparagus.

Sandizell was where my family had arranged to meet. Each member of the family was carrying addresses in the west on them. In addition, a suitcase had been left in Sandizell for each family member. together with numerous boxes containing drawings of the three-cylinder DKW "3=6," which had originally been developed for the 1940 International Automobile Exhibition, canceled due to the war, and would later go into

series production in the west and the east in 1953.

The next morning, the maid bringing me breakfast in bed informed me that the count was expecting me in the swimming pool. On that May 22, 1945, it was probably the only pool with domestic staff that was still in working order, at least in Germany. Despite all this pampering, we soon set off back to Auerbach near Zwickau. My comrades wanted to get back to their families in Saxony. I searched for my parents, who I presumed to still be in Auerbach, and although the area was currently occupied by the Americans, it was apparently going to be handed over to the Soviets. And so the five of us traveled to Zwickau on just the one bike. Our homemade identity papers, now looking very official in their cellophane sleeves and translated into English, served their purpose without a hitch. To be on the safe side, I had distracted the communist mayor of Sandizell long enough to add official looking stamps to our papers. Additionally, I added the key postscript "permitted to use military roads," which allowed us to use the highways. All in all, this enabled us to travel seventy kilometers (more than 40 miles) a day.

We reached Zwickau in record time. There, at the house of Paul Günther, manager of the Horch automotive plant, we met Auto Union's head of exports, Werner Jansen. He had just arranged for the commanding officer in charge of Auerbach to have the use of a Horch 853, and he was to prove a great help to us. As he crept back to Auerbach along back roads in his beautiful eight cylinder Horch convertible, with no registration documents and us hiding on the back seat, he ignored a clear stop signal given by two American sentries. When the next two soldiers appeared in front of us, I saw the two men we had just passed draw their guns, at which point we abruptly stopped. In no uncertain terms, they made it absolutely clear to us that the road was closed to civilian traffic. It was only thanks to Werner Jansen's strong grasp of English that the sentries dropped their threat to give us a good pounding and we got out of there alive.

In all the confusion after the end of the war, there were still many ways to end up dead, although your chances were better under the Americans than under the Russians, who were just a few kilometers away, on the far bank of the Mulde River.

I found my parents, alive and well, in the same hotel in Auerbach in which I had last seen them. It was not long before a motorcade set off towards Sandizell with the families of Richard Bruhn, Werner Jansen and Carl Hahn senior, equipped with official passes and fuel from the American, who did not want the chairman of Auto Union to fall into Russian hands. The castle in Sandizell was turned into an NCO school³ shortly after our return, so we ended up in the gardener's attic, which back then was worth as much as a free suite with full board in a five-star hotel in Berlin. From now on, we were ensured a steady supply of fresh vegetables. Thanks to Don Munnerlyn, the chef for a large US unit, we also had access to a guaranteed source of "staples." Don had fallen in love with Kigele the gardener's eldest daughter, and had added us to his logistics. His sweetheart was called Resi, and her younger sister was Sofferl. Americans descended en masse almost every evening. The Bavarian pastries did their job, and we would spend hours talking long into the night with the Bavaria-mad yanks. Eisenhower's antifraternization decree did nothing to stop this. These days, whenever I'm in Dallas – where in 1993 I joined the supervisory board of Perot Systems – I meet up with Resi, who made a life for herself there with Don after the war. She is now a widow. The Wegele market garden at Sandizell, run by Sofferl and her children, is now a well respected major operation with customers from all over.

It was becoming harder and harder to get hold of ration cards with my homemade identity papers, and I longed for legal documents. So on the day after my nineteenth birthday, on July 2, 1945, I set off in an American GMC truck driven by an expert

³ Non-Commissioned Officer school

American chauffeur to the US prisoner of war camp at Ingolstadt. It was by far the most comfortable of all the prison camps in Europe. Our commander, a German Jew from Berlin, catered every day for more than thirty thousand German and Hungarian prisoners of war, even though there were no more than twenty thousand of us. We lived in the barracks of a former central spare parts warehouse of the German Army, on the exact same spot as Audi's factories stand today. As the Hungarians would steal like magpies whenever they were sent on work deployments, we were soon marked out for preferential treatment. While we "got down to business" in a slightly more low-key way, the Hungarians turned their part of the camp into a full on cottage industry, which thanks to its satisfied US customers, was never short of orders. The attractive female army and SS auxiliaries, who had tailored camouflage into fashionable garments to suit the warm summer temperatures, played a special role here. The Americans were keeping them safe behind extra-high barbed wire fences.

The African American soldiers, who had only recently gained equal treatment and even that only on a trial basis, saw us as their buddies, and became our teachers. They showed us how to drop food crates so that they would break into a thousand pieces and could no longer be repaired. In the evenings we would then sit around the camp fire, feeling pretty sated, and I would translate the *Stars and Stripes* newspaper. If the commander had not arranged a soccer game, we would often end up trying to outsing the Hungarians. Of course, there were rumors flying around that we were to be handed over to the Soviets. But by the end of July, it was all over. I was released from the camp, I once again had legal papers and I headed home to Sandizell.

In the fall of 1946, my father and I moved to Düsseldorf in the British Zone. Besides the political reasons, it was also financial considerations that convinced us to relocate, as we were almost out of cash. In moving from agricultural Bavaria to the Rhineland, my father was looking for better opportunities to get

back on his feet. Very soon, we took lodgings with Lieselotte Kuhn at number 23 on Düsseldorf's genteel Cäcilienallee. Two floors above us lived the boss of the British secret service, Major Gould, who often invited us up for tea and cake.

We lived off my father's wits and the one-pound parcels of ham my mother would send from Sandizell. First, we made and sold combination locks, later we moved on to aluminum pressure cookers.

Apart from Auto Union, our attention was soon concentrated on a product that did not suffer the motorbike's seasonal fluctuation: when the US secret service, the CIC, called my father in for questioning in Schrobenhausen, the main town near Sandizell, he noticed a "Tampax" ad while leafing through Life magazine in the waiting room. It was to prove the impetus for a successful enterprise. My father's globally entrepreneurial imagination was obviously not restricted to motorbikes, cars or two-stroke engines with loop scavenging, Schnuerle porting, machine tools, or the tobacco industry.

Through a close old family friend, Father Paul Schulte, known as the "flying padre," we got hold of the relevant patents from the USA. Paul Schulte had traveled the Arctic and Africa as an exceptionally courageous missionary, using every conceivable means of transport, and had been a US military chaplain during the war. His hand-cranked films, which he would occasionally show to family and friends in the pre-war era, are as fresh in my mind still as his books. Back in Germany, years later he was made president of MIVA⁴ in Paderborn, one of my major VW customers, ordering around three thousand vehicles a year. Even before the war, he had bought DKW cars from my father. After the currency reform, he started a pilot school for young men near Bonn, with ten "Tiger Moths." These airplanes, which were probably the most popular training planes in the world, were a gift from Ernst Göhner. Although not a Catholic himself, Göhner

⁴ A missionary society of the Catholic Church in Austria

was an avowed fan of Paul Schulte and, together with Baron Friedrich Carl von Oppenheim, one of Auto Union's first financial backers. Ernst Göhner had met Father Schulte at one of my father's birthday celebrations.

The pilots Father Schulte trained included the first post-war officer generation of the German Air Force, who renewed their pilot's licenses at his school. Much later, in 1972, the Air Force and the German Association of the Automotive Industry (VDA) were on hand to see him off in style, as he flew solo from Bonn to Swakopmund in Namibia in a two-engine propeller plane to oversee schools in the diocese of Windhoek. He worked there for a further two years as a chaplain before dying on January 7, 1974. He is remembered fondly to this day in the Air Force and in the automotive industry for his winning sense of humor, his enthusiasm and his reputation as a modern missionary. And he is remembered too, of course, for the donations he raised for his mission. Incidentally, Ferry Porsche had discreetly fitted a Porsche engine in the First World War fighter pilot's VW Beetle, causing occasional astonishment as he roared past, especially to anyone who realized what he did for a living.

But anyway, to get back to my father's Tampax project. During his time as general manager at Martin Brinkmann in Bremen, he had also met the manufacturers of cigarette machines in the Bergisches Land region. As the production process for cigarettes bore certain similarities to the manufacture of tampons, he renewed these contacts. It would not be long before he set up a lasting cooperation with the Niepmann company in Gevelsberg. A young officer of the General Staff called Heinz Mittag became his right-hand man. Together, they organized the construction of a fully automated machine for producing tampons, having to carefully circumvent all the "Tampax" patents. That they were successful in this is demonstrated by the fact that not a single patent dispute arose later. This completely innovative machine design was the foundation for the superiority of the "o.b." tampon, which was first launched in March 1950.

There followed an exceptionally successful period for the new limited partnership Dr. Carl Hahn KG in Düsseldorf, with Heinz Mittag taking over as managing director after my father turned his full attention to rebuilding Auto Union. The "o.b." tampons set out to conquer the world. Given our lack of equity – our capital consisted of 32,000 Reichsmarks, the proceeds of selling our Lancia Aprilia – and its rapid growth, the company ended up, after a few detours, in the open arms of a US corporation. Today, o.b. tampons are the world's leading product in their sector and the former Dr. Carl Hahn KG partnership is now part of the US conglomerate Johnson & Johnson. It is, of course, a pity to have lost such a pearl of a company, but I never spent any time dwelling on it. Instead, I am more than thankful for my own journey, and with good reason.

At that time, I thought the best thing for me would be to cut the cord on my jack-of-all-trades existence in Düsseldorf and start studying. Back in late 1945, I had applied to study medicine in Erlangen, but it was not until 1947 that I was able to take up a place for two semesters studying economics and business administration in Cologne. Looking back, I would probably have been better off studying engineering. But if I had done so, how would I have learned foreign languages and gained an international education, which would later come to be one of my "unique selling points"? From the outset, it was clear to me that I neither wanted to work at Auto Union with a leg up from my father, nor did I want to work at Dr. Carl Hahn KG. My overriding goal was to first get out of Germany and see what the world really looked like and how it worked.

A Jewish friend of my father, who had saved his property and life in 1934, Werner Jacoby, one-time DKW wholesaler in Berlin, gave me one thousand Swiss francs to study in Zürich for a semester. While the currency reform of 1948 had improved life for many back in Germany, once I subtracted the rent for my very modest room next to the Zürich Enge railway yard, and my university fees, I was living off just five Swiss francs a day This required some gymnastics to pull off, although the Swiss

discounter Duttweiler and its *Migros* stores certainly helped. Despite this, even just getting a Zürich bicycle registration number, which swallowed up five precious francs, made a major dent in my budget. A cash-in-hand job with A. H. Meyers, owner of Franz AG, Badener Strasse 313, Zürich, who imported Nash/Rambler and Peugeot cars, improved my finances slightly. I spent my time there handling warranties, which gave me some initial experience in dealing with automotive factories and their agents.

Zürich was my window to the wider world, and it played a key role in my later professional career. More and more, it was becoming clear to me that you have to know how to get ahead in this world. And so, despite my chronic financial situation and constant hunger, I decided to continue studying abroad: in Bristol and Paris, and then in Bern and Perugia. This was the first strategic decision I made about the direction of my professional journey, which would not take me back to Germany until 1954.

My most valuable experiences were those I gained in Paris at the *Institut d'études politiques* (commonly known as *Sciences Po*), which I attended at the suggestion of my Zürich friend Hugo Bohny. Its secretary general, Curial de Brevannes, accepted my application to the school, even though I only spoke four words of French (*la vie est belle*) and could therefore not take the mandatory entrance exam. At *Sciences Po*, I experienced a pressure to perform and a selection process the likes of which I had never known before and was not to see again until I visited elite universities in the USA – in my capacity as a member of the board of the Lauder Institute at the Wharton School in Pennsylvania, among others. The range of grades stretched from twenty, the top mark – which was never awarded in the time I spent there – all the way down to zero. All the results were published on a blackboard.

My very first grade was a three, and Curial himself sent his condolences. By the end of the year, I managed an extremely rare sixteen for an essay on the subject of "The French political party system." This established my reputation. The teachers I best remember from that time are Anton Baumgartner (governor of the French central bank), Pierre Renouvin (medieval history) and the legendary André Siegfried, then already in his eighties and a member of the *Académie française* (political geography). His exciting lectures always filled the hall to capacity. He spoke about the wave of collaboration in France after the return of French prisoners of war from Germany in 1940/41, a story first broken by *Radio Free Europe*.

When, in 1951, our class – *Certificat d'Études Politiques* in our pockets – celebrated our farewell dinner in the officer's mess of the French armored division in the Rue de Lille, I was seated next to Curial as one of the best students. When I asked him why he had accepted me – an unknown quantity and without any recommendations – into the school in the first place, he uttered the following words, which I treasure to this day: "Because I was a prisoner of war in Germany."

It goes without saying that no German university back then would accredit my semesters spent abroad. And so in 1951 I drove my DKW RT – now with a 200 cc engine – to Bern and Professor Fritz Marbach, the dean of the economics faculty there. Marbach was one of the founders of the 1937 Swiss "Peace Agreement" between the metalworkers' union and their employers, which ruled out any form of industrial dispute. The agreement has now lasted almost seven decades, and it has become one of the cornerstones of Switzerland's economic success.

Despite Fritz Marbach's deep skepticism, I earned my degree in twelve months and was awarded a doctorate, summa cum laude, under his supervision on the subject of *The Schuman Plan, with a particular focus on the Franco-German steel industry*. On the side, I took flying lessons with a Mr. Vogel – indeed, I took the very first flight of my life in his DFS Kranich glider – and earned my A, B and C glider pilot licenses.

Fritz Marbach also became a mentor of mine at this time. We remained close until his death in the 1970s. I also retain strong

memories of Alfred Amon, a theorist of political economy. My dissertation, which I had to defend in front of an audience on a hot Friday, June 13, 1952 in Bern (two editions of it were published by Richard Pflaum in Munich) opened the door to my first position just three days later, under Professor Frédéric Hausmann in Geneva. I worked as his assistant, helping him with his publication *Der Schuman-Plan im europäischen Zwielicht* (The Schuman Plan in the European Twilight) and enjoying summertime in Geneva.

My life would also be influenced by another Frenchman: Roger Grégoire, Conseiller d'État, Director of the OEEC Productivity Agency. Here too my doctoral thesis proved to be a useful admission ticket. I started a position with the OECC in 1953, which gave me the opportunity to live and work in the best district of Paris while enjoying diplomatic status.

Back when I had been studying at *Sciences Po*, I had to stay in cheap accommodation out in Suresnes sur Seine, even if my morning commute through the Bois de Boulogne on my – by today's standards tiny – motorbike was a source of new wonders each day. Now, by contrast, I was living in the 16th arrondissement – about as prestigious as it gets – at 2 Rue André Pascal, right next to the Château de la Muette, the headquarters of the OEEC. Proud as a peacock, I drove around in a two-seater DKW 3=6 cabriolet from Hebmüller.

I worked for Roger Grégoire as an *administrateur*, together with my Turkish friend Munir Benjenk and our Armenian colleague Nadine Ekserdijian. During the Second World War, she had been responsible for parachuting agents into France. Benjenk had served in Korea as an adjutant to the Turkish general, and he was fluent in nine languages. His later professional career included working as the Executive Vice President of the World Bank. When Nadine had originally been assigned to the office of this Turk, a deathly silence had reigned for a week, although the situation would soon turn around completely. I have seldom experienced such an inspiring and challenging environment, and to top it off, it was based on a

fantastic friendship: one which lives on to this day with Roger Grégoire's widow Menie. She is now a well-known political author in France, who initially rose to fame thanks to her best-selling book on Radio Luxembourg's influence on the sexual education of the French.

Getting to know the workings of a successful international organization such as this was, without doubt, a priceless experience. But, like my father, I had always been drawn to the automotive industry. Like him, I was fascinated by its unique dynamism. Back in 1952/53, my father's wartime connections to Italy had enabled me to complete an unpaid traineeship at Fiat, giving me access to one of my major role models: Vittorio Valletta. This ascetic professor of mathematics had, after World War Two, turned Fiat into Europe's biggest and most modern automobile factory, which, in turn, formed the core of a sophisticated, exceptionally successful conglomerate. For a long time, Fiat dominated the European automotive market, in both the East and the West. Later, however, they made the strategic error of concentrating too strongly on their national structure, with well-known consequences both for the company and for Italy.

In the summer of 1954, I finally ended up in Wolfsburg. At the recommendation of Alfred Pierburg, an old friend of the family and the owner of Solex, I took up the opportunity of an interview with the legendary boss of VW, Heinrich Nordhoff. After an intensive two-hour discussion, he shook my hand, sealing the deal on a position as his assistant.

It was only as I was traveling back to Paris – I had already passed Hanover – that I realized we hadn't said a word about my salary, that's how fascinated I was by this man and how overawed I had been by the scale of his factory. Luckily, I wouldn't live to regret it, even though I had been earning good money in Paris, tax-free.

On December 1, 1954, after quickly fitting in a round trip to Corsica, Greece, Turkey and Egypt before moving to VW, I

arrived in Wolfsburg in my elegant non-VW car. My belongings consisted almost exclusively of books. Very quickly, I got an otherwise unrentable furnished apartment and, almost as a bonus, the loyal Josephine Engerling, who was the cleaner for the early shift at head office. She was an expert, international caliber cook who instantly saw in me the successor to Nordhoff, a situation she tirelessly sought to promote. Sadly, she didn't live to see her prophecy come true.

However, it would not be long before I handed in my notice due to a "lack of work." Nordhoff's excellent personal secretary, Anneliese Metzner, who could in some ways be considered the number two at VW in those days, had successfully blocked me wherever she could. My decision would prove advantageous to my future professional development. Nordhoff, who at first appeared to take absolutely no notice of my resignation, then surprised me by making me responsible for promoting export sales. On the side, I prepared his lectures, managed his seminars and met him at regular intervals for extended, almost fatherly conversations. But still I felt that I wasn't getting enough to do, especially given the massive increases in capacity at VW that were making political leaders in Bonn⁵ breathless and indignant. As far as they were concerned, Nordhoff was nothing but a conman when he presented his plans for a daily production rate of 1.000 cars.

And so in 1957/58, I went job hunting again. Then I got my chance. Nordhoff was brave enough to entrust me, at just thirty two years of age, with the small, highly contentious Volkswagen of America (VWoA) starting from January 1, 1959. Wolfsburg would have liked nothing better than to liquidate it, especially if they had listened to the recommendations of US wholesalers. This attitude also helps explain why they thought ten employees was the ideal number for VWoA.

"Now you can show us how it's done!" were Nordhoff's

⁵ Since 1949, the German Federal Government had power of disposition over Volkswagenwerk GmbH.

words – and I did my best. No one, least of all me, had any idea at first what I was to be paid for my new position. So we decided to keep paying me my current wages and to arrange for an expert report on my future salary. Our personnel manager in Englewood Cliffs, Bill Valentin, sought out a small but specialized company called McKinsey. At the end of my first year in the USA, I bashfully showed Nordhoff the finished report. As the new year began, although he agreed to pay me only a fraction of the recommendation, converted into D-marks I was now one of the best paid employees in the corporation and more than satisfied.

For me, the USA was both a school and a stepping stone. At my instigation, we soon opened our new headquarters in Englewood Cliffs, New Jersey, right next to the Hudson River, with a customer service building, sauna, wine cellar and terraces on a forty acre (sixteen hectare) site for 350 employees – instead of the planned ten. Our headquarters were certainly something to look at. The architect Leo Safrata, originally from Prague, who was also responsible for our standardized wholesaler and dealership operations in the USA, created yet another masterpiece.

My comrades-in-arms, "my" wholesalers and dealers, the USA itself: they all became my valuable teachers.

We took out full-page ads in major German newspapers to recruit staff, which, besides bringing in healthy numbers of employees, had the added benefit of giving us good PR. Hans Holzer was one of the many to read these ads and in 1962 he transferred from Ford Cologne to VWoA. Once there, he put in place the latest data processing technology to optimize our processes, systems and standards, putting us well ahead of our competitors.

In 1960, at a wholesaler conference in Bermuda, I spelled out the VW philosophy to our US organization in the preface to the VW dealer contracts. Engraved on a brass plate, it then hung on the wall at every VW dealership, where customers could also see it. This philosophy was also my personal credo, the key part of which I would like to quote here, because even forty years later, it still strikes me as relevant:

"Volkswagen knows that continuous refinement of its products will serve the best interest of its customers, its employees and its owners. It believes also in product innovation and its vehicles are designed to meet society's transportation needs while conserving the diminishing supplies of raw materials and fossil fuel. It recognizes, too, the necessity to protect the quality of our environment while providing transportation in comfort, convenience and safety."

We went on to write history in the American distribution and retail sector, and our sales organization climbed up to very first place in just a few years. Our dealerships were not only the most homogeneous, most modern and most profitable, they also had the best morale and, above all, the most satisfied customers. One significant key to our success in the USA was an effective advertising campaign by Doyle, Dane & Bernbach (DDB) – it was actually VW's first ever ad campaign and was later chosen as the best of the 20th century by *Advertising Age* – as well as the public relations work of Art Railton, our window to the American psyche. I had hired him from *Popular Mechanics*, where he had impressed me with his awkward questions and very hard work. "Will success ruin Volkswagen?" was the title of an article he wrote back in 1958 after visiting Wolfsburg.

In early 1964, Nordhoff recalled me to Wolfsburg, just like that, with a handshake and without us exchanging even one word on terms and conditions. So I sold our house in Connecticut and returned to Europe with my American wife Marisa and our three little Americans – Alexander, Pia and Peter (later to be joined by Christopher in Wolfsburg). I was to succeed the chief sales officer, Fritz Frank, who had once been head of sales at Horch. My successor at VWoA was Stuart Perkins, previously sales manager at our US subsidiary and with whom I had always worked hand in hand. He guaranteed continuity. Perkins had

started off as the second employee ever to be hired by VWoA, after trying his hand as a gold prospector in Canada. He had originally worked in the British automotive industry.

I was presented to the VW supervisory board in the summer. They agreed to my appointment without asking me a single question. Instead, the gentlemen of the executive committee expressed their displeasure with the "situation," by which they meant, above all, the supervisory board's impotence in the face of Nordhoff.

I had observed this "situation" back when I was working as his assistant. On the evenings before supervisory board meetings, I would be in charge of looking after the chairman, Heinz Maria Oeftering,⁶ in the VW guest house, and even he could not escape Nordhoff's unwritten rule: no hot meals (except for Heinz tomato soup), no drinks after 10 pm and lights out in the club room at 11 pm. Sometimes, meetings of the supervisory board would last less than half an hour, which proved to be a problem for our kitchen in the board canteen. Only the Finance Minister (and future Premier) of Lower Saxony, Alfred Kubel, would "disrupt" the proceedings by asking tough and intelligent questions. Normally, however, Nordhoff's close colleague Frank Novotny would already have clarified all the critical issues in advance to the officials in Bonn and Hanover. The most common topic was increases to capacity, which were occasionally already up and running and open for inspection by the time the vote was held in the supervisory board.

Initially, we set up our family home in Braunschweig. There, we converted an old 19th-century apartment on Wilhelmitorwall street. The little house we were offered in Wolfsburg seemed, at just 1,300 square feet, somewhat small for our needs after our Connecticut home, built in 1730 and set in forty acres of garden. I initially declined the offer of a chauffeur. I much preferred to

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⁶ Assistant Director in the German Federal Finance Ministry from 1950 to 1957.

drive myself, even if back then our VW model range didn't offer a great deal of choice. By 1966, as luck would have it, "Villa West" in Wolfsburg became available and this soon became our new home. Wolfgang Siebert, who had joined VW from Thyssen to work as the finance director, had had the house built in the early '60s. However, he set the proceedings to terminate his contract in motion the very first time he drove his BMW 502, a beautiful saloon, past the VW guards at the Sandkamp factory gatehouse.

The success of VW in the USA had given me a reputation that I was not yet fully aware of at that time. Before I had even turned thirty eight, I was already on the board of the most distinguished company in Germany, and with some international recognition too.

VW in Wolfsburg had forged ahead to a scale that had no equal at that time in Europe. It was already operating on a global level. But Wolfsburg, located just a few miles from the Iron Curtain, was really quite isolated and a long way from the seat of government in Bonn. With the notable exception of Nordhoff, most people at headquarters tended to think at the local level. At the time I returned, I still had no sense of the depth and nature of the conflicts that were headed my way.

I was very familiar with the tried and tested sales and distribution group under Horst Kabisch (domestic) and Manual Hinke (exports); after all, I'd been working with them, directly and indirectly, for a decade. That said, and given the growing challenges facing us, I was convinced that a dose of experience from the USA wouldn't go amiss. And so I brought a proven team⁷ from VWoA with me.

⁷ Dieter Deiss (customer service, now Deiss Associates, St. Helena/Napa Valley. He built his company up to become the leading marketing and customer service consultancy for the automotive industry, including beyond North America); Hans Hinrichs (head of market research at VWoA, later responsible for marketing planning in Wolfsburg, after 1972 sales director at Daimler-Benz); Hans Holzer (to whom we owe our head start in information

At the same time, to make sure we didn't unnecessarily weaken our US subsidiary, I arranged for fresh blood in the form of managers from Ford Germany.⁸ Our competitor's German team had been completely demoralized by Ford's – in my view completely correct and logical– decision to centralize European operations in England. The restructuring had demoted Ford Germany to a production site only, where, with the exception of sales, the management positions were located in a virtual organizational structure in Dagenham. The team in Cologne was much too far from the decision-making centers in Dagenham and Detroit to entertain hopes of serious careers. We were now able to offer new opportunities to some of these dispirited employees – many of whom had been trained at Ford's McNamara School,⁹ an excellent management training ground.

This gave us a young, powerful team, every member of which — without exception — went on to great careers. The new team helped us further develop the tried and tested Volkswagen philosophy and open up new sales avenues. In the process, we never lost sight of the interests and economic wellbeing of our partner dealerships; after all, they are the lungs through which automobile factories breathe. For me, this was also the key

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technology, in 1972 he joined the board of Dynamit Nobel); Helmut Schmitz, head of advertising at VWoA and Volkswagen AG (admitted to the German advertising hall of fame); Hermann Bruhns (customer service and parts boss). These were just a few of the "Americans" I brought with me, and who weren't necessarily received with a warm welcome all round, as you can imagine. What was it Art Railton used to say? "Germans make the best Americans." But they aren't easy to re-import, as I was to find out.

⁸ I started at the top, with the then-head of sales at Ford Germany, Werner P. Schmidt (VW export boss, CEO of VW do Brasil, then AUDI, later responsible for sales and distribution on the Group's executive board, followed by finance); Peter Weiher (product planning and fire department functions in the Group, including head of VWoA, head of global marketing and CEO of Ford Cologne); Gerd Burmann (head of market research in the Volkswagen Group).

⁹ Named for Robert McNamara, president of Ford and later US Defense Secretary.

reason behind our decision to be the first in Europe to set up a dealership advisory board.

Elsewhere, I will go into my eight years as a sales director at VW and my involuntary separation from the Group. After that, I worked as the chairman of Continental Gummi Werke AG in Hanover from 1973 until the end of 1981. This position was an important preliminary step on the road to my future work as the chairman of Volkswagen AG.

Friedrich Wilhelm Christians at Deutsche Bank, who knew me from my years on the board at VW, had introduced me to Alfred Herrhausen, who was at that time the chairman of the supervisory board at Continental. We quickly came to an agreement. Although I could see the significant risk posed by a company that had been run down over the years, Continental was also part of an industry with close ties to the automotive sector, and I believed I could develop the necessary entrepreneurial instinct. Sometimes, problems just come to you when you're standing there on the street.

Given the speed at which Continental was dropping further and further into the red, this once proud German company looked like it had only months left to live. Teachers were offering bets to my children on how long before I declared Continental's bankruptcy. In 1971, a consultancy firm had recommended to the board that they radically retract the less profitable original equipment business, with its stringent technical challenges, in favor of the higher-yielding tire replacement business. Although the first part of the advice had proven easy to implement, the second part failed thoroughly and it only accelerated the downward trajectory.

The supervisory board and the executive board had declared Christoph Dahlmann responsible for the fiasco, which seemed to greatly please the Technology division, but the accusation bore no resemblance to reality. Everyone, except Dahlmann, settled back comfortably until my arrival.

Very soon after taking up my position, the supervisory board

began to pressure me to give up the tire business — which accounted for two thirds of turnover and fixed assets — and concentrate on the technical rubber business. ¹⁰ The business press was also recommending this as the only possible course of action. As the new steel belt tires that Michelin had brought onto the market lasted three to four times as long as conventional bias-ply tires, cutting back on capacity was inevitable.

Not only did the former Number One of the tire industry not have the technology to produce steel belt tires, it lacked the necessary production quality in general. Furthermore, the technical divisions were even more run down at Continental than the tire business was, but this was a closely guarded secret at the time. Liquidating the tire division would therefore clearly have been the end of the company.

It would not have been possible to implement my strategy to save Continental (although I would never have called it that at the time) without the legendary "godfather" of German industry, Hans Merkle at Bosch, and the employee representatives on our supervisory board working under "Benno" Adams. Without them, Continental wouldn't be here today, and neither would I.

We managed to turn the company around partly thanks to a license to produce radial-ply tires from Uniroyal, who were the only manufacturer to come up with a product to rival Michelin's. Our management team were not pleased at first, finding the idea of adopting expertise from a relatively low-ranking competitor humiliating. The other major factor in returning us to the black was a "zero-defect program" I initiated, according to which the production division was only permitted to produce tires suitable as original equipment. Back then, this was a first in the tire industry, but for Continental it was the difficult path back to success and it enabled us to once again ensure adequate prices.

In those days, it was common practice in the tire industry to

¹⁰ At that time, the technical rubber business involved a broad spectrum of products, ranging from hot-water bottles, through fan belts, engine mounts, pneumatic springs, door seals and hoses, to conveyor belts.

separate out the tires that were good enough to be original equipment. You simply carried on producing until you had enough fault-free tires. Often, the proportion of "good" tires was less than fifty percent. The rest were sent off for the replacement business, and the very worst were sold at throwaway prices, theoretically ending up in Africa, but in practice going to "gray markets" all over the place.

Michelin was a notable exception in the sector: the pioneer of the steel belt tire delivered original equipment quality to all its customers, for which it was paid accordingly. I learned a lot from that company, especially from François Michelin, an idealistic, exemplary entrepreneur from the small city of Clermont-Ferrand in France's Massif Central. His company, with its uncompromising quality and Prussian thrift, was about to take over the world. To top it all off, and with a certain sense of satisfaction, I found out that Michelin's European factories didn't have air-conditioning either, which had been the excuse I was given at Continental in arguments against the "zero defect program."

For me, quality was the be all and end all. It was crucial at each manufacturing stage, from the machines, through the mold, to the press bed. Nobody was allowed to touch a single piece of material before vulcanization, as it could result in deformation. On the other hand, this conflicted with, for example, the true running and handling characteristics that the automotive industry required, not to mention the safety issues. As Formula One so iconically demonstrates, the steel belt tire became the single most important component in a modern automobile's chassis.

With a new management board team, my work then focused on technical development, production, logistics and quality, with this last division reporting to me directly. In my previous career, I had dealt with sales, marketing and product planning, so my new duties were a particular challenge. I would visit the factories at any time of day or night — often on my way home — in order

to gather information for myself from the source. My "campaign headquarters" was a tiny office with old furnishings located on Königsworther Platz in downtown Hanover. Directly opposite was the IG Chemie union headquarters, headed at that time by its farsighted president Karl Hauenschild, with whom we had a constructive working relationship.

To make our wide-ranging technical business more competitive, we didn't hesitate to buy in expertise from outside, particularly from the USA. When in mid-1979 we eventually managed to buy the seven Uniroyal tire factories in Europe and a tire textile factory in Luxembourg from their US parent company, this proved to be the saving of Continental. Overnight, the company began operating at a European level, bringing it up to second place on the continent, and managed by a European team. A collaboration with Toyo Tires in Japan also opened up a global network.

All the German car manufacturers and Bosch had helped me muster the funds for this mammoth undertaking by underwriting a convertible bond through the Sal. Oppenheim Bank, because Continental itself was undercapitalized and emaciated. Horst Urban, my colleague in the finance department, and myself had come up with the idea for this concerted action on the flight back from the negotiations with Uniroyal in New York. Our underwriters were rewarded for their confidence when our stock market price recovered.

Albert Englebert at Uniroyal was a larger-than-life character. He had sold his company to the American Uniroyal Group in the 1950s and had stayed on as the head of his European companies. His appointment to the Continental supervisory board proved helpful to morale in the Uniroyal team. At the same time, it now gave us a tire specialist on the shareholder side on the supervisory board. The other key asset for us was Helmut Werner. In him, we gained an excellent deputy and, simultaneously, we solved the problem of who would succeed me. When, in January 1982, I took up my position as chairman

of the board at VW, I had, thanks to Continental, gained useful experiences to bring to my new duties. As a parting gift, I waived my pension entitlements. Continental had been saved, even if it wasn't yet back to full health. In 1989, I would once again find myself organizing a major rescue campaign for the only German tire development partner in our industry, when Pirelli made a hostile takeover bid. This was to have been financed by Continental, whose then chairman of the supervisory board was, behind doors, already prepared to surrender. In the end, however, the exceptional intervention of chairman of the executive board Horst Urban preserved Continental's independence. Sadly, Urban's corporate policy was not to everyone's taste and it certainly wasn't rewarded: his contract was terminated prematurely ("by mutual agreement").

2 Return to Volkswagen

As I was driving to Hanover airport in the summer of 1981 and I heard on the radio that Schmücker, the then CEO of Volkswagen, had suffered a heart attack, I subconsciously sensed that this could mean a return to Volkswagen for me. I was not wrong.

In the fall of that same year, Schmücker invited me to an initial interview at the Hotel Intercontinental in Hanover, not far from my Continental office. He told me that the idea of appointing me as his successor was floated by Siegried Ehlers, the chairman of the Volkswagen Group's works council and had been met with general agreement in the executive committee of the Volkswagen supervisory board. He was also in favor. Before the final announcement was made in November, there was frenzied speculation in the media.

Returning to VW filled me with satisfaction, representing as it did a retrospective confirmation of my earlier policies, which had led to me being kicked out in 1972. In total, I'd been with the corporation for eighteen years, the last eight of which I'd spent on the board and as the worldwide head of sales. After differences arose over VW strategy, our ways had parted. During the following nine years as the chairman of Continental in Hanover, I had the good fortune of getting to know the entire European automotive industry through the eyes of a supplier. At the same time, I had stayed in contact with many of my old colleagues at VW. This meant it took almost no time to settle into the job of head of VW. From the drive into the Wolfsburg site, the "Sandkamp gatehouse," to the assembly halls, I was familiar with every nook and cranny. I knew almost all the managers and the members of the works council. With one exception, the board consisted of the same people as before. I wanted to work together with them without any of the tactical maneuvers that are so often carried out these days through the media - "power constellations" and

ostentatious firings – that is, directly, not through our respective teams.

The only new member of the board was the former IG Metall union official and journalist Karl-Heinz Briam, who had been recommended to the supervisory board by my predecessor and with whom I enjoyed a good start after it became clear to him that the works council both respected and trusted me. That said, the works council soon asked me to stop mentioning the fact that I had the chair of the works council. Ehlers, to thank for my appointment as VW boss. It didn't fit the political preconceptions in the company. From the very first day of my return. I tried to introduce a culture of open discussion. This required a profound change of habits. The members of the boards were used to taking a position on matters in advance of board meetings and negotiating compromises between the divisions; a relic of the military leadership style that was still in place under Nordhoff. The members generally entered the meetings with an "agreed," you could sometimes even say sworn, position, as if they were attending a conference of agricultural ministers in Brussels. Iron discipline reined within the strictly partitioned board divisions; no information was allowed to reach the outside without approval. Now I called for arguments to be weighed up, freedom of opinion to be exercised, and for the practice of multiplying or diminishing arguments according to the rank of the speaker to cease, together with the tendency to all speak with one voice. We made advances, and genuine debates resulted in positive outcomes, albeit not overnight.

In addition to my visits to VW sites around the world, informal monthly lunches with the "top 100" were intended to encourage personal interaction, instead of just relying on the extended cocktail parties at my house in summer and the Christmas dinner at the end of the year, each of which were also attended by wives. The annual meeting of the Group's managers, which from 1986 included managers from outside

Germany – also with wives in attendance – took on a particular importance here.

When I returned in 1982, the situation at VW was grave. They had taken many wrong turns, even if some of these had been widely praised, and had driven into a blind alley. Prominent among these mistakes were the efforts to diversify, which had become very fashionable in Germany in the '70s. After the attempt to procure the mining, steel and machinery corporation Gutehoffnungshütte and so diversify into heavy industry had – thank goodness – failed, VW had in 1979 bought Triumph-Adler (TA), an internationally renowned German typewriter factory with electronic ambitions.

The spokesman of Deutsche Bank at that time, Wilfried Guth, was the first to warn of the dangers of diversification as a lifeline. 11 "Anyone who is committed to diversification outside their own industry will frequently discover that it is exceptionally accomplish technical difficult to commercial excellence multiple, completely across unconnected fields. The end result may be a 'top seller,' but next to it there will be product sectors that are suffering and that consume all the profits made by the former. Besides, the management team will, almost by definition, lose its homogeneity; specialists who cannot really understand each other's field end up working side by side."

At that time, people saw no future for the automobile, and it had also fallen into disrepute politically. VW lacked strategic leadership and automotive enthusiasm. More than anything, it was missing the idealism of the pioneering generation that had made us great. Some of its proud roots and the unique "Nordhoff culture" with its global reach had been lost, but more at the top than among the rank and file.

With some effort, we managed to report a profit for 1981

¹¹ Speech given at the 65th birthday of Prof. Dr. Joachim Zahn, January 24, 1979, Stuttgart-Untertürkheim.

and pay out a modest dividend of five marks. VW's poor performance in 1981 and even worse performance in 1982 were not solely due to the weak economy. Another heavy burden was the wage agreement that had been negotiated with the IG Metall union in Schmücker's time. The agreed breaktimes rules to match those in Baden-Württemberg anticipated the de facto 35-hour week that was meant to come in later. Social peace had been bought at a steep price. In just the 1981 financial year, the agreement represented a billion-mark debit. The board and managers were in despair and could see no way forward. They were at their wits' end, trapped by Germany's high labor and production costs.

Increasing "social gains" were leaving stronger and stronger skid marks. No increases in productivity had been achieved for more than a decade. While Toyota had added 5,000 workers and increased its production by 1.2 million cars over the course of a decade, VW AG had decreased production by 245,000 vehicles over the same period, while simultaneously increasing its workforce by 4,000 employees.

In addition, the former star of the Volkswagen Group, VW do Brasil, together with the Argentinean and Brazilian companies that had just been bought from Chrysler suffered a combined loss of 539 million marks in 1981. Added to this were write-downs of VW AG's South American financial assets totaling more than 420 million marks, so that the debits from our South American subsidiaries alone amounted to almost a billion marks. For these companies to survive, significant injections of cash would be needed from the parent company, to which the supervisory board agreed with little debate. But this was not enough. In the same year, Triumph-Adler cost almost another 800 million marks, taking into account a debt waiver and necessary write-downs on the part of VW. That year, the subsidiaries alone accounted for a loss of 1.75 billion marks, which given a Group turnover of under 38 billion marks, represented a share of 4.6 percent.

These were all figures that I presented in detail to the supervisory board, the managers, the works councils, the union delegates and, very soon, to employees at a works meeting. I didn't mince my words with anyone as I called for a cost-reduction program. I tasked my colleague Münzner with implementing this program thanks to his good relations to the works council, both independently and through Briam. This first cost-reduction program was to bring VW unparalleled productivity gains, only for these to be completely undone by the move three years later to a 35-hour week with full compensatory wage adjustment. Over that period, our European competitors achieved impressive cost reductions, primarily by extending working hours.

When the 35-hour week came in, our American competitors that manufactured in Germany exacted full compensation of costs, and more, by increasing productivity while reminding everyone of their factories in low-cost countries. By contrast, we even saw increases in the numbers of paramedics, kitchen assistants and firefighters. The number of indirect employees also grew in parallel to the headcount in the production area.

What I didn't mention back then, except to the board and the supervisory board, was that we had lost half a billion marks in 1981 due to theoretically correct, widely praised export hedging transactions. Until I returned, the CFO was the only member of the board who knew about this. I had always been an advocate of an elastic hedging policy and encouraged contrary flows of goods. This policy proved exceptionally useful in the subsequent period of dollar devaluation. However, people often forget that any form of hedging is speculation.

And so, in the early 1980s, we found ourselves in the most dangerous crisis of our history, sliding faster and faster downhill; a fact I successfully downplayed in public, as indeed I had to. The situation for Volkswagen was too serious to hand it over to public discussion in the hopes of applying pressure

internally — even if this would no doubt have made my life easier. In cases like this, the media are quick to proclaim you a renovator, or even a savior, and this is an epithet I avoided even back at Continental. I also made sure never to strike fear into our team as a means of persuasion, and instead provided matter-of-fact information, while also making sure to point out opportunities and to encourage people.

The patient – ranked fifth among European automotive factories at that time – was too weak for drastic treatment, the price was too high and it was too dangerous to play with fire. The Volkswagen brand had been a symbol of value ever since the early Beetle days. However, illustrious brands that are not successful soon lose their value and thus their price level.

Furthermore, the majority of IG Metall union members were still far from committed to the social market economy, preferring instead to clutch at the illusory benefits of a centrally planned economy and its supposed ability to deliver social justice. This was especially true at the IG Metall headquarters, with the exception of the then-head of IG Metall, Eugen Loderer, with whom I still maintained a trusting relationship from my first time on the board at VW.

When, in the spring of 1982, rising steel prices led to us raising the prices of our VW vehicles by 3.9 percent and the prices of Audi models by 4.3, we were met by furious protests: not from our dealerships or our customers, but from our works councils. In Kassel, five thousand employees took to the streets to protest against our price policy for the benefit of the television cameras. This was hardly conducive to sales or to securing jobs.

In those days, we still had the safety valve option of raising prices on the German market. But with the Common Market in sight, there was a time limit on this policy. Germany had become a high-cost location and therefore a high-price country, much to the delight of our foreign competitors.

For Volkswagen, this life-threatening situation called for a

new strategy, from top to bottom:

- · Restoring pride and confidence
- · Concentrating on the automobile, ending diversification
- · Neutralisierung der tödlichen Kostenfalle Deutschland,
- Intensifying efforts in development, products and marketing
- Introducing a genuine multi-brand strategy with Audi as a premium brand
- Reorganizing the South American subsidiaries
- Streamlining in North America

I began immediately with inaugural visits to our seven VW and Audi factories in Germany and our assembly plant in Belgium, which we had involuntarily "inherited" in 1970 from our Belgian importer. VW Bruxelles was to become the "benchmark," which didn't make our Belgians or me at all popular. When we drew up comparisons within the Group, this assembly plant was in many ways the most productive, even though it was set up as a "hub" to compensate production volumes for the Golf and the Passat. In addition to this, it suffered from the handicap of being "hemmed in" inside the city of Brussels itself. The boss of VW Bruxelles, Louis Frenay, was an excellent businessman, as was his successor Pierre-Alain De Smedt, who went on to accomplish great things as the president of AutoLatina and Seat, before leaving the Volkswagen Group after my time to become number two at Renault.

I began my first fourteen-day overseas visit in March 1982. It was always my custom to go on these visits alone, without a retinue, and although this increased my workload, it increased productivity much more. Working for a global German company, we also represent Germany abroad. This entails a political responsibility. We need to set standards and provide a good example – not just to our managers, but to each and

every employee – to ensure that our corporate philosophy is put into practice in even the most far-flung corners of our corporation. As a representative of Volkswagen, you are also working at dangerous altitudes, which can cause acute altitude sickness, even going so far as to make you completely lose touch with reality. First of all, I took a weekend side trip to VW Canada, our oldest sales subsidiary, founded in 1952 by Werner Jansen, who had been the head of exports at Auto Union before the war. Next, I visited "my" old Volkswagen of America (VWoA). Since my day, it had left Englewood Cliffs, New Jersey, and moved to Troy, a suburb of Detroit.

My successor at VWoA, Stuart Perkins, had in turn been succeeded by James McLernon. Perkins was unwilling to work under him and had left. McLernon, a former and well-respected plant manager at General Motors, enjoyed a great deal of independence from Wolfsburg. I found him to be a typical GM manager, in the best possible sense: someone who made every effort to build up a Volkswagen Group in the USA as ordered. But if someone spends almost his entire (professional) life at GM in a straitjacket, many levels below the top, and then suddenly finds himself relatively "high up," the job could prove risky for everyone involved, as I was soon to find out. Even if this hadn't been the case, the job of building up the company was unrealistic to start with, and it hadn't been thought through properly, either strategically or from a planning perspective.

The very first time I drove from Wolfsburg to Braunschweig airport in an American-produced Golf – known as a Rabbit in the USA and Canada – I almost ended up in the ditch. Like its handling characteristics, the car's interior had also been Americanized. The American (GM) management team had been given the freedom to "improve" the Rabbit, to adjust it in line with a lifetime's habits and in accordance with the GM philosophy. But American customers expected something different in a VW, not the tasteless fare that Detroit

had been serving up all their lives. If, in addition to this, the quality wasn't up to scratch, even if it exceeded what Detroit was providing at the time, it's not hard to imagine the consequences.

Our product range planning at German headquarters took far too little notice of the giant US market: truth be told, it ignored it almost completely. As a result, we didn't have any potential to expand in the US and Canada for the time being and were instead faced with further contraction. Our Rabbit sales had already halved in the previous two years, leaving our plant in Westmoreland, Pennsylvania, operating well under capacity and making dangerous losses.

To my horror, an assembly plant at the same scale as the one in Westmoreland had just been completed in Sterling Heights, a suburb of Detroit, and it was about to start production. A new capacity of a thousand units a day, or a quarter of a million cars per year, was ready and waiting. Production managers are, of course, in love with their factories. They have to be. So it wasn't easy closing this plant straight away and putting it up for sale. It is thanks to our American head of finance, Ian Anderson, that the sale to Chrysler went off without a hitch and even brought in a profit. The fact that the factory was new and up to date was, without a doubt, a big help here, and it was one that was particularly painful for our technicians.

McLernon had proudly shown me another site for a third "1,000 capacity" VW assembly plant. In addition, we visited a former Studebaker testing ground they were negotiating for and, finally, a piece of land on which they were planning to erect an office building for our US corporation, including Triumph-Adler. Evidently, we were planning to strike fear into the hearts of all our competitors, including IBM – although it only ended up scaring me. Luckily, putting an end to these projects didn't involve major costs. The situation in Fort Worth, Texas would prove trickier. There, our little

"shack" for manufacturing air-conditioning units, built in the early '60s when it was managed in exemplary fashion by Gerold Schlager, had been replaced by an oversized factory on a huge site – almost big enough to have its own airport. By that time, however, even in Europe people were beginning to see the advantages of air-conditioning in small cars. And so we later sold Fort Worth to Valeo, one of our suppliers headquartered in France. This was all part of our North American disinvestment.

We were far too small and unimportant a customer for the American supplier industry. This is something we had first noticed back in 1955, when we bought an assembly plant in New Brunswick, New Jersey from Studebaker. Just a few months later, we had to sell it again due to the unprofitability of the American supply business. Evidently, this experience had since been forgotten. This lack of sufficient national purchasing volumes meant we were still faced with currency risks in the USA. Despite this, we had once again taken the same steps in the US.

No one on the supervisory board or the executive board and nobody else in our management team would have agreed to close Westmoreland then and there. Besides, launch preparations for the new Golf II had just begun in Westmoreland and I wanted to give it a chance and then face up to the actual situation, whatever that might be. As a rule, factories that face possible closure make unexpected progress in cutting costs. Unfortunately, the losses in the coming years made it clear that, under the current circumstances, we were faced with a hopeless situation.

Nonetheless, the decision process that was meant to seal Westmoreland's fate went anything but smoothly. The Westmoreland plant was finally abandoned in 1988. First, an extensive compensation program was drawn up for the employees in question. In addition to this, we worked together with local authorities to set up a job placement center for them.

When we officially announced our intention to close the plant, the Governor of Pennsylvania at that time, Robert P. Casey, immediately sent me a short telegram: "Fully understand your actions, what can we do for you?" But the thing that has stuck most in my mind and that I found most moving was the sense of realism with which staff accepted the news. Even years later, I would receive letters from former employees expressing their gratitude to Volkswagen for the good working conditions and their fair treatment.

The production equipment was shipped from Westmoreland to China and then set up again on the premises of our joint venture in Changchun. This equipment would end up in operation for a record period of more than a quarter of a century. The plant itself was sold at a loss to the state of Pennsylvania, who then leased it to Sony.

The closure of our manufacturing sites in the US market had been preceded by serious debates in both the executive board and in our supervisory board, albeit with different focuses in each. The main issue here was the comparison with Japanese car manufacturers, which, in stark contrast to us and to American manufacturers, were setting up one factory after the other, putting strong pressure on their competitors. Whereas the Japanese built eight factories in the US between 1982 and 1989, US manufacturers and VW closed nine factories in the same market from 1987 to 1990. With products tailored to the US market and thanks to their trend-setting production system, the Japanese had quickly reached a scale that was attractive to more than just the local supply industry. Even Japanese suppliers were increasingly setting up shop in the States.

From 1987, there was at least also hope for us on the horizon in the North American market: the future North American Free Trade Agreement (NAFTA), which was going to include Mexico in addition to the US and Canada. We began speculating on its prompt implementation, as it

would mean a significant boost to our competitiveness in North America, thanks to our Mexican production site.

Even before Westmoreland, we closed our press shop in South Charleston, West Virginia in 1987 and transferred the facilities to our Puebla plant in Mexico. With this, we set our Mexican subsidiary, which had first been founded at the Xalostoc site in 1964 and then relocated to Puebla in 1967, on a footing for possible expansion.

Up until 1980, Volkswagen de México was constantly struggling with losses and it was often only kept alive thanks to capital injections from the parent company. When VW AG, itself suffering from a general crisis in the mid-70s, was forced in 1976 to once again throw in several hundred million marks because of a major devaluation of the peso, the powers in Wolfsburg began to look for a permanent solution. In the end, the plan to gift the company to the Mexican government was abandoned. Key concessions from the government on price increases and the balance of foreign exchange payments to be settled ultimately ensured that VW de México remained in the Volkswagen Group, which would give us new strategic opportunities a few years later. As a low-cost location in a North American free trade area, this plant was predestined to supply the US market. 12

That said, the 1980s were a disappointing time for our US organization. The Golf II simply hadn't been tailored enough to the needs of American customers – a painful truth to swallow given that twenty years before, when I was the boss of Volkswagen of America, Beetles were being snapped up as fast as we could make them. Under the leadership of the new boss of VWoA, Noel Philips, and his deputy James R. Fuller, ¹³

¹² During the period of our amicable relations with Daimler, in the second half of the 1960s, space had been reserved next to the VW sign on the VW de México factory facade for a Mercedes star.

¹³ James R. Fuller and his marketing director Lou Marengo were victims of the terrorist bombing over the town of Lockerbie, Scotland. Both died in Pan

the worst was avoided, but we lost the exclusivity of our dealership organization – in large part for economic reasons, due to a lack of volume. What we retained was the dealers' fantastic loyalty.

It wasn't until the Golf III – which was aimed specifically at the needs of American customers and which suffered a shaky start – was launched in the USA in 1993 under my successor that the tide would turn in the US market. Back in my day, Piëch had personally taken charge of quality problems during the start-up of production in Mexico. The Golf III marked the beginning of a very successful, expansive period for VW de México, once NAFTA came into force in 1994. As the plant in Puebla was still receiving deliveries from Germany and until then it had not been possible to balance the value of these by exporting engines to Germany, exports to the USA would from now on provide a solution to our chronic foreign exchange problem. Previously, we had sometimes only been able to solve this issue thanks to our good relations with the government, an area that the boss of VW de México, Hans Barschkis, handled expertly. Barschkis, a former submarine commander. was also in many ways an ambassador for Germany in those days. He had managed VW de México from the very start, and continued to do so until he retired in 1986.

We had now organized our corporate structures in the NAFTA zone and made them competitive. They remain in place, unchanged to this day. There had always also been links between VW de México and VW do Brasil, and they exchanged components and vehicles. Today, two VW models are made exclusively in Mexico for the global market: the New Beetle and the Jetta, This was also the last site to keep manufacturing the original Beetle, right up until the summer of 2003. In 1972, it not only became the world's most produced automobile of all time, knocking the Ford Model T

Am flight 103 on December 21, 1988.

off the top spot, it also set a global record by being in production for almost 70 years; a record that will probably never be matched. The number two in this ranking is the VW Transporter, which is still in production at VW do Brasil after more than 50 years. Third place is taken by the Golf I, which has been produced in South Africa for 30 years, where it continues to be a best seller.

The 1981 financial year was a successful one for VW de México, and 1982 also looked to be on track for success. The company had been the market leader in Mexico since the mid-1960s. My first visit back then was mainly aimed at gathering information. Consultations with the President and participating key ministers had become a routine necessity in these countries, whereas in Western Europe, North America and Japan, you "only" had to deal with the markets.

In Brazil, after a critical year of recession and inflation in 1981, which led to a drastic collapse in profits and liquidity for our local subsidiary, the car market had not yet substantially improved. The situation was still serious. But I encountered a motivated team assembled around Wolfgang Sauer, who I had not yet met. Sauer had come from Bosch's Brazilian subsidiary, and was originally meant to take up the chairmanship of Audi.

In Brazil, as in Mexico before it, I noticed one negative aspect: a failure to "nationalize" the management positions. So far, we had completely neglected to make use of the considerable intellectual potential offered by these huge countries. In Wolfsburg, moreover, there were no plans to seize on the unique opportunities offered by a global rotation of personnel to help train management.

That said, Wolfgang Sauer and his two predecessors Werner P. Schmidt and the founder of this, the largest VW foreign subsidiary, Wilhelm (Bobby) Schultz-Wenk, were treated like locals and highly respected. VW and the Beetle were in any case considered Brazilian. After all, despite

globalization, all our markets were still local.

We only started up in Brazil in 1953, long after GM and Ford, who had moved in after the First World War. Thanks to the Beetle, however, we quickly took top spot in the country, a rank we maintained for almost half a century. As the Brazilian market was closed off by a law requiring a domestic production share of almost one hundred percent, we were followed by our supply industry, from Bosch, through Benteler, Karmann, ThyssenKrupp and Mannesmann to Metzler, to name but a few. As a result, almost all the major players, especially from German industry, were soon represented in Brazil, As a key industry, we brought capital and expertise into the country across a broad front, free of charge. It's hard to believe that even to this day, political forces everywhere still refuse to accept the globally demonstrable beneficial impact that multinationals can have. Thanks to a new dimension of technical advances. globalization can contribute more than ever to the benefit of everyone involved. Certainly, a base level of economic and political prerequisites, social harmony and education need to be in place, and corruption and mismanagement should be absent.

In the crisis year of 1981, a massive slump in demand and state price controls had forced Sauer to cut staff numbers dramatically. A restructuring plan commissioned by Schmücker included further drastic measures to reduce costs at VW do Brasil in 1982. All the heads of "critical" subsidiaries now had to submit monthly reports to the board in Wolfsburg describing the results of their work.

In March 1979, Volkswagen had bought the Chrysler vehicle factory in Brazil. This was located in Anchieta, a suburb of São Paulo, directly opposite our factory. Less than a year later, Volkswagen also took over the Chrysler plants in Argentina, a country in which it had not previously

manufactured passenger cars. Shortly before, GM had packed up its bags in Argentina because the political situation seemed hopeless. But at the same time as we were buying the Chrysler plants in Argentina, there seemed to be a profound change of opinion towards the country, especially among European investors.

Despite this, the Argentinean automobile market once again collapsed dramatically in the early 1980s, shrinking by more than half. The situation could hardly have been more difficult and unprofitable. Our head of production, Jürgen Berger, was working desperately on a vehicle that still required parts imported from England. Finally, he managed to fit a 1.6 liter, four-cylinder VW engine (with rear-wheel drive!) into this passenger car – the only one we made like it - and we were then able to proudly present our "VW 1500" to the Argentine public. In fact, this car was a British Hillman Minx, which had previously been sold by Chrysler as the "Dodge 1500." This at least gave our dealers in Argentina something to live off. With help from VW in Brazil, we worked hard to expand the product range. As a newcomer to the market, the situation in Argentina was – contrary to our expectations – extremely volatile. First of all, we had to stop the "bleeding" and save our dealership organization. There was little purchasing power in the country and, thanks to the government's exchange rate policy, exports inconceivable, other than perhaps to Brazil, although with major logistical obstacles. Nevertheless, we tried to retain as much of our workforce as possible. I will return to the subject of Argentina in the chapter on "Cooperation strategies."

My fondest memory of that first visit is jogging with young police officers early in the morning after my arrival in the beautiful parks of Buenos Aires. The avenues and buildings of that city reflect to this day the wealth of what was the world's fifth richest country after the First World War.

In Brazil, the most pressing matter at hand was how to

modernize the truck division. Crossing the road from the VW plant in Anchieta and entering the former Chrysler factory – almost as big as the Wolfsburg site – I met an experienced American manager and a professional in the field of trucks: Don Dancey. I learned a lot from him. Luckily, I had already gained some experience of the truck industry at Continental, thanks to our truck tire business. My knowledge of products, manufacturers, markets and – most importantly – the customers, would now prove useful.

Dancey was still completely dismayed by a recent visitor. He no longer felt he understood the world. A high-up manager had flown in from Wolfsburg specifically to convince him, or rather to force him, to accept a bonus for himself and for his team for the previous fiscal year, despite a record loss of 10,000 marks per truck. Spoiled by past Beetle successes, some still saw VW as a retirement fund with guaranteed handouts thanks to the Volkswagen Act of the German Federal Government.

With its virtual monopoly of the truck and bus sector in Brazil (which to this day has almost no railways), Mercedes surely had the earning power to one day finance a hostile takeover of our passenger car business. For me, our obvious strategic task was thus to break that truck monopoly. To be honest, I didn't expect back then to challenge their market leadership, I was simply focused on "normal" competitive conditions. We only realistically set our sights on becoming the market leader after founding AutoLatina. This we would manage almost twenty years later – thanks in large part to José Ignacio López.

It was clear to me that the truck division we had acquired from Chrysler gave us an opportunity. But to make money from trucks, we first had to prepare the ground thoroughly. First of all, we had to replace the old eight-cylinder gasoline engines and (sugar cane spirit) alcohol-powered Chrysler trucks with a modern range of vehicles. The experience we had gained from collaborating with the truck manufacturer MAN was especially helpful here. Step by step, our truck range was expanded into a fully competitive selection in the 6 to 26 metric ton weight class. Axel Balk, a young engineer from Hanover, designed his very first heavy VW truck here, and it would prove to be a masterpiece.

An equally important task was building up a high-caliber, exclusive truck dealership organization, even though we were starting from a tiny share of the market. A sufficiently large number of exceptionally successful (and thus wealthy) VW dealerships helped us conjure up from nothing a modern, impressive and exclusive VW truck sales organization. Market success in the face of our major competitor, Mercedes, soon followed.

At the same time, we tried to build up North America as an export market. To do this, I "cold-called" Chuck Pigott, the chairman of PACCAR Holding in Seattle (Peterbilt, Kenworth and now also DAF). His product portfolio was missing mid-range trucks, which he needed for his dealers, especially given the Japanese competition, while we were short of potential markets. While PACCAR had not always been the number one for trucks in the six to eight metric ton class in the USA, it has to this day normally been the number one in terms of profit. This company, largely shaped by the Pigott family, was to be our partner from 1985 to 1995, building an important bridge to the future. Unfortunately, the numbers were not convincing enough for a joint venture with PACCAR in Brazil.

In the passenger car sector, a wealth of opportunities opened up for VW do Brasil with the launch of the Santana (Passat class) in the summer of 1984. A wide variety of options were developed on this platform, including the "Gol" in the Polo class, which has since also made its way to China. And Brazil also continued to produce the Beetle. After production was initially shut down in 1986 after 27 years, it

started up again in early 1993, on a temporary basis. One of the reasons for this was that the Beetle was part of the basket of commodities used to measure the cost of living in Brazil, and the government offered us tangible benefits.¹⁴

During the regular trips I now began to take to Brazil, my day would begin in the factory immediately after landing. Sometimes, I would stay in a cheap hotel in Anchieta, and although this troubled some people, it saved me hours of commuting to and from downtown. The first items on the agenda were always Technical Development and test drives, both with in-house models and with competitor cars and trucks. The tank training and the truck driving license I had received during my time in the German army now paid off.

I should mention in passing that on my second visit, I also took my first and only trip to our "Companhia Vale do Rio Cristalino" cattle ranch in Paraná. This was a 140,000 hectare ranch that started as a school in the middle of the jungle, which we managed in an exemplary fashion – even going so far as to pay overtime (!) to the cowboys – although it proved unrealistic for the sector. Under the professional management of a trained agronomist from ETH Zurich, there was a strong focus on environmental issues. The ranch and an abattoir next door in which we and several other notable Brazilian companies had an interest proved to be a financial disaster. Eventually, they were put up for sale, a lengthy process that proved equally expensive. A tax-saving development scheme proposed by the Brazilian government had racked up losses running to hundreds of millions. The contracts with the International Finance Corporation (IFC) left us sitting on the debts of South America's biggest slaughterhouse.

North and South America would remain critical regions for us. In my written report to my colleagues on the board, I recounted my impressions of this first trip, warts and all. It

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¹⁴ Beetle production was resumed as part of the "Popular Car Program" for encouraging the production of low-volume or traditional vehicles.

was the first time in VW's history that a chairman of the board had submitted a written report after visiting subsidiaries abroad and then opened the report for debate.

Besides the subsidiaries in the Americas, Triumph-Adler was another problem child in acute danger. My colleague Münzner had taken over the chairmanship of the Triumph-Adler supervisory board from his colleague in the finance department, Friedrich Thomée, when the latter retired, and he was doing everything in his power to revive the company. Since buying it, we had again spent on it far more than its purchase price of 650 million marks. I came across TA typewriters everywhere in the Volkswagen Group, but this was just a drop in the ocean.

We had no experience in this field. We simply didn't have the necessary entrepreneurial or technical acumen to make the right judgments. That said, TA itself was also lacking in this department. They were tied to the past and to tradition. Despite this, major efforts were made, sales of electronic typewriters increased significantly and a family of computers was created for multi-functional workstations. We desperately tried to bring the company up to a level where we could sell it and save jobs.

The new "silicon-based" information and communication technology of the future that was set to revolutionize the world would primarily develop in the USA, and later in Asia, in the context of an extremely specialized division of labor, as any glance at and into our laptops and offices so convincingly shows. It has not only created millions of jobs, it has also catapulted entire regions directly into a new dimension, doing the same indirectly to the global economy and all our lives. The fundamental research that enabled this technology often originated in German laboratories, such as Konrad Zuse's computer or the invention of the fax machine.

It was obvious to us that TA had to be sold, the quicker the better and at any price, because although we were increasing sales, we weren't reducing our losses. That being said, we would have sold TA even if it had become profitable. Unlike many people at that time, I believed in the automobile, and my colleagues agreed with me in opposing any form of diversification, even vertical integration of our in-house production, i.e. taking a stake in or taking over our suppliers or dealers. Very soon, we committed to reducing our in-house production depth after studying the advantages of this policy as evidenced by our Japanese competitors.

If we wanted to avoid the embarrassment of having to close TA, by 1986 the only option left was selling it to my friend Carlo de Benedetti, at that time the majority shareholder of Olivetti, the only potential buyer left standing. We received a token sum for the purchase but had, in turn, to pay a considerable amount to Olivetti for the contractually agreed acquisition of Olivetti shares to the equivalent of 595 million marks. With our five percent share, we thus unwillingly became the second biggest Olivetti shareholder. In light of our ongoing losses and management connections, it wasn't hard to clarify this transaction to my colleagues on the board and supervisory board, in spite of my own unease. It was the most cost-effective solution for us. The acquisition also turned out to be a poor deal for Olivetti. Despite the best efforts of the able Olivetti manager Franco Tato, who moved from Italy to Nuremberg, TA's downward trajectory continued.

As expected, our Olivetti shares required yet another major write-down. As I remember, the final bill for our involvement in TA was a total loss of 2.5 billion marks, as we informed our shareholders at the 1987 annual general meeting. And so it turned out that what was meant to become the corporation's second pillar ended up costing more than the purchase of Seat and Škoda combined.

Luckily, the majority of my working day would increasingly be taken up by strategically expansive and

successful projects that led Volkswagen to a new, global and strong position, all ready for the world of the dawning $21^{\rm st}$ century.

3 Product strategy

Volkswagen can look back on an unparalleled (product) history: after Hitler, the inferno of the Second World War and a brief interlude under the Americans, the British occupied Wolfsburg. Major Ivan Hirst of the REME (Royal Electrical and Mechanical Engineers) was responsible for development from 1945 to 1949, under Colonel Charles Radclyffe. Hirst discovered Heinrich Nordhoff, made him general manager on January, 1948 and gave him a free hand. And so began the rebuilding from the ruins and the company's rise to becoming a symbol of the German economic miracle. I began more than one after-dinner speech by noting that Volkswagen had become the world's most successful company ... that the British Armed Forces ever founded.

Without the will and the idealism of the post-war workforce – Hugo Bork, the chairman of the works council deserves special mention here – this turn of events would have been unthinkable. Bork and Nordhoff were united by their belief in "their" company, which was practically abandoned at the time but which they always prioritized, and they were also united in their commitment to society and their mutual respect. In my countless conversations with Bork and his colleagues I learned that there had really only ever been one topic in Nordhoff's time: extra shifts. I greatly admired Bork for his humanity and his selflessness.

The first VW post-war product was the "KdF-Wagen" car from the Third Reich. It held within it the combined experience of one of the most creative automotive pioneers of the first half of the 20th century. Ferdinand Porsche from Maffersdorf (today Vratislavice) in Bohemia. His car – later affectionately nicknamed the "Beetle" by the Americans and known internally as "Type 1" – even incorporated elements

1.0

¹⁵ Heinrich Nordhoff's predecessor was Dr. Hermann Münch, who had been appointed custodian by the British.

of his Auto Union racing car, the Formula One of its day. It was so full of youthful vitality that it wasn't discontinued until almost seventy years after its birth – and for many, this was still too soon. The global success of this car can be credited to the businessman Heinrich Nordhoff. 16 After the Ford Model T, the Beetle was the second "world car." But unlike its American predecessor, it stood for prestige and was a symbol of progress and quality. As a classless vehicle, loved by rich and poor alike, the Beetle achieved the highest status a car can have: it became status-free. People noticed its friendly-looking shape. No other vehicle looked anything like it. The Beetle's success made its discontinuation a matter of survival. Forecasts were filled with skepticism. after all, the discontinuation of the Ford Model T in America had initially resulted in the closure of the plant in question. Although new models had been created in the meantime, including the VW Transporter, derived from the Beetle, and the VW Karmann Ghia or the Cabriolet, these were (apart from the VW Transporter, which created its own product class) merely supplements to the range on the periphery of the Beetle platform. Developing a successor to a vehicle with a daily production of up to 4,300 units was a problem at a scale never seen before in Europe, and it was even more daunting for a company that hadn't even designed this unique automobile itself. It was time to sink or swim.

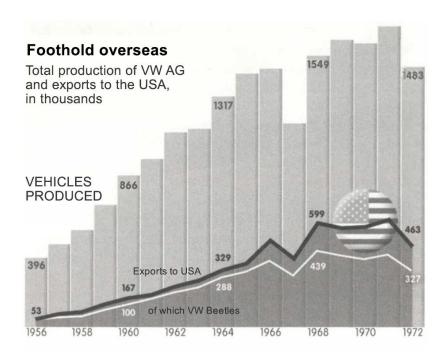
Nordhoff was aware of this risk, which grew exponentially in parallel to the company's success. Even in the early days, when production figures were still low, dealers were clamoring for a new car: "four doors and with the engine in the right place!" But there was no money for this. But over the course of the next two decades and beyond, almost all new developments built on the concept of the Beetle, they were never very satisfying, were continuously overtaken by the growing sales figures for the Beetle itself and they ended

¹⁶ See also *Heinz Nordhoff und Volkswagen*. *Ein deutscher Unternehmer im amerikanischen Jahrhundert* (Heinz Nordhoff and Volkswagen. A German entrepreneur in the American century), Heidrun Edelmann, 2003.

up on the scrap heap. The Type 3 which finally launched in the early '60s was positioned too close above the Beetle, it was also based on Beetle technology with all its associated disadvantages, and for customers it represented little more than an underwhelming conventional body variant.

For these reasons, I took the position that it would be better to continue relying on the Beetle for the time being and to use all the marketing tools available to us to make the most of its potential, rather than try to replace it too soon with second-class vehicle designs. These would only have undermined its market position without coming close to achieving anything comparable.

As long as we could continue to guarantee sufficient growth in the USA with the Beetle, I even avoided importing the Type 3 for many years; a policy that was heavily criticized back in Wolfsburg. But this kept our American organization at optimal cost and we created a planned reserve market for the expected European excess production capacities. In 1971 the US market provided just this valve function, enabling sales of more than half a million VW vehicles and record Beetle production. This corresponded to around a third of total VW production in Germany.



With its advertising and its policy of making yearly cosmetic changes to its models, Detroit had trained American customers to think in terms of prestige. You could even say this resulted in a frenzied pressure to consume. The continuity of the Beetle – thanks to the policy of avoiding change for change's sake – had freed buyers from these shackles and started a revolution, one that eased the strain on the customer's wallet.

The Beetle, positioned in the lowest price category on the market, first became popular among the more highly educated and in higher income groups.¹⁷ This gave it prestige, which then attracted lower-earning buyer segments, resulting in an explosion of demand. The Beetle had become a beloved member of the family who just happened to live in the garage.

 $^{^{\}rm 17}$ In the USA, the Beetle was competing in the same price category as large six-cylinder Chevrolets.

Later, when the first generation of Japanese compact cars came onto the US market, they disappeared again as quickly as they had appeared, due to poor quality. It wasn't until the second wave in the '70s that the American automobile market would be revolutionized again. Once again, the American manufacturers misjudged the general mood, losing fifty percent of their home market in the passenger car sector by the end of the 20th century. In Europe, we also spent too long ignoring the reasons for the Japanese success, or preferred to explain it away as price dumping.



1 As a five-year-old in Zschopau. I always introduced myself: "My name is Carl Horst and everyone calls me Bubi.«



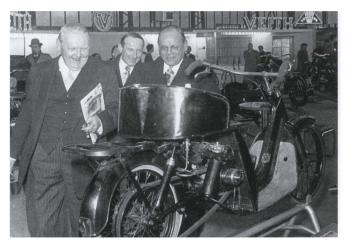
2 My mother visited me in Kamenz late in the summer of 1944. I was serving there in Tank Replacement and Training Regiment 18 under Group Captain von der Decken.



▲ 4 Mother and son, mid-1946: The family of five were living as refugees in Sandizell, Bavaria, near Ingolstadt. Our third apartment there, which we lived in for four years, consisted of a multipurpose room and a kitchen. This latter was vital, because my mother was a gifted housewife and knew everything about Austrian cuisine. When my father and I moved to the Rhineland that same year, we missed that very much.

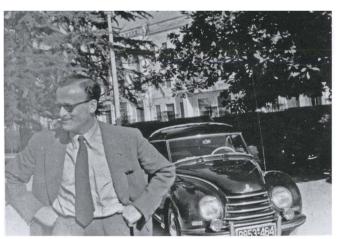
3 Werner and Hilde Jacobi, who built a new life for themselves in Montevideo after fleeing Germany, visit us in 1955. After the war, Werner Jacobi gave me 1.000 Swiss francs to finance my first semester in Zürich, opening up the world and my future career to me.





◀ 5 My father guides the father of the Economic Miracle, Professor Ludwig Erhard, around his first motorbike show, around 1950.

Center: 6
The first DKW "manufactured" out of spare parts by us in the West proved a reliable workhorse. The legendary racing driver Tazio Nuvolari gave us vehicle registration papers for it. His DKW had been destroyed in a fire in Modena.



7 Bill Bernbach, co-founder of "my" American advertising agency, Doyle, Dane and Bernbach (DDB) – at that time a dwarf in the industry with a turnover of 2.5 million dollarsplunged into the world of VW in Wolfsburg in 1959. Left to right: Helmut Schmitz, later VW advertising director and inducted into the German advertising hall of fame, the legendary Bill Bernbach, C.H.H. and Ned Doyle.







▲ 8 Guest of honor at the Beetle's 50th birthday: Major Hirst. A street is named after him in Wolfsburg. He played a key role for VW after Germany's surrender. Volkswagen escaped dismantling thanks to the British car industry's lack of interest in the Beetle. They thought it was "of no commercial value."

Top right: 9 Presenting the first post-war DKW in the Ingolstadt fortress casemates, July 1950: Richard Bruhn, Walter Osswald, the veteran motor journalist, August Horch and my father.

10 Heinrich Nordhoff (center) and Frank Novotny (right) opened the new Volkswagen of America headquarters in Englewood Cliffs (N.J.) with me in 1962. Afterwards, Nordhoff gave a much publicized speech to representatives of the US automobile industry in Detroit, which Art Railton and I had to quickly revise overnight due to the escalating Cuban Missile Crisis.





11 Reynold C. Johnson, our authorized wholesaler for Northern California, smiling next to me in a light suit in San Francisco. Next to him: my fatherly friend, the great VW export boss Manuel Hinke (from Peru). On the far right: Alfred Kalmbach, responsible for the USA to the West of the Mississippi. In those days, fifty percent of Karmann Ghia Coupés and Cabriolets were sold in the USA. Today, they are cult objects.

12 Companions: Horst Urban and Helmut Werner (left to right), both from my time at Continental, and Klaus von Dohnanyi. He had made his name at Ford at a young age, and now I brought him onto the Audi supervisory Dohnanyi board. Von also pioneer in the campaign to sell to the former East Germany.





13 Celebrating the Beetle's 50th birthday in Wolfsburg in 1985. Von links: Anton Konrad, Horst Münzner, Louise Piëch, Jutta Münzner, Ferdinand (Ferry) Porsche, my wife Marisa, Premier of Lower Saxony Ernst Albrecht, C.H.H. and chairman of the VW works council Siegfried Ehlers.



14 The 50 millionth Volkswagen rolled off the assembly line in Wolfsburg in 1987. Head of the VW works council Walter Hiller, later Social Minister of Lower Saxony, is holding my hand. On my other side: Gerd Ganninger, head of assembly, and plant manager Helmut Amtenbrink. 18 years later, in May 2005, VW passed the 100 million mark.

15 Italy's President Cossiga and Foreign Minister Andreotti were enthusiastically received in Wolfsburg. After all, it's the largest Italian city north of the Alps.





16 Mayor Werner Schlimme (left) and Chief Municipal Director Professor Dr. Peter Lamberg award me an honorary citizenship of Wolfsburg. Over half a century, it has become my first home town.



17 Salvatore Pravata (right) was my foreman during a Saturday shift in Hall 54 in 1991. On my other side is my shift buddy, Torsten Jakobs. I remain on friendly terms with both to this day. I was assembling cables for the Golf.

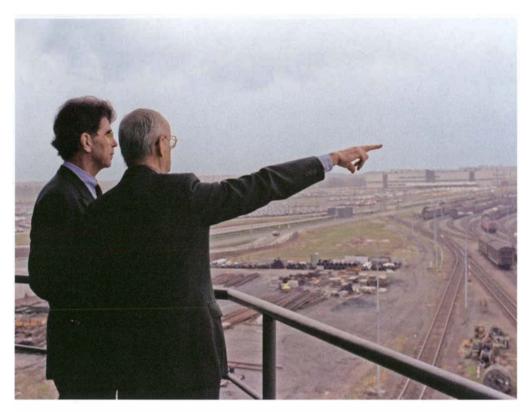
During a shift in the Hanover commercial vehicles plant in 1983, I worked on the rear axle of the VW LT. At that time I was still relatively new at the company, and my work buddy Hubert Jakubowski at first mistook me for a Lutheran bishop



18 From time to time, my practical skills were put to the test: spot welding in a factory hall at our Mexican subsidiary in 1991. I wasn't short of an audience.

19 Berlin always played a special role in VW's corporate policy: the then—Mayor Eberhard Diepgen with the VW supervisory board chairman Karl Gustav Ratjen and me.





20 Head of the Deutsche Bundesbahn, Heinz Dürr, at the Volkswagen plant in 1991. With Dürr's help, I managed to get the track for the new high-speed rail line from Berlin routed through Wolfsburg, contrary to the plans of everyone else involved. And so Volkswagen – the European railways' biggest customer since way back – got a high-speed rail station in its capital city.

21 My bodyguards were also my companions in sport. From left to right: Helmut Kaussel, Hubert Sprenger, Frank Georg, Peter Stemmler, Michael Landmann, Detlev Stahmer, Hanno Funke, Klaus-Dieter Hoffmann, Klaus Rüger, Michael Neuse, Manfred Kühn, Thomas Krahl, Hans-Jürgen Wehlauer.



Some of us were not surprised by the decline in Beetle sales in Europe around 1960. In 1959, when I was head of Volkswagen of America, I had already taken the precaution of expanding the US sales organization from 300 to 1,000 VW dealers, even though there was theoretically not enough available vehicle production capacity to satisfy that, as Wolfsburg made amply clear to me.

Apparently, though, it was us who had a more realistic view of the market. What we referred to as "gray imports" of Beetles were a clear sign to us. In 1958, these accounted for almost fifty percent of the total VW registrations in the USA, amounting to 100,000 cars. Without these "gray imports" from Europe, thanks to major European VW business partners, Renault would have overtaken us with its Dauphine. At that time, there were large workshops in the Port of Hamburg mass-converting European Beetles to meet American specifications. This business came to a sudden end in early 1964, after I had returned to Europe.

Back in 1960, Wolfsburg had presented the prototype of what would later become the Type 3 sedan to the bosses of the VW subsidiaries from Canada (Werner Jansen), Asia, Australia/New Zealand and Africa (Klaus Detlef von Oertzen). Brazil (Wilhelm Schultz-Wenk) and me. None of us were particularly impressed by it, which resulted in us establishing a "secret greeting" among ourselves. Werner Jansen instigated development of the Type 3 Variant, setting in motion a vehicle type that continues to play an important role in the VW product range to this day. After I returned from Europe, I was soon increasingly confronted by vehicle development issues – a key remit for a sales and distribution boss, even if he is generally the first to go if crucial product policy errors are made. Back then, Porsche suggested an aircooled six-cylinder rear-engine vehicle for what is now the Audi A6 class, which would have opened up new markets to

us, even if they were still very small at that time. I was the only person at Wolfsburg who voted for this car, and not only because it could have served us as a test case for launching a new model, but also because it was positioned far enough away from the Beetle in the market.

During my time in the USA, I had been fascinated by Formula V racing, which was becoming more and more popular there. This racing sport category was promoted by enthusiastic American VW dealers and US Air Force officers, all the way up to General Griswold at the Strategic Air Command in Omaha, Nebraska, who were all fans of the Beetle. During an Easter vacation to Nassau in the Bahamas, my wife and I also had great fun driving Formula V, although not in a race. Back in Germany, we soon had the idea of bringing this popular motor sport over from the US to Europe. In 1966, Nordhoff approved a budget of 100,000 marks for me to do so.

With the help of Ferry Porsche and the Porsche racing driver Huschke von Hanstein, who I considered a good friend, the inexpensive Formula V racing cars became the biggest racer class in numerical terms, from one day to the next. There were 2,500 of them. VW simply couldn't lose with this car. An entire generation of Formula One drivers was recruited from Formula V in the '60s and '70s, including Lauda, Rosberg, Scheckter, Piquet, Fittipaldi and Mass.

Anton Konrad, head of PR for the Volkswagen Group during my time as CEO, was made manager of this racing series, which received fervent support from our wholesalers and importers. This ice had been broken and now, for the first time, VW and motor sports were linked. For me, this came full circle

¹⁸ The Beetle had become a cult item and pet hobby for many, also giving rise to the dune buggy, which was soon to be seen on US beaches everywhere. With the help of Karmann, I brought it to Europe at zero cost.

in 1990 when Michael Schumacher became German champion in Formula 3 (with a Golf engine). VW also scored successes in rally racing, with Audi celebrating major triumphs in parallel. Nevertheless, we had successfully stayed away from Formula One.

But to return to VW's product policies: after coming back in 1964, I strongly disapproved of a vehicle that had been developed to series maturity, the EA¹⁹ 97. It was again based on the Beetle platform and, with its conventional body, it ended up more expensive and heavier than planned. To me. this didn't seem at all the right way to make up for falling Beetle sales. Unsuited as it was to the intended task, I feared that this car would ruin our reputation. Even the Type 3 had been too close to the Beetle, but the EA 97 was even closer. And so I saw this design as a mortal danger to the company, as it could be interpreted as an admission of the approaching end of the Beetle era, which was already a favorite topic of the press at that time.

I spent far too much time going back and forth between my colleagues, agitating against this car. It was already rolling off the assembly line at the Wolfsburg plant as a pre-production series, and it was scheduled to appear at the 1965 motor show. Finally, Nordhoff agreed to my request to cancel the project. The EA 97 disappeared after a board meeting without debate in May 1965, to the dismay of the engineers, who had a long memory. The vehicles that had already been built were scrapped. The supervisory board acknowledged the decision without comment.

Unlike in Europe, I considered our position in Brazil to be so solid (exceeding, as it did, forty percent of the market share), that I thought it safe to ask Bobby Schultz-Wenk to take tools and equipment used for the EA 97. However, the

¹⁹ From the German abbreviation for "development order."

project at first continued on its ill-fated course. The cargo ship carrying the production equipment sank and wasn't salvaged until a year later. But, as there was no Type 3 cars on the Brazilian market and the competition was weak, the EA 97 managed to make headway, especially in the Variant version developed in Brazil and known as the "Brasilia." It continued in production there until 1982.

A second ongoing development was the EA 158. The idea of positioning a modern vehicle with a 900 cc engine below the Beetle - in those days, vehicles were often classified according to displacement because of how the motor vehicle tax was written – seemed to me to be one with potential. However, when I found out that the car wasn't going to be the planned 750 kilograms – which was what the Beetle weighed at the time – but closer to 900 kilos, I requested a meeting with Nordhoff in my capacity as Head of Sales. A few days later, I flew to South Africa. On my return, I found out that my commendable head of prototype "informant." the construction, Rudolf Ringel, had been sent into retirement. In his concern, he had broken the unwritten rule according to which each board member had the sole right to report on his own department. In cases like these, there was no court of appeal, no chance of rehabilitation. In those days, like all large companies, we were a silo organization, strictly arranged according to function, with a hierarchy based on military structures. The two head engineers in the company jealously guarded their monopoly on information.

Just a few months later, VW suspended work on the EA 158 without further ado. The vehicle had exceeded a weight of 900 kilograms and blown its budget. This meant that Volkswagen was still dependent on the Beetle. Neither the VW 411, launched in mid-1968 and still based on the Beetle concept, nor the K 70 in the same price category, "inherited" from NSU and riddled with compromises (with front engine

and front-wheel drive) represented viable extensions to the range. The sales figures may have demonstrated the strength of our sales organization, but it wasn't enough for either them or us to live off.

Although Beetle sales had risen again after my return from America, we knew that it was by no means impossible that demand for the Beetle could collapse, and so we would need a strategy for such an eventuality. Our cupboards were bare.

Against this backdrop, a product planning committee was created in 1967 at the intersection between Nordhoff and Lotz: the APP, also known in-house as the Prince's Guard after its creator, Gerhard Prinz, 20 who had come with Lotz when he joined VW from Brown, Boveri & Cie. Under the leadership of Wilfried Ulbricht, previously at Krupp, the APP was made up of representatives from all business divisions. Its task was to plan and coordinate the transition from the Beetle to a new, modern product range. This was a matter of life and death for VW, as the Beetle clock was really ticking down now, even if we kept managing to wind it up again.

Given the size of the job at hand, multiple development departments were tasked with devising concept proposals:

- · Volkswagen's Technical Development in Wolfsburg
- · Auto Union's Product Development in Ingolstadt
- · Porsche's Development in Stuttgart, which had often processed orders for VW in the past

All three submitted different technical concepts for the

²⁰ The APP also included Claus Borgward (Quality Assurance), Wolfgang

Lincke (Research and Development), Helmut Müllmann (Finance), Ludwig Abmeier and Rainer Tiede (both Purchasing), Arthur Schuld, followed by Helmut Amtenbrink and Peter Krohn (all Production), Edgar Freiherr von Schenck zu Schweinsberg, Peter Weiher (both Sales) and, as keeper of the minutes, Kurt Bohlmann (Research and Development).

Beetle's successor, and all these were developed up to the prototype stage. The APP strictly monitored compliance with the specifications, which detailed all the features and requirements for the product.

The development department in Wolfsburg, injected with new energy under the leadership of Hans-Georg Wenderoth who had recently joined from NSU, managed to cut out a lot of dead wood and tread new paths. As a replacement for the Beetle, they presented a compact, light sedan with a tailgate, front-wheel drive, transverse engine and an ingeniously simple twist-beam rear suspension. The key players in the VW development team were – besides the VW (and Horch/Audi) veteran Kurt Schwenk, who was responsible for the chassis – Gerhard Choné and Ekkehard Döhring, responsible for power train and chassis development. Both engineers were then new in the company, and both sadly died in 1973 during test drives.

Despite its top notch technical concept, the VW model suffered from an unattractive design. However, this problem would soon be solved when Giorgetto Giugiaro was put in charge of the design. In the Golf body, Giugiaro managed to create a form the basic elements of which have survived for more than three decades in all the subsequent "Golf class" cars.

Auto Union's development proposal largely stuck to the familiar in-house technical concept with a front-wheel drive and longitudinally installed engine. However, compared to the existing series-production models, the new design was significantly lighter and more compact.

Finally, the EA 266 developed by Ferdinand Piëch at Porsche had, like the Beetle, a few "unique selling points," much to the delight of the sales department, but its midmounted design with a water-cooled four-cylinder in-line engine was the subject of serious controversy, and not just among the developers.

In 1971, in the Rudolf Leiding era, the committee eventually

settled on the VW development. This marked the birth of the Golf. With it, Volkswagen made the unavoidable break with the air-cooled rear drive in favor of the water-cooled front drive. The Auto Union prototype came a close second, mainly missing out on top spot because its design was too conventional. That said, some of its elements were used in the Beetle successor, in particular the EA 827 water-cooled four-cylinder in-line engine. The Audi model was developed further for the next vehicle class up, launching on the market first as the Audi 80 and later with a hatchback as the Passat.

By contrast, all work on Porsche's EA 266 ended abruptly. The only specimen of this type to escape flattening by a Leopard tank at the Porsche development center in Weissach on the orders of VW (it wasn't only the ancient Egyptians who wished to chisel events out of history), can be seen today, looking as contemporary now as it did more than thirty years ago, either in the *ZeitHaus* museum at Volkswagen Autostadt or in the VW AutoMuseum in Wolfsburg.

Leiding was rightly always skeptical about whether one model alone would be enough to replace the Beetle and guarantee full utilization of our enormous worldwide production capacities. For this reason, he had promoted the development of an even smaller and more economical vehicle back when he was the boss of Auto Union. The car was then launched as the Audi 50 and the Volkswagen Polo. Both models, fitted with the EA 111 engine from Auto Union, helped expand the Volkswagen Group's competitive standing around the world. In the end, and contrary to the expectations of many skeptics, the Golf managed the role of Beetle successor all on its own. The Golf platform was also used in the two-seater Scirocco sports car, likewise with a body designed by Giugiaro.

The EA 827 (Passat/Audi 80) and EA 111 (Audi 50/Polo) engine series developed at Ingolstadt and used in the new models still form the Group's standard power trains, after

numerous upgrades. More than a hundred million of them must have been built up to the present day. These immediately successful first water-cooled VW engines were designed by Franz Hauk, who had originally been posted together with Ludwig Kraus to Auto Union in Ingolstadt from Daimler-Benz, one year before we bought the former company. The completely new technology, right down to the gray cast iron engine block instead of magnesium, required completely new production facilities. The investment in radiator production alone at the Hanover plant, in collaboration with the French company Valeo, was unprecedented. And the new product range didn't only trigger gigantic investment on our part, it also required major investment by our suppliers and customer service organization.

Looking back, it was just one of many Beetle miracles that enabled the company and its worldwide organization to reach the safe harbor of the Golf, nine years after the end of the attempt to find a successor in the EA 97. This is a longer stretch of time than a normal model cycle. It demonstrates both the order of magnitude of the risk facing VW in this period of its history, and also the unique vitality of the Beetle.

The miracle had many different roots. First among these were the fully developed, distinctive vehicle concept, the unique Beetle shape, the almost legendary reliability (by the standards of the day) and continuous product upgrades leading up to the "Super Beetle" of the early '70s. Last but not least was the unique product personality that the Beetle had carved out for itself in the market. It had become a classless car, one which anyone would be happy to be seen driving. It defied conventional classification, and our American advertising agency DDB (Doyle, Dane & Bernbach), who followed me to Europe and then to the entire VW world, knew how to make the most of it.²¹ And we shouldn't forget the strength and

²¹ Advertising slogans including "It runs and runs and runs ..."; trade journal

determination of our worldwide VW dealerships, who helped establish the crucial ties to customers.

It's hard to imagine now what would have become of Volkswagen without the help Audi provided from Ingolstadt during that critical period of upheaval. And to think that in 1965 we came within a hair's breadth of "liquidating" Audi's development and production expertise in the field of frontwheel drives and water-cooled engines, the only knowledge of its kind in the Group.²² Can this help explain the somewhat complicated relationship with our Bavarian sister company, the dwarf that saved the proud giant from the abyss?

Volkswagen's thinking and action on product strategy have remained true to this new program and its philosophy to this day. The guiding theme was a "down to earth" policy that was strictly oriented towards lucrative market segments and our customers' expectations and less towards fame or fashion trends. Even without the unique Beetle shape, we were still preserving VW's exclusivity on the world's markets. At that time, we couldn't have known that the successor to the Beetle, designed by our engineers and with its body by Giugiaro, would not only continue the global success of the Beetle, but would also create a new vehicle class all of its own, the Golf class. To this day, more than thirty years later, the Golf family, which has now been expanded to include the Golf Plus, remains the benchmark in its class around the world.

Another result of the newly created product team at the time was a VW sports car with a front engine providing rear-wheel drive, in which the gearbox was mounted at the back on the differential gear for better weight distribution. I had come to appreciate this design at the end of the war in my parents'

Advertising Age voted the "Think small" ad the best advertisement of the 20th century.

²² See also chapter 4, "Audi's breakneck rise to the premium class," page 117 et seq.

escape car, a Lancia Aprilia with a VR-4 engine. It was the only gasoline vehicle (not powered by wood gas) that my father was able to get hold of when the Soviets were about to march into Chemnitz. Contrary to plan. however, this new VW sports car developed by Porsche with VW/Audi components did not end up seeing the light of day as the successor to the two-seater mid-engine VW 914/916, which was also designed by Porsche (with electronic fuel injection, which had been used for the first time ever in the VW 1600LE in 1967), but instead as the Porsche 924.²³ It was produced by Audi at the Neckarsulm plant.

We didn't think our mission at VW was to set new world records, even if many ended up falling into our laps. After all, the automotive world expects us to perform a pacemaker function in mass motorization. For customers, this means trust in the manufacturer, safety in every dimension, reliability, durability, stable value, cost-effectiveness, customer service, convenience and reliable technology. The harmony and synthesis these provide called for ground-breaking developments, careful use of resources and environmental progress while keeping outlay and income to an acceptable ratio. Even with an obviously more conventional product range, Volkswagen retained its exclusivity and its unique image. You know what you're getting: an honest car that runs and runs and runs.

The initially two-brand, then four-brand platform strategy positioned the Volkswagen Group to optimally serve the markets and their constantly emerging new segments and niches. All our brands can draw on a modular system of axles, gearboxes, engines and modules, supported by a global Group purchasing department. At the same time, a controlled degree of internal competition promotes differentiation and the characteristics of the each brand: here the Latin,

²³ See also chapter 7, "Cooperation strategies," page 212 et seq.

Mediterranean character of Seat, there the Slavic feel of Škoda, here Volkswagen in the high-volume segments, including its technical added value, and finally Audi in the premium segment.

From the outset, we made sure that the differences between our brands were not just cosmetic, as is the case with General Motors, where short-sighted optimization driven by the overpowerful financial divisions resulted in excessive product standardization (right down to the body) of the brands. This killed the spirit of the brands, resulting in severe market share losses in the last quarter of the 20th century. It was not until 2003 that GM approved independent technical development by the Cadillac division, which is surely only down to the new vice chairman and GM's head of development, my friend Bob Lutz.²⁴ The complete centralization of GM technology certainly saved costs, but it also paralyzed initiative, and diluted and devalued the brands. Supporters of this philosophy are willing to invest 1,000 to 4,000 dollars per vehicle in sales promotion at any time, but do not allow an additional hundred dollars for a better rear axle, for which the market amply rewards the Europeans. European and Japanese manufacturers and their dealers don't need to sell the bulk of their vehicles dirt cheap for the fleet, leasing and rental business and yet they still continue to gain market share in recent decades.

The in-house competition in vehicle development perfected by Piëch is the fiercest form of competition that I know because it is the most transparent. It is the reason why we have such fast-paced progress. In contrast, by ignoring these realities and keeping a short-sighted focus on shareholder value, the US automotive industry has lost half of its domestic passenger car market and found hardly any new export markets, while at the same time their stock price and

²⁴ Bob Lutz was previously President of Chrysler, a board member at Opel, BMW and Ford Europe.

creditworthiness hit rock bottom.

When I returned to VW in 1982, internationally acclaimed pioneering work had already been done in the field of passive safety research, thanks to professors Ernst Fiala and Ulrich Seiffert. As early as 1968, we officially participated in the development of a safety vehicle in the USA at the expense of the US automotive authority, gaining valuable knowledge in the process. At that time, European authorities were not planning for these issues at all, despite the alarmingly high number of fatalities.

A year earlier, in 1967, I approved (through Volkswagen of America) a research assignment by Cornell University to analyze the consequences of accidents involving VW Beetles and to make the results available to the public. Art Railton had drawn my attention to the project. It was not just a "first" for Volkswagen, but for the industry as a whole. At that time I was very impressed by the well-known consumer lawyer Ralph Nader in the USA, especially his book *Unsafe at any Speed*.

During development of the Golf III generation in the mid-80s, I shifted the issue of safety into the foreground. I agreed with my colleague Seiffert that we would no longer deny consumers around the world the strict accident safety regulations that had previously only applied in the USA. In practice, the US public, through its consumer organizations, demanded that passenger cars not only meet government safety regulations for a 30 mph crash, but that they also meet the requirements of a 35 mph frontal crash. This made the use of airbags unavoidable.

So while there were practically no safety standards for automobiles in Europe and the rest of the world, we were the first mass manufacturer to set the world's strictest standards as the target for all of our markets. When the Golf III appeared in 1991, it was equipped with airbags as standard and was the first in its class to not only meet the 35 mph frontal crash requirements, but also pass the side impact test at 33.5 mph,

which only became standard for all vehicles in the USA five years later.

If I am proud of anything, it is that decision made back then. The pressure of competition resulted in the general introduction of airbags by all mass manufacturers in a disproportionately short time. This saved the lives of hundreds of thousands of people or spared them serious harm in accidents. Up until then, airbags had only been reserved for a few premium class cars, mostly at a surcharge of more than 2,000 marks. Car magazines such as *auto*, *motor* & *sport* and the German motoring association ADAC actively and constructively addressed the issue. They provided impetus and transparency for buyers.

And so VW had started a revolution in the field of vehicle safety, driven solely by the power of the market, without a word from the legislature and the associated costs, compromises and delays. Progress in active and passive safety is now developing faster and faster, especially thanks to new sensors and more powerful computers that can individually control around ten airbags in a vehicle. But we are still a long way from reaching the end of this technical development, which will lead to a further decline in serious consequences of accidents and increasingly prevent accidents from occurring in the first place. This is not only great for people, it also has wider economic benefits.

In times of crisis, like when I returned to VW, there is always the risk of throwing the wrong thing overboard. As at Continental before, I also avoided slowing down our research and development at VW by cutting costs. There were, of course, heated arguments in our committee meetings, especially when technical innovations meant increased costs for new products. But only superior technology enabled us to justify our price level in high-cost Germany by offering a correspondingly high level of customer benefit and thus live up to our reputation. Despite our leading unit sales, VW

customers are buying exclusivity – but not short-lived fashion trends that would detract from the vehicle's resale value.

Reducing air resistance was part of Audi's *Vorsprung durch Technik* on its way to becoming a premium brand. Customeroriented innovations, even if they are associated with additional costs, usually create added value for the product. When companies are facing a downturn, these innovations are more crucial to success than ever. For me, it was obvious that although we were being squeezed by costs, without pioneering technical innovations, we would not be able to escape the trap.

At the time I took up the job, product policy surprisingly opened up opportunities to make considerable savings in investment and costs that would at the same time bring us dramatic advantages in terms of sales, earnings and market share and, last but not least, create jobs.

The situation was as follows: in 1982, the second Golf generation was a year away from launch. This meant that the Golf II Cabrio was about to be discontinued. The estimated investments for this would have driven up the price of the vehicle dramatically. And so I advocated keeping the Golf I Cabrio, even though the new Golf had improved significantly in terms of both comfort and technology compared to its predecessor, thanks to the team under VW chief engineer Wolfgang Lincke. This didn't exactly reduce the risk associated with my proposal. A step like this was also completely at odds with the routine way of thinking in our industry. All of this led to forecasts that automatically and exclusively made me responsible for the expected decline in sales of the Golf Cabrio.

I stood alone against the advice of all departments. Luckily for me, but even more so for the company and for Karmann, we ended up managing to extend the production of this sophisticated vehicle, which we had already written off, by another decade, to excellent returns and a lot of capital saved. We achieved previously unimaginable sales figures. Our convertible became the best-selling in the world – although I always had the impression that we could have achieved even higher figures.²⁵ This was true also for a Golf derivative that was far ahead of its time with its off-road vehicle look, the pet project of my colleague Fiala. Overall, our sales organization grew significantly, although you should never rest on your laurels. On the other hand, you shouldn't overstretch your team.

The discontinuation of a vehicle always involves a certain amount of procrastination as financial incentives and special low-cost models are offered to delay the inevitable, and so it was with the Golf I. I would even go so far as to claim that I invented this tactic in 1972 when I was sales director and the Beetle became the world's most produced car. Unfortunately, you can't patent something like that.

When planning the Golf I discontinuation, I realized that the Golf GTI, which had originally been created by car enthusiast engineers and our PR boss Anton Konrad, had established itself as a completely new sporty vehicle class. It generated the highest margins by far. In response, we put together a GTI as a special phase-out model at a reasonable price and it attracted customers beyond all expectations. Demand rose so rapidly that we ran into delivery problems due to capacity bottlenecks at our suppliers. It was the best thing you could hope for from a discontinued model. At the same time, we were laying the ideal foundations for the new Golf II to get off to a good start. Although it was, to all intents and purposes, too late, I still convinced our designers of the need to make stylistic changes to the C-pillar. Even if journalists bet me at the time that the Golf II wouldn't last four years, it ended up just as big a success as its predecessor. In nine years, 6.8 million Golf I cars

²⁵ The Golf I Cabrio remained in the product range for a total of 14 years and proceeded to sell 388,522 units – all manufactured by Karmann in Osnabrück – the best-selling convertible in the world.

had been built. Its successor managed 6.3 million units in eight years.

In the area of engine development, we were facing a number of important but also capital-intensive tasks: VW already dominated the passenger car diesel segment, and we now took on diesel (Audi) and gasoline direct injection technology (VW), the VR6 cylinder at VW, V6 and VS cylinder at Audi, supercharged gasoline and diesel engines, and four- and five-valve technology. These were all developments in which we were the leaders, just as the market expected from us. Added to this were all-wheel drive at VW and the introduction of lightweight construction (switching over the crankcase to aluminum), measures to improve vehicle safety, electronic vehicle diagnosis²⁶ and traffic control, as well as much more.

But our main strategic focus was on expanding the Golf's lead: the first in its class with a six-cylinder engine, and practical tests of twenty hybrid Golfs in Zürich by private drivers from 1991 to 1993, after we had previously developed this type of combined drive with Bosch back in 1987, trying it out for the first time in a Golf. Now, nearly two decades later, the booming demand for hybrid vehicles on the US market shows how far ahead of our time we were with this combination of gasoline and electric motor; a demand that is almost exclusively being met by Japanese manufacturers, primarily Toyota.

At VW we also made an early effort to build up and expand our position in market segments in which we were either weakly represented or not at all. A great deal of effort was also spent on improving the reliability of our vehicles and optimizing their mileage costs. Among other things, this included cheaper insurance classifications, which required

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²⁶ Under the leadership of Hans-Dieter Deiss, our customer service engineers developed the first electronic diagnostic device ever for authorized workshops.

close cooperation between designers, customer service and spare parts service. We also busied ourselves intensively with projects that might seem more peripheral at first glance, such as clearances, tidying up in the engine compartment (doing away with the clutter of signs, cable and wire routing) down to covering the engine compartment, which is now almost completely enclosed. All these seemingly minor improvements play a key role in the customer's impression of quality, but also the quality itself.

With the two new brands, Seat and Škoda, we were better able to penetrate the lower price ranges of the classic mass segments, including ranges we were previously unable to reach. Thanks to VW's brand value, which is derived from the objective and subjective added value to the customer, its prices were always positioned in the upper reaches of each market segment. But there is a lot of space below the Golf and the Polo, above all in the Mediterranean region, but also in South America, where we had and still have some catching up to do. Up to half of the total market there is contested by the lower vehicle classes. And of course, we mustn't forget China now, nor Asia in general, not to mention Central Europe.

Especially in poorer countries like Brazil, smaller vehicles were missing from car makers' product portfolios for decades. The Gol, a small car in the Polo class, developed in Brazil on a shortened standard platform of the Santana, was to be the first step in the right direction in the mid-1980s. Meanwhile, the VW Fox, also developed secretly in Brazil and manufactured exclusively there, is preparing to conquer the European market in the subcompact car segment. This segment, below the Polo, is one of the largest in many markets, including Japan. The Fox will also be available in China.

In Europe, Seat opened up a new market segment for us with its Marbella, a Fiat Panda derivative. With our new sites in Spain and Central Europe, we had the cost base to penetrate these lower price ranges. The relocation of Polo production to the Seat site in Pamplona, Spain, also enabled us to once again earn profits in this class instead of having to give it up.

When we are represented multiple times by our various brands in a relatively large vehicle segment, this often leads to the false assumption that we are cannibalizing ourselves. But this wrongly interprets each segment as a monolithic, homogeneous block. The opposite is true, and that's where the multi-brand policy comes in – but you need to know how to wield this weapon.

It is essential to give the individual brands a clear, distinctive identity, underlaid by a corresponding price policy. Due to the growing complexity of our markets and their segments and niches – a complexity that is also reflected in different price levels within a segment – it is becoming less and less possible to exploit these with the models from just one brand. Just as a McDonald's restaurant offers quality for its price range, quality is also taken for granted in a luxury restaurant. However, nobody would think of merging both brands and both price ranges for reasons of rationalization. It would water them both down and ultimately gravely endanger them: destroying them in this example.

The brand value resulting from the product, quality and marketing policy determines the price level and the acceptance volume in the respective competitive environment within a segment, right down to the resale price. It seems many have forgotten this when it comes to cars.

Pricing is not based solely on internal cost calculations that are of no interest to the market. Especially in multi-brand companies, a complex product, price and positioning policy essentially determines the overall success of market penetration. It is important to avoid substitutions, to address the defined sub-segments in a credible way and to make optimal use of them financially. Success can only be achieved through consistent long-term action, even if the market demands a certain elasticity. In the case of the Volkswagen

Group, the Seat and Škoda brands play an important, flanking role in this concerted effort, namely by competing with all the competitors that are priced below VW. At the same time, both brands can perform an important test function in the market, reducing risk for the Group as a whole.

As car manufacturers, our product portfolio and pricing policies also confer responsibility on us for the future of countless independent dealerships around the world who invest their capital, their staff and their entrepreneurial energy in us, often over the course of an entire career, frequently over generations.

Up until the second half of the 1980s, Audi and VW shared a common platform in the Passat/Audi 80/90 segment.²⁷ In 1973, Leiding had elegantly modified the Audi platform and body for the VW Passat by Giugiaro by turning it into a hatchback, with a minimum of investment and time. What was life-saving for VW in the early 1970s during the first oil crisis was no longer viable in 1986 in the context of our goal of developing Audi into a premium brand. VW and Audi models, still in the same showroom, substituted each other and limited themselves in their pricing policy and branding because they were too similar. This was another reason why I arranged for the platforms to be separated in order to enable a credible VW/Audi differentiation and pricing policy.

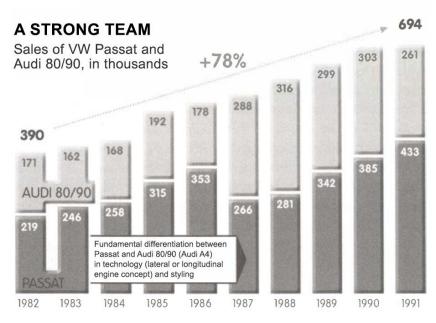
Audi retained the longitudinal engine installation, while the VW Passat would, at my suggestion, implement a transverse engine concept to match the Golf and Polo. The main advantage of this construction was the better use of available space.

The separation between the Passat and Audi 80/90 gave

²⁷ When I visited the head of research and development at Audi in 1981, when I was still CEO of Continental, he made it clear to me that the identical parts policy pursued in both model series (Audi 80/90 and Passat) went nowhere near satisfying the plans.

technicians at both brands the greatest possible creative freedom without appreciable cost disadvantages due to the respective smaller series. We reduced these by aiming for identical parts between the Golf and Passat "vertically." At the first attempt, we managed more than twenty five percent here. This did, however, involve dramatic investment for the changeover in production and for our suppliers, which led to hefty debates on the board before I was able to get my way. At that time we still assumed that these expenses were one-off.

The market immediately rewarded our policy, as sales figures for the Passat and Audi so convincingly demonstrate. Audi was now able to afford a more complex platform, in line with its class. In doing so, we created a credible alternative to the relevant competitor vehicles from Daimler and BMW.



Immediately after my resignation from VW, the separation between the platforms for the Passat and Audi 80 series (now the Audi A4) was reversed, only to be reinstated just one vehicle generation later. An astronomically expensive zigzag simply to reaffirm my theories in practice. You can't win simultaneously against BMW and Daimler on the one hand and all VW competitors on the other with only one platform.

During the development phase of the new generation of Passat, I had difficulty accepting the styling versions that were presented to me for VW's future top model. At that time, we just didn't have enough experience in this size category. We then decided to expand the quality, quantity and geographical spread of our design capacities. Audi expanded into Munich Schwabing, VW into Düsseldorf and Barcelona. In addition, the two brands opened a joint design center in Simi Valley, near Los Angeles. Many other sites would soon follow as the new brands also got their own design center, as did our factories in China, Mexico and Brazil. One of the first fruits of our Los Angeles styling was the "New Beetle" study. During a detour to California in the summer of 1992, I took the opportunity to inspect this vehicle concept, which was still top secret, and I was very impressed. America's love affair with the Beetle was apparently still going strong, especially among young people. And as the world champion in selling Beetles, the idea of the Beetle was one that followed me everywhere. The car was originally built by enthusiastic Audi designers from Simi Valley on the Polo platform. Piëch later approved the concept, but correctly insisted it be transferred to the Golf platform.

Fortunately, at the Geneva Motor Show in 1983 I had already seen a car in the Passat class designed by Giorgetto Giugiaro (with whom I had maintained friendly terms since development of the Golf I – his original drawing of the Golf I is on my office wall) with a transversely installed engine. The car, exhibited under the name "Orca," was a perfect automobile, one which matched my idea of what the future Passat should be, both in terms of technology and style, and

so we bought it. This was a bitter pill to swallow for the VW team. But the new Passat proved an outstanding success and was celebrated by the press as a "miracle of space." The *auto*, *motor* & *sport* headline says it all: "The stuff that space is made of." There was no longer any question of an overlap with Audi.

Even before my return to VW, in the fall of 1981, VW had presented the new Polo to the press in the Hotel Cala di Volpe near my summer house in Sardinia. The executive board and some works councils had traveled to Sardinia, where we had slotted in an autumn vacation. Only Toni Schmücker was missing because of his recent heart attack. Old colleagues met me by chance and invited my wife and me over. I spoke to Fiala, my colleague responsible for VW and Group development, about the need to develop a six-cylinder engine for Volkswagen. Why shouldn't Golf drivers be allowed to enjoy what motorcyclists had long taken for granted? Wouldn't the Japanese soon be bringing out this engine in the Golf class, anyway? Thankfully, this wasn't and still isn't the case, even more than twenty years later. We are still the only ones in this class with a six-cylinder engine.

When I returned to VW, this topic was on the table. The engine policy for our mid-range segment was under discussion. It is true that Piëch had developed a five-cylinder engine that was extraordinarily powerful and had proven successful in rallies when fitted with an exhaust gas turbocharger. To my delight, it also became our first diesel engine with direct injection and our first gasoline engine with five valves per cylinder.

But now we needed a credible, competitive six-cylinder range to match our size, our expansion plans and our product strategy, and, of course, to meet the needs of our existing and potential customers. Specifically, it needed to be suitable for transverse installation. Our five-cylinder power train was too long for this. After all, our European and Japanese competitors already had six-cylinder engines in the Passat class and up; most even had multiple six-cylinder series, even if they were often outdated. In the case of US automobiles, four-cylinder engines in this class and higher were virtually extinct for the time being.

And so, in the second half of the 1980s, we had two very different six-cylinder concepts developed for the Group in parallel in Wolfsburg and Ingolstadt and in fierce competition. The results from both brands proved so promising that I proposed to the product strategy committee and my fellow board members that both developments be approved for production. This dual strategy opened up a whole new way of thinking in the Volkswagen Group at that time. It also triggered significant investment. However, both engines complemented each other perfectly and couldn't have better suited the design principles of transverse installation at VW and longitudinal installation at Audi.

The VR6 engine developed by Peter Hofbauer under Ernst Fiala for VW went into series production in 1991 in the Passat and Golf. With its small cylinder angle of 15 degrees, it is essentially as short as is possible when installed as an in-line engine, and incomparably narrow as a V engine. Unlike conventional V engines, it gets by with just one cylinder head. It forms an excellent basis for a modular system with three or more cylinders, which is particularly suitable for freeing up space by being installed transversely in VW vehicles. Even with a small vehicle, the VR engine leaves more space for a crumple zone at the front, thus helping optimize the safety of our vehicles.

By the way, one of the first major customers for the VR6 engine, later known as the V6 engine, was Daimler-Benz, for

whom the genius Maybach had already designed and installed a two-cylinder engine with a similarly small V-angle way back in 1887. After my retirement, space-saving engines with five, eight, ten, twelve and 16 cylinders were derived from the VR6. Their production costs are relatively cheap thanks to the use of many common parts. However, given the competitive conditions at that time, I believed the upper limit for VW was a six-cylinder engine down to the Polo.

For Audi, with its longitudinal engine concept, I approved a V8 as the top motorization, which could be developed economically with the components derived from the standard 827 engine and supplemented by a V6 on the same basis. The V engine installed longitudinally also helps to save space because it is so short, and so this concept also provided safety reserves from the outset. The VS engine only looked like a conventional power train. In fact, it is an extremely compact and lightweight powerhouse that had almost no teething troubles.

At the same time, we were also looking at engine variants "lower down," which involved more than just three-cylinder derivatives of our two standard engines 111 and 827. On my initiative, for example, we developed a 0.8-liter four-cylinder engine in Wolfsburg as a strategic reserve for small cars.

A second major platform change would take place very soon for our successful Transporter. It formed its own product family with its rear engine, which was still derived from the Beetle and had proved more and more expensive and unsatisfactory as time went on. Furthermore, as a commercial vehicle, the compact Transporter had disadvantages during loading and unloading due to the drive block at the rear, but at the same time this was an advantage when transporting passengers due to it smaller size. Ever sine I spent time in the US, I myself have been an enthusiastic VW bus driver – an

enthusiasm that my family shares.

When, in the early '60s, our Transporter could no longer compete on the US market against the incoming local competition, I had the idea of shifting our focus to a new target group: the family, and particularly the suburban American housewife. The cargo transporter, overstretched when it came to rugged commercial use in the USA, became a reliable family bus. Our average profits for the better equipped vehicle went up, its marketing costs and costs associated with complaints went down. This success came about almost over night and it helped overcome a sales crisis for this type in the United States in 1961.

In Europe, it wasn't until more than thirty years later that families would start buying these categories of car. In the 1970s, we already had enough trouble selling our station wagons, such as the VW Variant, to families. At that time, this body shape was still too strongly associated with the cars tradesmen used. This is no longer an issue; quite the contrary in fact. For years, it has frequently been the case that more VW Variants or Audi Avants are sold than sedans.

In the USA, light commercial vehicles long ago displaced the passenger car as the most frequently driven vehicle. One reason for this is the ever growing popularity of pick-up trucks, but an even bigger reason is the love of sport utility vehicles (SUVs). These are off-road vehicles, frequently derived from pick-up trucks, and chosen more for their design than their technical concept.

During further development of our Transporter, we were faced with a fundamental change in concept from a rearengine to a front-engine drive, just as we had been during the transition from the Beetle to the Golf. However, the time and effort needed to develop a vehicle whose product range was intended to cover everything from modern commercial vehicles in all their different variants to sedan-like people carriers, far exceeded that needed to develop a purely passenger car.

I can still remember the countless meetings with employees from our commercial vehicle plant in Hanover, led by Karl Nachbar on our test track near Wolfsburg, where we tested the handling of prototypes. Giving the now front-wheel drive commercial vehicle, whether empty or loaded, the same driving characteristics as a passenger car proved to be anything but simple. Ultimately, however, our engineers mastered the task convincingly.

The result was impressive: the T4. It ended up in production for fourteen years. Its traction head concept with front engine and front-wheel drive and its two different wheelbases allowed a considerably expanded range of products. There was a choice of four, five and six-cylinder engines as well as all-wheel drive. If you look at the new T5 Transporter today, you can see that the changeover was an outstanding success.

I will admit, however, that the move away from the rearengine concept was very hard for me personally, and not just because of the high changeover investment. In doing this, we lost a unique selling point. Reluctantly, however, I bowed to the economic realities, especially with regard to our high-cost site in Hanover. Our problems with the cost of manufacturing the Transporter only eased thanks to our Central Europe policy and the second European VW commercial vehicle site in Poznań, Poland, which now has four plants.

The direction of travel in vehicle development was by no means "always more, always faster, always higher." We were aware of our duties to society and the environment: alternative drive concepts, from biodiesel to hybrid vehicles, were as much a part of it as recycling end-of-life vehicles, the use of environmentally friendly production technologies or working

on future prototypes (mostly positioned below the Polo) for motor shows to test public reaction. Our technical development department presented the first drafts of a two-seater Polo. We were on the right track here too. Finally, in 1988 we entered the territory of urban delivery vans with our (at that time) three brands.

There was an urgent need for action in the compact car class below the Polo, resulting from the aging of the Marbella, i.e. the Fiat Panda, at Seat. Our promising efforts to get ahead of the competition in the search to develop a successor in this segment are described in the chapter "Cooperation strategies," as are our first steps into the segment of large pick-ups and minivans. Our maxim here was to share risks by creating strategic partnerships.

In the automotive industry, once a product decision has been made, it is only many years later, often under changed competitive and market conditions, that you can see whether it was correct or not. We don't know until the end of a product's life cycle whether the billions in investment have paid off to our satisfaction. This is why the quality and timing of a product strategy are the real core of a company's success. The wishes and needs of our brands' customers around the world and analyses of local income, working conditions and competition are important (but by no means the only) parameters that need to be taken into account in this complex process.

If, in the end, decisions turn out to be wrong because you didn't sufficiently anticipate your competitors' moves, for example, or development capacities were directed at the wrong market segments, this can quickly lead to decline or even to a serious crisis. This affects jobs, dealer livelihoods and the fate of entire sites. This highlights the weight of not only the industrial responsibility but also the economic

responsibility that our key industry bears worldwide. At the end of the day, it is always about the fate of people and their families – or, in the worst case, the fate of entire economies.

Approving the budget and specifications for a new model is usually preceded by long debates and often tough struggles with colleagues, engineers and the other parties involved. Everything has to be done under massive time pressure. As you advance towards series-production of a vehicle, corrections become more and more difficult, if at all possible, and progressively more expensive. They have to be kept the an absolute minimum. The personal strain is considerable, and you end up taking a lot of your worries home with you.

With the explosion of variety and ever shorter product cycles, only a few successful exceptions can manage the risks in our industry in the long term. More than ever, it is not just the quality of the individual product that determines its success, but its place in the overall concerted effort. Properly distributing energies to brands and markets is just as decisive as mobilizing intellectual potential in the corporation. Global segmentation and decentralized development and production are important. Development areas in particular must be located in the major markets of Europe, Asia (China) and America. With the growing pace of progress and increasing proliferation, a centrally controlled, customer-oriented division of labor in all continents is one of the decisive factors for success. Bearing this in mind, staff rotation and a longterm personnel policy across entire professional careers and beyond have often not yet been given the attention they deserve. It requires high caliber personnel directors with their fingers on the automotive pulse who are able to think globally and ahead of their time, and who inspire confidence. The growing demands of the market have massively increased the complexity of product and process developments, as well as cost and time pressures. Under these conditions, shortening development times and optimizing the entire value chain must take top priority — challenges that would be impossible without the use of information technology. The arrival of this technology in our industry revolutionized product development and production planning, and dramatically accelerated process flows. It is only with the help of information technology that it has become possible and feasible to process the constantly increasing amounts of data and coordinate globally operating development capacities. Virtual factories also enable planning, simulation and optimization of all production processes up to and including the integration of suppliers. Information technology has thus become a key criterion for the success of companies. Its importance in the race to innovate will continue to grow.

Essentially, there are always more good ideas and possibilities for innovation than you can afford or you should risk. However, deciding to innovate too little is just as damaging as the opposite. There are many unknowns in this process. Different responses are needed in different regions at different times. It is all the more important to use the entire range of instruments available to us, including modern test methods for consumer reactions (focus groups), in order to obtain the broadest possible basis for making decisions.

More than ever, the key skill will be having the right information in the decision-making centers at the right time. In the end, however, entrepreneurial instinct at the top of the company determines success. This requires independence and assertiveness, not majority decisions. Instinct results from the sum of your global experience and constant proximity to the market.

"Intuition is simply the result of your cumulative experience," said Albert Einstein. ²⁸ Familiarity with your

²⁸ See "Albert Einstein und die Physik des 20. Jahrhunderts" in: Abenteuer

competitors – everything from their management to their products – is just as important as constantly exchanging knowledge and experience in all conceivable areas of product policy.

And so I spent a lot of time not only in our sales and production departments, but especially also with our developers and designers, who are daily faced with the seemingly irreconcilable conflict between budget and specifications. This way, I got to know the various teams, such as the team under Wilhelm Schäfer in Wolfsburg – whom we have to thank for the design of the Golf II and III – or the team under Hartmut Warkus in Ingolstadt, who strongly shaped the Audi line. You benefit from each other's expertise and influence each other. I also got to know and appreciate the international team of designers at Seat and Škoda. In this way you develop a "feeling" for different cultures and ways of thinking, which are reflected in the products.

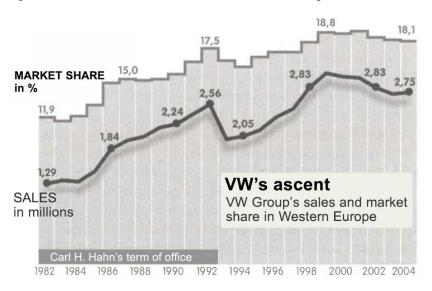
Market research companies such as J.D. Power in the USA also provide us with a complete, objective picture of automotive customer satisfaction worldwide. From a customer's thoughts on a door handle, through to their response to an unscheduled visit to the workshop, we receive information about our own products and those of our competitors. With all this comprehensive transparency, however, each manufacturer ultimately draws its own conclusions, which in turn sets it apart from its competitors.

The best opportunities to meet customers of all ages in person and refine my feeling for the market and products, apart from surprise visits to our dealers, were always at motor shows in Germany and elsewhere. You can train your judgment at your own exhibition stands and those of the competition by listening closely to visitors. The crowds mean

der Erkenntnis, Deutsches Museum, 2005, page 56.

that these can be tough days when you have to leave the comfort of meeting rooms behind. No matter how good professional research is, it can't replace this proximity to the market.

The market is an infallible seismograph that ultimately decides whether you are on the right track. During my tenure, we increased our market share in Europe to nearly fifty percent, where we continue to lead from the top.



4 Audi's breakneck rise to the premium class

My first association with Audi will always be DKW, the largest motorcycle factory in the world before the Second World War. The Dane Jørgen Skafte Rasmussen founded it in 1907 in the Zschopau Valley of the Ore Mountains to manufacture machines, metal goods and fittings. In the early 1920s, he started manufacturing motorbikes. My father, originally from Bohemia, joined him in 1922 as head of sales and right-hand man. He had returned from the First World War as a first lieutenant in the reserve forces of the Imperial Austro-Hungarian 37th Honvéd Regiment and then, true to family tradition, received a doctorate from the University of Natural Resources and Life Sciences in Vienna.

It was thanks in large part to his enthusiasm for motorbikes and his creativity, especially in product, marketing and dealer policy, that DKW experienced such a rapid ascent in the '20s. With tireless energy, he dedicated himself to enhancing the two-stroke engine and setting up an efficient sales and distribution organization. My father was not only the first to create a modern customer service, he also pioneered completely new ways to promote sales by introducing installment purchase transactions and organizing dealer conferences and road shows. This made him one of the marketing trailblazers of the German automotive industry.

During the motorcycle racing season, nights in the narrow Zschopau Valley were filled with the noise of the racing engines on the test stands. If they sputtered out or they were switched off, the sudden change would wake you up.

In 1931, the DKW product range was expanded to include a two-stroke passenger car with a transversely installed front engine and front-wheel drive: the F 1. This design principle, which the designer Sir Alec Issigonis helped bring to the mainstream in 1959 with the Morris Minor, can be found in most passenger cars today. In 1928, DKW bought Audi in

Zwickau. This brand also set standards in front-wheel drive technology with the "Audi Front" in the early 1930s. The pressures of the Great Depression led to the forming of Auto Union in 1932, with DKW under the leadership of Richard Bruhn at its core. It brought together four traditional companies from Saxony that had had a decisive influence on the state of automotive technology, which was still so young at the time: in addition to DKW and Audi, it also included the automobile brands Horch and Wanderer. Together, they formed the second largest car manufacturer in Germany.

War and German partition led to the dismantling and liquidation of Auto Union. It would be reborn in Ingolstadt on the Danube. Up until 1945, Ingolstadt had been a traditional garrison town for Bavarian military engineers. With the end of the war, it had lost this source of income and meaning. Then automobile pioneers moved into the city. The location was chosen from my family's nearby place of refuge in Sandizell.

In the very same year as the German surrender, 1945, a "central depot for Auto Union spare parts" was established in Ingolstadt, and this later became an "Auto Union working group." Almost the whole of the first team was guided out of Saxony and across the zone border, which was fiercely guarded by the Soviets, by our DKW dealer Edgar Friedrich from Hof. In 1946, chief engineer Hermann Weber also smuggled the construction drawings for a DKW motorcycle, the RT 60, across the Iron Curtain in his luggage. The industrial plan of the Allied Control Council stipulated that only motorcycles with up to 60 cc displacement could be built in Germany. This is why the RT 60 was meant to mark the beginning of a new Auto Union. But it only existed on paper. By 1947, US Secretary of State George C. Marshall had announced the Marshall Plan for the reconstruction of Europe, which was to pave the way to an undreamed of future. However, soon after their trip to West Germany, chief engineer Weber and his team began an odyssey to the Soviet

Union, where he died.

I turned twenty one that year, living and working in the new Cologne headquarters of Richard Bruhn and my father in Ms. Schneidereit's apartment at Klosterstraße 57, where I was jack of all trades: driver, secretary and cook. In this role, I was also given the task of typing a decisive letter, which Richard Bruhn, true to his working method, dictated into the machine, specifying every period and comma. The recipient of the letter was the Cologne banker Friedrich Carl ("Sunny") von Oppenheim, to whom my father had been introduced by Otto Wolff von Amerongen.

Baron Oppenheim granted Richard Bruhn and my father a personal loan of one million marks without any security, a considerable sum in the year of the currency reform. This ushered in the resurrection of Auto Union. (At that time, incidentally, you could legally buy the new D-mark from banks in Zürich for around 17 centimes as what was known as an "escrow mark" for investments in the three West German occupation zones. Fresh supplies of D-marks came from the French zone in crates.)

Baron Oppenheim and Ernst Göhner, owners of the Swiss DKW import company HOLKA (a contraction of the German word for "wooden body"), made further funds available. In this way, the seed capital of three million marks was scraped together. In 1949, Oppenheim, Richard Bruhn and my father founded the second Auto Union GmbH in Ingolstadt, the nucleus of today's Audi AG. The banker von Oppenheim, at that time already a Bentley driver, became chairman of the supervisory board. His skeptical partner Robert Pferdmenges, a friend and financial advisor to Chancellor Konrad Adenauer, greeted this move into the automotive business with very little enthusiasm.

With this modest equity capitalization, the new Auto Union was mostly reliant on bills of exchange. But it worked. The same year the company was refounded, in 1949, it began

production of a DKW motorcycle that had been one of the world's most advanced motorcycles before the Second World War: the RT 125. This machine would become my faithful companion a short while later during my student days in Paris – one on which I racked up a five-figure mileage in France, Switzerland, Italy and even as far as Spain.

At the end of 1949, a DKW fast truck (F 89 L) expanded the product range. It appeared on the market before the first VW Transporter. Its external dimensions were specified by the young head of construction, Kurt Schwenk, who had come from Horch, to fit the cross-sections of the casemates in the Ingolstadt fortress. Because that is where it was built. The vehicle was the world's first forward-control delivery van, a DKW innovation that immediately caught on. Finally, the DKW F 89 passenger car completed the product range. It was initially built in Düsseldorf on a former Rheinmetall site, where Daimler commercial vehicles are now manufactured.²⁹

In 1954, Friedrich Flick became a major shareholder in Auto Union. At that time he was particularly solvent because the Allies had forced him to sell his coal and steel holdings, which at that time still symbolized corporate prestige and national power. After multiple capital increases, Flick had become the second major shareholder in Auto Union by 1958. Göhner and Flick each held 37.57 percent of the shareholders' capital. In addition, Flick had gradually acquired 37.9 percent of the share capital of Daimler-Benz. Logically, it didn't take long before he brought his Auto Union stake to Daimler-Benz. The deal took place in 1958. His fellow major shareholder in Daimler (beside Deutsche Bank), Herbert Quandt – at the same time the largest shareholder in BMW – was facing bankruptcy. A merger under Daimler with the inclusion of Auto Union was planned and agreed, but it was prevented at

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²⁹ Rheinmetall had previously been forced to part with the site due to an Allied resolution. Auto Union was then given the opportunity to rent it cheaply.

the BMW general shareholders' meeting in 1959. Looking back at these events, BMW's small shareholders and BMW dealerships not only saved BMW, they also indirectly saved Audi.

In 1964, after having worked in the USA for five years, I returned to Wolfsburg and became a member of the executive board. One day Nordhoff called me in for a meeting. In his office sat Joachim Zahn, at that time the finance director of Daimler-Benz. I can still very clearly remember his battered briefcase, probably the only one he ever had throughout his successful career. He was offering to sell us Auto Union GmbH because they weren't "happy" with Ingolstadt, or to put it in plain terms. they weren't coping with it and hadn't managed to stem its losses.

This transaction laid the foundation for today's major competitor to Daimler-Benz and BMW: what would later become Audi AG. At the same time, this purchase also provided a vital aid for VW in its transition from the concept of the air-cooled Beetle rear-wheel drive to the water-cooled front drive, and as such it was heaven sent. Great strategies can arise in the brains of entrepreneurs – and even more rarely in strategy departments – but sometimes the greatest come about by accident.

Over a three-stage transaction involving one payment of fifty percent and two of twenty five percent to help the business partners save face, VW became the owner of what was then Auto Union GmbH on January 1, 1965. Originally, my colleague responsible for finance, Wolfgang Siebert, had seen an opportunity to negotiate an even lower price. But Nordhoff called him off, keeping his eyes on his main goal, a merger with Daimler, which he had been pursuing since 1955. With the sale of the loss-maker Auto Union, Zahn laid the foundation stone for the Wöhr truck factory. It was intended as the starting point for Daimler's domination of the world market in heavy trucks.

After the takeover in Ingoldstadt, VW had to start up a Beetle assembly line at lightning speed. And so, despite the fact that hardly anyone was willing to buy a two-stroke passenger car, and despite the huge stockpiles of two-stroke engines that were building up at Auto Union and at dealerships, the factory was already back at full capacity in May. Production of these engines was then stopped with the exception of one model. As head of sales, I managed to sell the three hundred or more extra VW Beetles rolling off the production line every day – in 1965 we sold a total of almost 62,000 vehicles. From May 1965 to July 1969, a total of 348,000 Beetles were made in Ingolstadt. Looking back, I'm amazed at my audacity, because production of the Beetle in Ingolstadt started up six months after the opening of the Beetle plant in Emden, in December 1964, where soon more than a thousand vehicles were being assembled each day.

Our sales results turned out to be a psychologically important step in restoring confidence in the future of the Beetle. In the early '60s, this future had been the subject of much discussion in Europe at large and in German politics in particular. The number of new registrations in Europe was then falling for the first time and it was only the success of sales in the USA that offset this (and then some). Until my return from the United States, this downward trend in Europe continued. We now reached the longed-for turnaround, particularly thanks to changing over sales at VW dealerships to stock on hand. Previously, customers generally had to wait patiently until the vehicle ordered from the dealer could be delivered from the factory. Now, they often got it from stock in the dealer's warehouse. This improved VW's market share and dealer morale, supported by an ad from "my" US advertising agency Doyle, Dane & Bernbach, which now had subsidiary in Düsseldorf.

However, Auto Union in Ingolstadt continued to post losses after our purchase, despite the Beetle assembly line. In the first

year, they amounted to 84 million marks, a serious order of magnitude for the time. We had underestimated how complicated the takeover would be. In this situation, I fought for a two-brand strategy with two independent product ranges and sales organizations. The successful divisional organization of the pre-war Auto-Union into DKW, Audi, Wanderer and Horch, which was abruptly ended by the war, was an example I thought worth following. If you position yourself at the right part of the pond with the right bait, you catch more fish with two fishhooks than with one.

General Motors had given me an even more convincing object lesson during my time in America. At that time, GM had such a perfect command of its multi-brand policy that, until the 1970s, the company had trouble staying below fifty percent of the US market, the absolute limit as far as the antitrust authorities were concerned. Today, however, GM has the opposite trouble due to its failed brand and product policy, not only having to accept market losses to less than thirty percent share, but also having given up one of its five car brands, Oldsmobile. This perfectly illustrates how difficult this policy is. It is no place for formulaic thinking and certainly not for short-term thinking.

I was convinced that a clever two-brand policy was the only correct solution for Wolfsburg and Ingoldstadt in the long term. As early as October 1964, I laid down this strategy in an internal memo to Nordhoff:

"In addition, it is our goal to build up a second strong dealer organization with the help of DKW, and we must therefore endeavor to keep both dealer organizations separate from each other ... Furthermore, we should check with the gentlemen in Ingolstadt whether the four-stroke version of the F 102 – with external changes – should be offered under the Audi brand and the current version of the F 102 should continue to be built as a DKW. We can then continue to serve the relatively small number of two-stroke fans and try to use the good old Audi

brand to turn today's F 102 into a solid mid-range vehicle that is clearly differentiated as a "European" car from the American cars that dominate this class."

I had also described this strategy in a speech that Nordhoff gave to Auto Union dealers in Ingolstadt in November 1964. Nordhoff stressed at the time:

"We are not thinking of swallowing up Auto Union's sales organization or ... bringing (them) into line. Quite the contrary, it is our determined intention to keep this sales organization as an independent organism with its own branches, and its large and, above all, its many small dealerships ... You will continue to sell Auto Union cars."

For me, the prerequisites for implementing such a policy were:

- 1. Restoring the confidence of DKW dealers in the future of Auto Union
- 2. Restoring public confidence in the quality of DKW vehicles
- 3. Restoring exclusivity and expanding the DKW dealer organization
- 4. Timely release of promised technical improvements and additions to the DKW range

The rapidly increasing losses led to a bitter awakening, but not to an acceptance of my two-brand strategy. Very soon I was plowing a lonely furrow. After even Nordhoff withdrew his support, it was hopeless to try and find allies, given the board mentality at that time. Each board meeting became an ordeal and a painful strain on my relationship to my mentor. Excluded, I was at the center of increasingly bitter discussions.

Back in 1963, as head of Volkswagen of America, I had suggested that Nordhoff invite German press representatives to visit the US, which they did that same year. Impressed by

our US dealer organization, which was trend-setting for the time, and the enthusiasm of our dealers for Volkswagen, the journalists proclaimed me the "Crown Prince" in Wolfsburg on their return home. This was followed by an avalanche of praise in the press, and not just for the Beetle and our sales organization in the USA. The Beetle was then accepted by the public again as a contemporary vehicle, although the general verdict was that high-powered American cars were undoubtedly superior.

The trip had thus achieved the goal we had hoped for, but for me personally it was anything but a good calling card as far as the executive board in Wolfsburg was concerned. So there were many plausible reasons for the fact that as a 38-year-old on a board of executives who were all in my father's age group, I was facing a precarious situation from the outset, and one which was exacerbated by my objectives for Ingolstadt.

I no longer had any objections to discontinuing the development of two-stroke engines. However, growing losses in Ingolstadt led to Nordhoff's decision not to carry out any further technical development of any kind there in the future. All "superfluous ancillary businesses" were to be disbanded and Ingolstadt was to become Volkswagen plant number 7. The management team was cut back dramatically as a result. First, anyone who bore the title "Director," a title that didn't exist in Wolfsburg, was let go or sent back to Daimler-Benz in Stuttgart. My sales director Emil Gräbner and the head of Technical Development, Ludwig Kraus, who had come to us from Stuttgart but was originally from Ingolstadt, were the sole survivors of this spring cleaning in 1965. Whereas Daimler had in its day still tried to influence Ingolstadt's business decisions by making recommendations, Nordhoff now led with an iron fist and took drastic measures.

My fellow board member Helmut Orlich, responsible then for development and quality at VW, had – to my joy and

surprise – finally and just in time been able to convince our colleagues on the board that Ingolstadt could not be compared to the normal, highly specialized Volkswagen factories, and that it was instead an integrated automotive company.

Nordhoff's saving decision came when he appointed Rudolf Leiding as the new Ingolstadt boss in July 1965. Although Leiding swept the place clean with an iron will, he didn't endanger the company's automotive heart. He also covered up development work that the Group's top management in Wolfsburg was unaware of, after coming across Audi's uncompromising model of the future – at that time still in plasticine – behind a curtain when doing the rounds. Without any approval from higher up, Ludwig Kraus had begun working in the stables on the development of a truly pioneering automobile for what was then the upper mid range. The result, the F 104, later called the Audi 100, was a genuinely underground development. I made regular, discrete visits to Kraus to gaze in awe at the maturing of a car that would have been a marvel of balance and progress even if it were bearing a Mercedes badge – and all without any input from third parties. Kraus, in turn, complimented me on our sales success with the Beetle, which he considered phenomenal.

But soon there were plans to relocate Kraus to Wolfsburg, where he was meant to take over engine development. And so he submitted his letter of resignation on a Friday and cleared his desk on the same day, as was the Wolfsburg custom. My colleague Novotny, the Group board member responsible for awkward cases of all kinds, immediately flew to Ingolstadt after consulting with Nordhoff. Obviously, they were aware of Kraus' value after all. He convinced Kraus to withdraw his resignation, and guaranteed him a position in the Ingolstadt management team, an adequate salary and a relocation from the stables and barracks spaces to a yet-to-be-built new building for technical development.

Under the market's pressure against two-stroke engines – added to my hostility to selling stockpiled DKWs through our US organization – the Wolfsburg board conceded at the end of 1965 that development of the F 103 would need to be expedited. The new vehicle with a medium-pressure engine was based on the DKW F 102 two-stroke passenger car. On selling Auto Union, Daimler committed to assisting Ingolstadt in development work on this engine until it was ready for series production. The legendary Professor Fritz Nallinger, Head of Development at Daimler, personally took care of the project. The matter was urgent, because our DKW dealers were practically only staying afloat by carrying out maintenance work on the German army's DKW Munga (jeep). However, the strategic objective within the Group was limited to simply maintaining the Auto Union dealer organization until the costs of this model had been paid off, at which point Ingolstadt would become a Volkswagen plant.³⁰

The board made no bones about its differences of opinion, with the result that I was constantly having to appease distressed Auto Union dealers, and particularly their spokesman, who I had known since my childhood, Emil Spahr in Stuttgart. I also sold my policy at dealers' conventions, and this soon came to the attention of the Auto Union supervisory board, as it contradicted the internal objectives. At the same time, I had to encourage my Auto Union dealers to do their very best, which was not an easy task. But, in their time of need, they clung to the glimmer of hope that I would manage to win my case – for lack of a better alternative.

After a tough struggle, I managed to get my way on pricing policy and the Auto Union dealers started selling the F 103 better than my fellow board members had been led to expect, which gave us a little breathing space for the time being. The executive board had also allowed me to use the name "Audi"

 $^{^{30}}$ Annex to the minutes of the executive board dated August 26, 1965. 103

for this car, as originally suggested in my internal memo of September 1964. From now on, this would mark a clean break with the DKW two-stroke past. There was, however, also an edict from Wolfsburg banning the use of the four rings in addition to the Audi lettering, starting with the F 103. Thank goodness, this order was never put into practice. Later, during the recession of 1967, Nordhoff regretted approving the name Audi and came to the conclusion that the name I had suggested was "the most unfortunate" name that anyone could have come up with.³¹

Based on the success of F 103 sales, the F 103 station wagon that was developed by Kraus next became a further building block in the survival of our Audi dealers, after my colleagues in Wolfsburg had reluctantly agreed to the project. The highly praised medium-pressure engine that Daimler-Benz sold us together with the Auto Union package formed the basis of our advertising campaign, lending it substance. DDB had by now also taken over advertising for the AUDI brand. Despite all its theoretical advantages, the sensational medium-pressure engine didn't have a future.

Rudolf Leiding, working together with the Audi board member for sales Ludovicus Dekkers, managed the masterstroke of ending the 1966 fiscal year in the black. At the same time, he announced the sale of all F 103 vehicles that had been produced and there was even talk of a possible price reduction. Without this success, of course, my policy would have remained pure theory.

Development of the F 104 was also given the go-ahead by the Wolfsburg executive board after a visit to Ingolstadt. Contrary to what some wanted, this development didn't take place in Wolfsburg, but in Ingolstadt from start to finish. Official approval for the vehicle was, however, initially granted with the proviso that "it will be the major car of

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³¹ Minutes of the executive board dated April 26, 1967.

Volkswagenwerk AG," as can be seen in the minutes of a board meeting of August 30, 1966. As far as I was concerned, this was something that could be argued about later. The main thing for me was that Ingolstadt would develop this vehicle in the first place and the conspirators Leiding and Kraus wouldn't get the sack, which they had both fully expected. During the presentation to the Wolfsburg executive board, Leiding took the precaution of leaving his coat on until the final okay had been given.

I have no idea now how from 1965 to 1972, as a junior on the executive board, I found the strength to fight continuously for Audi's independence. It wasn't just about having a second brand and increasing our market share, it was also about securing the livelihoods of the Audi dealers. They were anything but "dilapidated." This judgment of Nordhoff's was naturally suggested to him by VW wholesalers, who knew how to make the most of their long-term connections to Wolfsburg. Obviously. a second sales organization, and even more so the DKW/Audi direct dealer system, was more than a thorn in their side.

Regardless of this, I had extremely difficult, but always fair and constructive conversations with the authorized VW dealers through the VW dealer advisory board I had founded in 1965 (the first of its kind in Europe). This dialog was often tense but it never left a bitter aftertaste. The first chairman of this advisory board was Fritz Haberl from Munich, one of our largest and most prominent partners. He knew the business inside out, was a little younger than me, eloquent, charming and tough at the same time, and with his Bavarian sense of humor to boot. The Audi and Beetle situation and the unusual new conditions – i.e. stress – for the dealerships filled the agendas of our meetings, not to mention my plans to abolish the wholesale business. Our mutual willingness to keep a

³² Minutes of the executive board dated Thursday, October 22, 1964.
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dialog open ensured constructive cooperation in very difficult times.

Ludwig Kraus, a member of the management of Auto Union GmbH since 1965, was an outstanding development engineer and knew how to sell his work and show it in the best light. He was one of that long-extinct species of engineers who understood every last detail of an automobile's development, from the engine to the body – even the paintwork, in the best Daimler tradition. There were times when he would argue about the color of the car until sparks flew and he would slam on the table with his cane. Kraus had had a stiff leg ever since he suffered a serious accident during a test drive, but this had not dampened his spirit in any way.

With the construction of the first Audi 100 (now the Audi A6 series), the former designer of Daimler racing engines, working together with a dedicated team and the latest methods (finite elements and so on) managed to create a "Super Mercedes" that was way ahead of its time: exactly what Audi needed. The potential offered by this vehicle put wind in the sails of the previously deprived Audi dealers, but it didn't help me at all in my confrontations with the VW leadership and the VW wholesalers, who claimed that the fit and healthy VW dealers would certainly have managed even bigger volumes with a car like this.

In 1967, on the date of final approval of the Audi 100 by the VW board, the four-ring Audi emblem on the car was replaced by the VW logo at the end of the presentation. This rechristening could have meant the death knell for the DKW dealer organization and thus the end of Audi. Ingolstadt would then conclusively have become VW's plant number 7 and I would have been the only one in Wolfsburg not celebrating. Finally, literally at the last second, I managed to win Kurt Lotz over to my multi-brand strategy and stay the execution of Audi. This decision says a lot about Lotz, as he and I had fought over our not-infrequent differences ever since he

arrived from Brown, Boveri & Cie. as the designated successor to Nordhoff.

It is thanks to Kurt Lotz, who became CEO of Volkswagen after Nordhoff died in the spring of 1968, that the F 104 ever saw the light of day under the Audi brand name, as the Audi 100: a service for which he has never been properly recognized, indeed one that is never mentioned anywhere. And so the Ingolstadt company had been saved for the time being, but I knew only too well that we were only kicking the can down the road, because somehow relations with our southern partner remained complicated. In the Volkswagen Group, we were still a long way from a consensus in favor of an "Audi division."

It would take too long to go into all the details of Audi's pioneering days and do justice to all the men, besides the team around Richard Bruhn, Carl Hahn sen., Ernst Göhner and Baron "Sunny" von Oppenheim, who rebuilt Audi after the Second World War with idealism and skill. From the time after it was taken over by VW, special mention should go (in addition of course to Ludwig Kraus) to Rudolf Leiding, CEO of Audi from 1965 to 1968, and Ludovicus Dekkers, sales director of Audi, who I had recruited from out Dutch importer before we bought Audi. Also worth mentioning are Gerd Stieler von Heydekampf, head of Audi from 1969 to 1971, and his successor in this office, Gerhard Prinz, from 1972 to 1973, W. P. Schmidt, 1973 to 1975, Gottlieb M. Strobl, 1975 to 1978, Wolfgang Habbel from 1979 to 1987, and finally Ferdinand Piëch, 1988 to 1992. And Kurt Lotz naturally also belongs in this company.

However: Ingolstadt was not the only stage for his unappreciated merits. Even though his term of office only lasted three years, it was de facto under his tenure that the course of the Volkswagen Group was set from a Beetle monoculture to a wide range of models based on completely different technical concepts. To this day, he has not been

thanked for the fact that he initiated and pushed through this revolutionary transition. Instead, he was discredited by his opponents with flimsy arguments and finished off with the help of some journalists. It's high time for this to be corrected in Ingolstadt and Wolfsburg; after all, at that time it was a matter of whether the still young Volkswagen Group would even survive.

In 1968 Lotz had also – at my instigation – re-established the connection with NSU in Neckarsulm after Nordhoff had broken off the initial talks on a collaboration with the traditional South German company. The subsequent negotiations under the direction of Gerhard Prinz then led to the merger of Audi/NSU in 1969. At a stroke, this gave the new company the numerically largest dealer organization in Germany, but the majority of those numerous dealerships were still motorbike specialists. Many of these were small family businesses in which "she" ran the cash register and "he" ran the workshop. But the vast majority of these business had one thing in common: they were short of suitable products and short of cash. It was hard work selling NSU vehicles or even the first post-war generation of DKW cars. So we were faced with an unprecedented consolidation task on the road to a healthy dealer organization. It was to be the starting shot for our Audi direct dealer organization with sales centers owned by Audi.

Building on our close ties to Porsche, VW founded a global sales company in 1969 together with the Stuttgart-based sports car manufacturer at my suggestion: VW-Porsche-Vertriebs GmbH, in which both partners had a fifty percent stake. All Porsche sales were managed through this new company. The idea for it had grown from the realization that we couldn't successfully build up a successful Audi sales force in the United States on our own, but that Audi needed the US market. Porsche, on the other hand, could be supplemented and strengthened in the USA by Audi. Working together, the

two would be able to form a competitive dealer organization. Our VW dealers far exceeded all other dealer organizations in the USA in terms of sales and profits. If we had given them Audi as well, this would have been equivalent to demonstrating Johann Heinrich von Thünen's law of marginal land productivity, which doesn't only apply to agriculture.

In light of these considerations, we came up with "Porsche Audi of America," which grew to become a strong and very profitable dealer organization in the United States in record time. Only in exceptional circumstances and where no Porsche partners could be found in the market would we allow strong VW dealerships to sign a second contract for Porsche Audi in separate standardized operations with an independent management. The requirements we made of applicant dealers in those days were unprecedented. Despite this, there was no shortage of candidates. The reputation of our dealer policies and the confidence in our success magically attracted experienced automobile dealers. Everyone wanted to join the "Rolex Club." Twenty years later, Toyota would copy our example when it set up a sales organization for its luxury brand Lexus.

Porsche had brought its existing US organization under the management of Otto Erich Filius and his dealers to the new sales company. At the time, they were far from ideal because, with a few exceptions, they lacked healthy volumes and consequently they didn't have the right look.

The "Porsche Audi 917" racing car developed by Ferdinand Piëch with a more than 1,000 hp engine dominated the American Trans-Am (racing) Series in those days, earning us publicity and visibility – much as his grandfather's racing car had done for Auto Union before the war.

In Germany, at my instigation and to fierce opposition from all quarters, VW-Porsche-Vertriebs GmbH also replaced the wholesale side of Porsche sales with a direct dealer system. Wholesale had long been too costly in our sector and it had become obsolete over time. This reorganization represented a difficult, deep intervention, particularly for the human relationships that had grown up over the years. Former Porsche wholesalers have now become modern, profitable and exemplary large retailers, known as the Porsche Centers. This gave Porsche the foundations for an exemplary sales organization in Germany.

For VW wholesalers and their supporters in Wolfsburg, the Porsche direct dealer system rang alarm bells. It's therefore not a stretch to assume that this measure was yet another nail in my coffin as sales director. I was aware of this, but the personal risk didn't induce me to give up such a vital corporate goal: replacing the Volkswagen wholesaler system with a direct dealer system. But the wholesalers had more time on their hands to argue their case to the governments in Bonn and Hanover³³ and to the VW supervisory board, where they were also well represented by an importer.

The first time I proposed in writing that we should introduce a direct dealer system was in an internal memo to VW management in 1955; this would have been relatively easy and inexpensive to do at that time. After all, pretty much only VW was still practicing the antiquated form of distribution through wholesale. But people were still too stuck in their pre-war ways of thinking.

A VW wholesaling contract meant a lot of entrepreneurial endeavor and considerable investment and responsibility for the subordinate dealers and workshops, but it also meant prestige and a virtually guaranteed retirement income. There were too many wholesalers of very different sizes, and so there was no homogeneous structure. Added to this, the wholesalers – contrary to my practice with VW in the USA –

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³³ The German federal government and the state of Lower Saxony at that time still held an equity share in the company of forty percent between them.

also acted as retailers and so represented a strong source of competition for the other VW partners they served in their area. For the Group, this system meant a loss of profits (certainly more than two percent) and competitive disadvantages in many ways. And so I wanted to do away with it; a process I had gradually begun in the United States, much to the horror of Wolfsburg.

In the fall of 1971, Rudolf Leiding followed Kurt Lotz as VW CEO in Wolfsburg. This didn't strengthen my position as sales director. Our views on the cornerstones of company strategy were too different, not just when it came to the divisional organization of Audi, but also to the wholesaling system. And so the severance came at the end of 1972. "It's him or me" was the alternative that Leiding put to the supervisory board after I had arranged a visit from the Austrian Federal Chancellor Kreisky, who I was close to on a personal level, and this was doubtless misconstrued. But this incident was just a pretext. A year earlier, an influential VW importer – surely not on his own initiative – had asked me to surrender at a private lunch in the VW executive lounge.

I accepted the decision, which was conveyed to me by the chairman of the VW supervisory board, former State Secretary. D. Josef Rust, with his regrets. Ultimately, the first man on the executive board has to take responsibility for policy and make the decisions, as long as the supervisory board follows

When I was kicked out, my plans for a new form of VW sales and distribution and a separate Audi sales organization were rendered null and void. It wasn't until 1989, seventeen years later, that the direct dealer system for Volkswagen vehicles was in fact introduced, after the corresponding loss of time and profits. At the same time, the prerequisites for direct sales of spare parts were created in stages, a sales system in which the former wholesalers have remained involved to this day for legal reasons.

After Rudolf Leiding very soon went head-to-head with the works council about leadership issues, which is what being a CEO in Germany is so often thought to be about, despite the generally foreseeable effects it produces, Toni Schmücker was appointed head of the Volkswagen Group in 1975. He had previously been CEO at Rheinstahl and Ford Germany. His heart attack in the fall of 1981 forced him to give up the job early and led in the following year to my return to Wolfsburg. For the first time, Volkswagen now had a board chairman and Audi a supervisory board chairman who had known the company from its beginnings at Schrannenstraße 3 in Ingolstadt and who didn't need to be convinced of the benefits of a multi-brand strategy.

In Ingolstadt, I came across the works council chairman from the time of my father, Fritz Böhm from the Sudetenland, who advocated a clear divisional independence within the Group. He had exceptional political authority and intellectual independence. He was a member of the state parliament and the Bundestag for over fifteen years and had already been a member of the Stuttgart supervisory board back when Auto Union was owned by Daimler. Böhm knew how to keep his colleagues and co-workers on board and even how to convince them it was better for them to forgo top Wolfsburg salaries, i.e. the negotiated VW wage rate. This cost advantage became a key element in the survival of Audi. The in-house wage agreement would soon have turned Audi into VW Plant 7. This independent policy inevitably created a distance to the IG Metall union headquarters in Frankfurt as well as the works council in Wolfsburg. Böhm's influence on the continued existence of Audi could hardly be overstated. For him, Audi's interests always came first.

Although Audi was still an independent brand in 1982, it had been amputated since I left in 1973 and had no sales organization of its own. There wasn't even a trace of a separate in-house sales department, let alone a sales director

on the board.

After my departure, the worldwide Audi dealership organization had been liquidated, with compensation payments to Audi importers totaling hundreds of millions, and their sales function was transferred free of charge to VW dealers, wholesalers and importers. The only exception was the USA, where dealer protection legislation saved dealers. Only a few European Audi dealers managed to receive VW dealer contracts.

And so Audi's only option to survive as an independent brand was to live up to the letter of its tagline, *Vorsprung durch Technik*, and keep at the leading edge of technology – a moving target you should certainly set yourself, but not one you can reach at first go, let alone take for granted. Ludwig Kraus had already created the basis for this with the Audi 100. Ferdinand Piëch took over from him as head of development in Ingolstadt was in 1975.

After my return, we developed a bold plan with an ambitious goal: we wanted to enter the premium class, where BMW had been gradually establishing itself since the 1970s next to Daimler. A higher positioning was necessary if only to differentiate VW from Audi and thus avoid substitution and volatility, which had increased due to the joint dealerships.

With great creativity, Piëch worked out the basis for a credible "Vorsprung durch Technik" – progress through technology. The quattro drive was the first step in this process, and probably the most decisive. The superiority of this system in terms of safety, thanks to its independence from the specific road conditions, was conveyed to the public in spectacular form in rally racing. Overnight, we won our first real customers. But the road to the ladies and gentlemen who drive the Mercedes S-Class was a long and hazardous one. Our well-established competitors could draw on very well organized, strong sales forces, in the case of Daimler supported by its own branches, which had originally arisen

mainly to save on sales tax.

Our target audience still associated Audi with the blue clouds of exhaust from a two-stroke DKW. Our biggest shortcoming from a strategic viewpoint was initially the lack of a customer base with the corresponding purchasing power. And in the premium class, the lion's share of sales normally comes from an established customer base. Even more so than today, vehicles in this segment were replaced with another from the same brand, generally in more than ninety percent of cases. While it would not be possible to upgrade our vehicles to a state worthy of the premium class without increasing product costs – the quattro drive is only one example – our lack of an appropriate clientèle also meant we had insufficient unit sales to cope with all the cost disadvantages. On top of this came the weak purchasing power of our traditional customers, who we would continue to rely on. We couldn't afford to fall between two stools and ask too much of our loyal customers and thus lose them.

When trying to advance into the premium class, the lack of a customer base is ultimately the key cause of financial failure for most manufacturers. A cold-blooded calculator wouldn't usually choose to go through this lean period. And so it's no wonder that colleagues who should be taken seriously argued against my policies convincingly.

Even after my arrival, the press — not without encouragement from our subsidiary in Ingolstadt — was full of stories about oppression from uninspired but powerful board members "in the misty lowlands of Lower Saxony." Although, in my capacity as chairman of the Audi AG supervisory board, I never left any doubt about the clear line on separate brand policies we were now pursuing and the role I had played several times in rescuing Audi from oblivion, the story of "Ingoldstadt the underdog" was still an attractive one and it was popular in Ingolstadt.

The topics of "brand separation" and the "premium class"

were therefore right at the top of my agenda. However, it wasn't my custom to entertain the public with our future business policies. It would undoubtedly have helped me personally to do so, and it would certainly be in line with today's management style, but it wasn't my style and it wasn't in the interests of the company.

Implementing the brand separation proved to be a lengthy and expensive process due to the contractual agreements that had been drawn up in 1973, very much in the dealers' favor, when Audi sales were handed over to the VW dealerships. In North America, on the other hand, our problem was the inadequate quality of Audi at the time, which undermined the exclusivity of the Porsche Audi dealers. Independently of this problem, Audi was separated from Porsche in the USA and Canada in 1985 on the initiative of Porsche. Porsche now saw itself as big enough to take over the sales function in the USA under its sole control again. All my interventions with the family were fruitless. With this, VW-Porsche-Vertriebs GmbH lost its inherent purpose and it was dissolved.

Despite some quality defects, Audi achieved sales of over 70,000 vehicles in the USA by the mid-1980s. The profound break came with a campaign directed against the company involving cases of so-called "unintended acceleration" – a campaign with an almost devastating effect on the North American market.

The allegation was that vehicles in the Audi 5000 model series (these were sold in Europe under the name Audi 200) with automatic transmission supposedly accelerated despite the driver pressing on the footbrake, causing severe accidents. There were reports of Audis crashing through garage walls and even ending up in swimming pools as soon as you engaged the forward or reverse gear. The TV news magazine 60 Minutes repeatedly looked into the issue in detail, in a very one-sided way, reporting, among other things, on the tragic accidental death of a small boy.

The consequences of this reporting were devastating for Audi. Signs saying "No Audis" were put up in parking lots and in parking garages. Sales on the US market collapsed to 12,000 Audi models by 1991, and we only managed even these paltry sales figures thanks to astronomical marketing costs.

It was almost a lynching. In situations like this, the mood is not conducive to objective arguments. Even though the National Highway Traffic Safety Administration was unable to discover any fault and we kept winning one after another of the hundreds of pending cases, the costs added up to billions. The nightmare gradually came to an end when Piëch's engineers installed an electronic shift interlock that they had developed into the vehicle. From then on, in order to be able to shift the gear lever for the automatic transmission into a gear position, the driver had to press the footbrake at the same time. This way, the driver is reminded where the brake is before starting any journey. Suddenly, drivers no longer unconsciously mixed up the brake pedal and the accelerator pedal, which was incidentally a problem throughout the industry, as our statistics showed. In the end, it took the company more than a decade and a half to credibly overcome the damage to its reputation. It is only recently that Audis have once again reached the level they were at in the mid-80s in North America, where they are now also accepted as a luxury brand.

My visits to Audi's technical development department in Ingolstadt in 1982 were disappointing in one case, despite the good start that the quattro represented. I found a successor to the Audi 80 with a pagoda roof, which I considered virtually unsellable from a style perspective. When Piëch and I flew back from the car show in Japan in the fall of the same year, we immediately agreed to kill this car. We arranged for a significant facelift to tide us over until a successor could be found. I liked that we were able to deal with the issue

objectively and without beating about the bush, which is generally not the case in Germany, especially if the issue isn't being debated in the press.

For me was clear that we had to differentiate Audi from VW technically and stylistically, and not only because the two would still be sharing their VW/Audi dealers for a while longer. The only way to gradually develop Audi's image was with credible, higher-value products, not with beautiful ads.

Audi's profits – inter-company transfer prices within the Group notwithstanding – were still a long way from BMW's, despite the lower personnel costs compared to Wolfsburg. Obviously, part of the reason for this was the high level of advance outlay. Over in Munich, BMW had built up a customer base for their products with a significantly higher income, and could thus, on average, sell a much higher-quality mix of model and equipment variants with correspondingly larger margins. But BMW had also originally started from the very bottom. You don't need to go all the way back to the Isetta, you only need to look at the first BMW 1500, for example.

In addition, Ingolstadt could not expect development aid from anyone for free, as was given to BMW by Audi at the beginning of the 1970s thanks to VW's policies at the time. When the Audi sales organization and its efficient and exceptionally loyal dealers – in the years immediately after the war, they had sold their DKW vehicles without taking any commission – were abolished by VW in 1973, the justification given to the VW supervisory board was that this would save on distribution and marketing costs.

The VW decision had far-reaching results for BMW. Hans-Erdmann Schönbeck was no longer needed at Audi as sales director and so he was handed to BMW on a silver platter, together with a choice selection of his team and a few selected dealers. This blood transfusion gave BMW's export business a strong boost, especially given that the Bavarians had hardly

looked beyond the Alps before. No one in Munich has properly recognized this gift to this day. Hans-Erdmann Schönbeck, who had roots in Silesia and had been an officer at Stalingrad, cut his teeth at the largest German VW wholesaler, MAHAG, in Munich, until I brought him to Audi as sales director when Dekkers retired. After moving to BMW, he stayed with the company until he reached retirement age. He then became President of the German Association of the Automotive Industry and, in parallel, was President of the European Automobile Association for several years.

This meant we were facing a fresh start at Audi in 1982 in many ways. At the last top management meeting of the Volkswagen Group before my return in 1981, the VW executives had put retrenching the Audi executive board pretty high on their list of proposals to the Group executive board, and they were probably in agreement with the Wolfsburg works council on this point.

The big question was what to do. How could Audi be given its independence again with a viable sales organization and, as a prerequisite for this, a product range that would do justice to its target market positioning, without neglecting the potential synergies in the Group? Committees are not much help in situations like this. We had to set the goal, show the way. However, the Ingolstadt executive board did not make any strategic proposals. Only Piëch, the head of development, regularly proposed strategic and technical solutions, which were viewed with suspicion in the Group because of our cost situation but each of which earned Audi a "first." They demonstrated their worth by invariably being followed by the competition. Sometimes this took a while; with the quattro drive, for example, it took decades. Sometimes, engineers also distinguish themselves by the quality of their excuses.

Piëch and I not only shared a weakness for Japan and motorbikes, we were also on the same wavelength in terms of product policy. I knew we needed an independent, creative spirit like this if Audi was to survive. Of course, Piëch was difficult for the Ingolstadt team and – to put it mildly – not exactly popular with all of my colleagues in Wolfsburg. Nevertheless, we maintained a good and disciplined working relationship, one which my predecessor Schmücker had scrupulously ensured back in his time.

At VW, too, we again built up momentum in terms of technology and product policy, although given the size of the VW brand, this involved completely different dimensions and complexities. Whereas Audi consisted of two plants in Germany, Volkswagen already had over thirty worldwide. These are two different worlds. After all, VW had to accommodate the needs and wishes of its customers and their respective purchasing power at our various global locations, and it had to take economic and competitive conditions in the Third World into account. Nevertheless, there was close cooperation and coordination with Audi in technical working groups, with beneficial effects for both sides, despite the frequent friction.

As a result, Audi kept turning out new pioneering achievements:

- The quattro drive (permanent all-wheel drive): it was prioritized with differentiated technology immediately after my return and adopted for key VW models, including for the VW Transporter
- Aerodynamics: groundbreaking drag coefficients meant less fuel consumption, less wind noise, more comfort (taken as standard around the world today)
- Galvanized sheet metal and a ten-year guarantee against corrosion for new cars: the end of rust buckets and higher value for used cars
- · Safety
- Four and five-valve engines (together with VW)
- Lightweight construction (aluminum body of the A8)

In competition with VW, Audi also revolutionized diesel technology. VW had already done important pioneering work in this area in the 1970s with the swirl chamber process and in 1980 had risen to become the global market leader for diesel-powered passenger cars. While generously coordinating the division of labor with Wolfsburg and under the cloak of secrecy, Audi then began to work on a five-cylinder diesel engine with direct injection and fully electronic engine control, which would set a new milestone for the diesel passenger car market thanks to its innovative technology.

When the VW executive board landed at Ingolstadt Manching Airport for a product strategy committee meeting at the end of the 1980s, an Audi with this type of engine was waiting for me. The engine's smooth running and its traction impressed me. But Audi's insistence on keeping the project as secret as possible caused some initial resentment up north in Wolfsburg. Regardless of this, Audi remained true to its motto "Vorsprung durch Technik" and became the world's first manufacturer to bring TDI technology to the market in mass production. A loud, unsophisticated and relatively inefficient engine had become an agile and comfortable drive system that is not only fun to drive, but has yet to be beaten by any other engine in terms of fuel consumption. According to calculations by Richard van Basshuysen, 34 direct injection leads to annual fuel savings in Germany alone of more than eight billion liters compared to conventional diesel units, equivalent to the consumption of nine million passenger cars. Our competitors, who initially dismissed the TDI engine as a flash in the pan, were soon disabused. Now VW was also

³⁴ Richard van Basshuysen was head of development for the comfort class of vehicles at Audi and was responsible for the development of the power trains for all cars. Series development of the passenger car diesel engine with direct injection took place under his direction.

turning to this technology on the basis of Audi's advance development and just a few years later it presented a fourcylinder diesel direct-injection engine for the mass market. This marked the start of TDI technology's triumphant progress, with its unique combination of sporty driving dynamics, low fuel consumption and longevity, the full potential of which is still far from exhausted. For me, the resounding success of the diesel engine with direct injection was another convincing example of the stimulating impetus of inter-company competition within the Group. It would be a number of years before the outside competition caught up. Before that, we also became the global leader in multi-valve technology. Both engine developments combined a performance significantly increased with tangible environmental advantages.

But none of these pioneering innovations gave Audi its breakthrough to the top league yet. Audi still lacked the prestige, the credibility of a Mercedes, a Porsche or a Volkswagen, whose new and used car prices reflected the value of the respective brand.

Back when I was head of Continental, I had driven an Audi 200. I was certainly the only board member who came from outside the company who would drive to Wolfsburg in a company-made car. At that time it was not only a bit large for its class on the outside, it was also a bit too big on the inside. Despite this, it was limited to a five-cylinder engine. The only existing VW six-cylinder engine did not fit in any of our passenger car models, only in light trucks and some Volvo cars, which were very successful in Italy and France in a diesel version supplied by VW. Product policy is a complex business.

At a meeting of the Group's product strategy committee in 1983, I surprised everyone by proposing we use the Audi 200 as a relatively inexpensive starting product for developing a premium-class Audi and – in the interests of consistency – we

simultaneously develop an eight-cylinder engine. This would allow us to take an economically justifiable first step into the premium segment and initiate a learning phase. At the same time, and inevitably, six-cylinder developments were long overdue for VW, even though nobody at VW seemed to have noticed this yet.

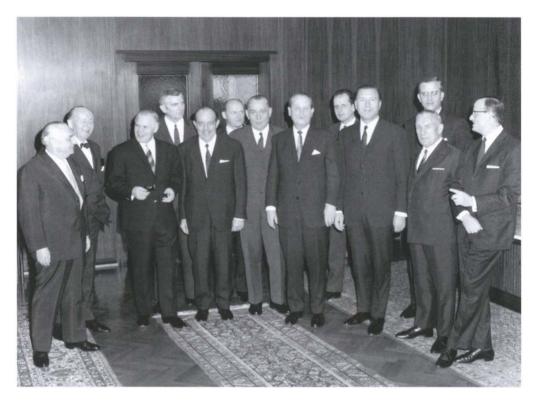
step would mean significant investments This development and production, right down to the last supplier, and also initial losses and a relatively late financial return. Ultimately, we also lacked the gearboxes for these engines, both for all-wheel and for front-wheel drive versions, not to mention the brakes and new chassis parts. All this was worded very carefully for the product strategy committee, but it was also a more than revolutionary proposal for our colleagues at Audi as it was full of risks. In fact, it marked a completely new chapter in our company's development. If we were going to compete credibly against the two German leaders in the premium class, we would need more than words, we would need to back these up with an appropriate product range. It would take more than rally races and fivecylinder high-performance engines alone. That being said, the superior quattro concept gave us a unique selling point, and one which we were left to enjoy exclusively for long enough to complete our ascent to the premium class.

It would be an understatement to say that enthusiasm for my proposal was limited, apart from a few colleagues in Ingolstadt and my colleague on the board, Borgward, who was responsible for quality in the Group.

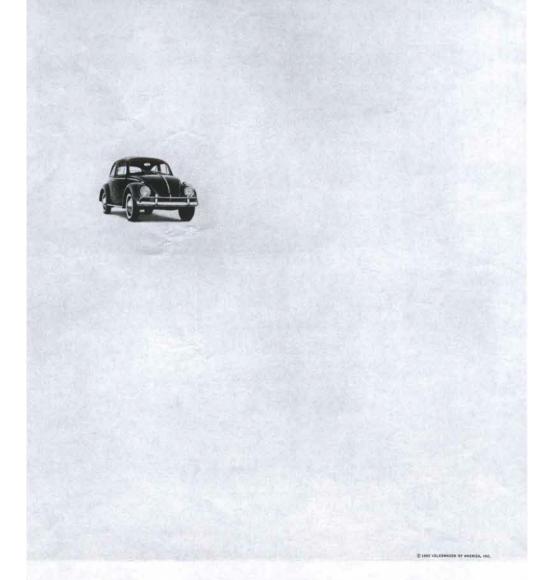
But just a few weeks later, we were driving an Audi 200 with the eight-cylinder engine of the Porsche 928 on the Porsche test track in Weissach. Unfortunately, this engine proved too heavy and its dimensions too large to be suited to our purposes.

Piëch then started parallel developments for a VS cylinder aluminum engine in Ingolstadt and Neckarsulm. Under the direction of Richard van Basshuysen, a masterpiece of reliability, weight and performance was created at first go. Of course, a whole range of changes had to be made to the vehicle's technology and equipment to match its new engine and the driving characteristics expected in its class. We were clear that a small volume couldn't make us competitive initially given the costs, and we certainly couldn't reach Mercedes price levels straight away. Our brand simply didn't have this value yet, it still had to earn it in the public's perception. This was part of the enormous price, i.e. the high upfront investments, that would have to be paid in order to rise to the premium class. Certainly, using the Audi 200 saved us some costs. Developing a completely new car would have given us even greater initial losses in the first generation of vehicles, but it would have made little impact on volumes. Above all, the key thing for us was the learning experience right across the board.

We had, by definition, no existing customers in this class, and our sales organization had no experience of acquiring and handling such a clientèle. There was also the fear of embarking on something new, as well as insufficient showroom capacity in terms of size and quality, and a lack of suitable sales staff. But we were determined to strike out in this direction, to dare to make the attempt and even, finally, to break open emotional business relationships that had built up over generations, with nothing less than *Vorsprung durch Technik*. One hundred percent of our sales had to be new sales in a fairly saturated market, which set a natural limit on volume in the initial phase, even for a strong organization, and which was associated with considerable acquisition costs at the same time



22 After the death of Nordhoff in April 1968, Kurt Lotz with active and retired board members: Von links: Frank Novotny and Fritz Frank, (both already retired at the time), Friedrich Thomée, Horst Backsmann, Kurt Haaf, Horst Münzner, Hans Hiemenz and Julius Paulsen (both retired), Gerhard Prinz, Kurt Lotz, Werner Holste, Otto Höhne and C. H. H.



Think small.

Our little car isn't so much of a novelty

A couple of dozen college kids don't try to squeeze inside it.

The guy at the gas station doesn't ask where the gas goes.

Nobody even stares at our shape. In fact, some people who drive our little

flivver don't even think 32 miles to the gallon is going any great guns.

Or using five pints of oil instead of five quarts.

Or never needing anti-freeze.

Or racking up 40,000 miles on a set of tires.

That's because once you get used to

some of our economies, you don't even think about them any more.

Except when you squeeze into a small parking spot. Or renew your small insur-

ance. Or pay a small repair bill. Or trade in your old VW for a new one.

Think it over.

23 The ads from our American agency DDB revolutionized advertising around the world. The trade magazine Advertising Age was not alone in considering "Think small" the best advertisement of the 20th century.



◀ 24 The Formula V racing cars derived from VW Beetle components were the most-built racing cars in the world. Some of racing history's greats found their way into racing through the Formula V class.

25 The compact Futura caused a stir at the 1989 International Motor Show in Frankfurt with its novel design, distinctive gullwing doors and numerous technical innovations. One novelty, besides the four-wheel steering, was the engine with direct injection and G-Lader supercharger. Volkswagen set new standards in terms of safety, comfort and environmental compatibility with this concept car.



26 Love and creativity without limits: the Dune Buggy, a cult item from California on a Beetle platform. Here in a Karmann version. ▼





27 The VW "Student" prototype from 1983 was more than a decade ahead of its time with its extremely compact design, its high mileage and its low consumption. But our cost situation at that time prevented production of this car, which was also innovative in terms of manufacturing technology.



28 The VW engineers presented a masterpiece for my farewell at the IAA in 1991: the Chico, a 2 + 2 seater.



29 Despite its length of only 3.15 meters, it even complied with the strict safety regulations in the USA. Its hybrid drive and weight of less than 800 kilos ensured economical and environmentally friendly fuel consumption.



30 The 1991 VW Board of Management with the Golf III. Left to right: Daniel Goeudevert, Werner P. Schmidt, Martin Posth, Ulrich Seiffert, C. H. H., Peter Frerk, Günter Hartwich and Dieter Ullsperger.

31 In 1990, I was presented the "Golden Steering Wheel" from Bild am Sonntag newspaper by the then-head of Axel Springer, Peter Tamm.







32 In 1985 the GTI was voted "Car of the Year" in the USA. In the second half of the seventies only a limited run of 5,000 was initially planned. To date, the GTI has sold more than 1.5 million units.

33 In 1988 I sat on a DKW charge pump two-stroke racer for the first time. Before and after Word War II, men such as Siegfried Wünsche, H. P. Müller and Ewald Kluge had ridden to great victories on it. Besides cars, gliding, sailing, diving, skiing, tennis, cycling and horse riding, motorcycling was one of my favorite pastimes. I have always been fascinated by everything that moves.

34 Test drive in a car from our friend and neighbor in Sardinia, Giorgetto Giugiaro. Ideas are constantly flowing off his drawing board. He knows my weakness for these.

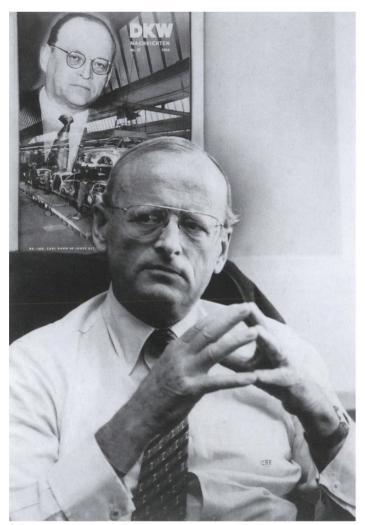




35 Group conferences with wives soon took us abroad. Vienna was followed by Barcelona (photo; 1989), Prague and Detroit.

36 Contact with retirees was always a duty and a joy for me. I appreciated their advice. Left to right: Rudolf Leiding, C. H. H., the legendary works council chairman at Audi, Fritz Böhm and my predecessor Toni Schmücker.





37 My father (in the background) at 60, myself at 50. Including my son Christopher, the Hahn family has been linked for more than eight decades to what is perhaps humanity's most fascinating industry.

38 The Audi V8, here in its long version, was of crucial importance for our Bavarian subsidiary. With it, the Ingolstadt-based company offered a convincing alternative in the premium class for the first time.



In every meeting of our technical strategy committee, month after month, the main discussion was whether this project was "to be" or "not to be," with its the break-even point barely visible on the horizon. Most of the time, I was the only one talking during these items on the agenda. But finally we agreed that at the end of the journey a generally higher positioning of the Audi brand and its products must be possible, even if there was no guarantee. By making this assumption, however, we were responsible for the investment required and the large expected initial losses on the way to the top. Separating the brands was the best alternative on offer. At the same time, experience shows that the price of entry into the premium club – like any other genuinely good club – increases all the time.

For our two German competitors, the cost disadvantage of Germany as a manufacturing site applied just as much as it did to Audi, but the superiority of their brand value and thus their price positioning allowed them to generate extremely attractive earnings. In addition, their vehicles were equally accepted as official cars for top politicians and as company cars for executives, in fact they were virtually a must, and so they experienced minimal price sensitivity and relatively stable sales figures. The high production volume also ensured corresponding economies of scale.

Although our tactic to enter the luxury class using the Audi 200 was relatively inexpensive, we knew, of course, that it would require not inconsiderable follow-on investment if, after a successful learning phase, we wanted to establish ourselves in the premium class with a proper second generation car built from the ground up. Otherwise, we could and should have spared ourselves the first phase.

The leap to the second generation involved billions in investment. In addition to all-wheel drive technology and the six and eight-cylinder engines, we needed aluminum technology, i.e. lightweight construction. Audi and Alcoa had been pioneers in this area for many years. Except for the eight and six-cylinder engines and their gearboxes, which were immediately judged outstanding by experts, only new parts could come into consideration for the second generation luxury class Audi. "Carry-over" parts to reduce investment and costs were ruled out from the start, both for the car itself and for the production systems. We still didn't have a customer base in the same league as our competitors' clientèle to fall back on, and so we were still at a competitive disadvantage – not just in terms of volume – which only went away with the third generation model.

On a trip to Crewe, England, in 1988 to which I invited Piëch, we saw what was probably the most primitive Western European car factory of them all, but we also saw how wood and leather could be beautifully and uniquely worked into what were technologically really rather outdated vehicles from Rolls-Royce and Bentley, in order to then sell these vehicles at high prices at the top of the luxury class. This gave us an important insight into how to reach the premium class in interior design as well.

Until the end of my tenure as CEO, in 1992, I had not seen a strategy paper from Audi on the subject of the luxury class – only from VW sales under W. P. Schmidt – nor did I have many allies. Apart from Piëch and his technical development department, everyone laid low and no one risked being held complicit in these billions of outgoings while we were simultaneously trying to take over half the world with VW. It was a long journey driving Audi up to the premium class with convincing product specifications and an attractive, sporty design, but initially only a minimum of marketing spending. The advance outlay needed for this represented an extraordinary financial burden that was at odds with considerations of short-term shareholder value, although it was very much to the benefit in the long term. It was

important for us to be in a position to cope with this advance outlay in the Group and still earn money even with the most conservative financial accounting. No development costs whatsoever were capitalized, contrary to accepted practice today. It was only later that Audi received relief with the opening of a new production site in Győr, Hungary, but better prices and larger volumes were a bigger help.

With the third generation, Audi is now technically more advanced and better than any competitor, and this work has paid off, as new registration figures convincingly demonstrate. As the European market leader for eight and twelve-cylinder engines, we have reached the automotive summit. Unlike in mountaineering, however, there is no time to rest at the summit, because the innovation race doesn't take any pit stops, it accelerates constantly. Before you even reach the finishing line, new ones have been set. But all the ideas, theories and means at our disposal would not have borne fruit without the engineers and skilled workers and their managers in Ingolstadt and Neckarsulm. Right from the start, they had demonstrated that they could also develop and produce top-quality products for the premium class, supported by their colleagues from research and development in Wolfsburg.

In parallel to this, the equally laborious process of disentangling VW and Audi sales had to be carried out in order to once again give Ingolstadt its own independent sales division. In the first phase, our VW/Audi dealers separated their showrooms and their sales staff. Our former wholesalers set up prestigious and impressive Audi operations in major metropolitan areas. They, too, would take many years to get back into the black on our journey to the premium class. At the end of my term of office, this work was far from over, the damage caused by the liquidation of the Audi sales organization in 1973 had not yet been resolved. But, since January 1993, Audi has once again had a separate CSO with his own team in Franz-Josef Kortüm, who joined the

company from Daimler.

In the 1980s, there were increasing signs that BMW and Daimler would attack us in our traditional lower vehicle classes, especially the Golf class. Analyses had always shown them that their customers preferred to satisfy their demand for cars below BMW and Daimler's product ranges with products from us. Conversely, until not so long ago, we had provided them with a clientèle for higher-class products, free of charge.

Irrespective of this, in our budget meetings and mediumterm planning rounds at Audi since the late '80s, I had repeatedly found that the company's annual targets had stagnated at around 450,000 vehicles. There was no upward movement, no credible concept to break through this limit. Nothing seemed to be moving.

So I tried to take an unconventional path, and one I hoped would keep up the pace at the same time. Piëch and I met to discuss an Audi model in the Golf class. This would mean veering off the course set by our planning and strategy system. Piëch, who I met every Tuesday at the meetings of the VW board of directors, to which he had been co-opted in 1989, brought his product planner with him, a young engineer named Franz-Josef Paefgen. I had already noticed him in his various functions at our product strategy meetings in Ingolstadt, not just as a promising engineer, but also as a manager. Paefgen would later become a very successful Audi CEO and is now high up in Bentley, Bugatti and VW Motorsport.

I brought Wolfgang Beese from the Volkswagen Group side with me. I can only remember there being three meetings of our team of four before the concept of a new product class for Audi was adopted. This put in place a protective wall against new competitors from above. Of course, the people we had bypassed were critical of my approach, and justifiably so, in theory. On the other hand: hadn't they had plenty of time to put forward their own suggestions?

The unanimous proposal of the Piëch/Hahn team was: a Golf platform with a typical Audi body, but with an Audi A4 front axle and a Golf rear axle. This way, we would benefit from the Audi engine range and clearly differentiate it from VW. At the same time, it would enable a correspondingly independent, technologically underpinned (higher) price positioning and minimize substitution with the Golf. That said, a decision was later made to also use the VW front axle, although this did nothing to detract from the success of the A3. With it, we managed to make the desired leap in volume and price differentiation. In addition, the Audi model range was supplemented by a two-seater Audi TT sports car based on the Audi A3, which has since appealed to Porsche customers and is produced in Győr, Hungary. With this, Audi caught up with BMW's vehicle volumes and began to overtake Munich in many markets, starting in Germany and continuing through Western Europe to China.

In our industry, it takes more than a decade to credibly upgrade the positioning of a brand and meet the needs of the premium class. However, this relatively short time frame is only properly realistic if you manage to minimize errors. And in general, you also need a fair amount of luck. One indispensable requirement is to offer genuine innovation that provides attractive alternatives to customers and helps them cross the psychological barrier of choosing a new automobile brand. With one exception, the premium class is a purely German club, but it must expect the number of providers in this segment to increase internationally and the competition to get tougher. Korea and China won't be waiting around for long. The pace of innovation and the proliferation of models will increase rapidly.

The Group's image and the value of the brands provide clear guarantees to buyers, but they also provide a status symbol, prestige – not that the customer will admit this. Ultimately, the automobile remains a highly emotional

product in every class.

Correcting and compensating for the mistake of breaking up the Audi sales organization took not just one, but more than three decades. It's better not to start calculating the cost of operations like this. That said, we shouldn't underestimate or forget the leveraging effect of our potent VW partners. They played a decisive and fair role in the rebuilding of the Audi organization, but especially in its higher positioning.

At the end of 1986, Audi CEO Wolfgang Habbel's contract expired. It was probably no coincidence that, just in time for the meeting of the executive committee of the Audi supervisory board where a decision on a successor was going to be made, we were surprised by a hatchet job on Piëch and his "lack of cost discipline" in an advance copy of Manager Magazin. My colleague on the supervisory board, Steinkühler, was undoubtedly no friend of Piëch at the time. Our excellent working relationship, which often brought us together for coordination meetings in his capacity as deputy chairman of the supervisory board of Volkswagen, didn't help much either. There was simply too much skepticism about Piëch. My fellow board member from Wolfsburg on the executive committee of the Audi supervisory board, Münzner, didn't exactly give me the support I would need for my goals, either. And so, in the face of Steinkühler's clear "no," my plan collapsed in the executive committee before it could even reach the plenary session of the Audi AG supervisory board. Piëch then verbally announced to me his wish to hand in his notice, which I refused. I probably owe, in large part, the fact that things progressed at all to his highly admired mother, Louise Piëch, the creator of Porsche Austria, the greatest company in that country, who I had mobilized over the phone.

The relationship between the two gentlemen in question became unbearable, although Habbel had achieved his goal for the time being, namely extending his contract by a year. But Piëch was appointed deputy chairman of the Audi executive board by the supervisory board. I now tried my hand as a fence-mender and a psychologist. But even three very long dinners together with Habbel and Piëch in the Munich Four Seasons hotel, at which I painstakingly tried to mediate between the two, appealed to their sense of fairness and emphasized the company's interests, only brought short-term, modest successes, because ultimately the incumbent continued on his course of obstruction.

The obstructionists were being somewhat short-sighted, though, because Piëch would have given any Japanese or Korean manufacturer exactly what these companies lack to this day, to the benefit of the German automotive industry. Nevertheless. I also had to look for an alternative so as not to get caught in the middle. It was hard to believe that my colleagues and the trade union in Frankfurt would change their minds about Piëch. Only Liesen, the chairman of the supervisory board, was generally in favor of our strategy and personnel measures and supported them more than clearly. The second candidate that I was now required to put forward, Helmut Werner, who had been my successor as head of Continental, was certainly not an understudy - quite the contrary. But in this case, I got the short end of the stick, because the chairman of his supervisory board was Alfred Herrhausen, and he enlisted him without fear of conflict for the Daimler-Benz board of directors, whose supervisory board he also chaired.

Today's successful Mercedes product range goes back to the revolutionary work of my friend Helmut Werner. Even after his time as CEO at Mercedes-Benz ended prematurely, he demonstrated his outstanding talents in building up a global company in the transport sector, together with Jack Welch and Roger Penske, who had once started his meteoric career as a successful VW dealer and Porsche racing driver. Werner was also active in many other responsible functions in business and the public sector. I have never known anyone with a more positive, youthful, athletic vigor or anyone as convincingly charismatic as Helmut Werner, who died far too young.

After a year of preparatory work, I was able to risk bringing up my old nomination again at a board meeting in Wolfsburg. In the meantime I had also got Steinkühler on my side, not without the help of the Ingolstadt works council, which had always been a reliable stabilizer against Piëch's rasher excesses. This time I managed to get a quiet consensus for Piëch. Audi was now headed by the man who had long appeared to me my own ideal successor, who knew where the path for this company had to lead. The supervisory board was also aware of his weaknesses, even if they evidently didn't always manage to take sufficient countermeasures.

Looking back at the Audi chapter, I realize how many building blocks are needed for success, how many dangers have to be circumvented. Even if the blueprint was clear to us, it took many strokes of fate to turn August Horch's great, traditional company from Zwickau, at which I spent many months after the war, back into what it had been for a long time and has now become again: a pioneering company of technology, of "Vorsprung durch Technik." I am grateful with all my heart that I was able to rescue the work of my forefathers from oblivion several times and was able to play a part in its triumph.

5 Europeanization strategy: Seat

It must have been my third day after returning to VW in 1982. I was eating late at night in our guest house when my colleague W. P. Schmidt asked me if I would like to meet his visitor, Juan Antonio Antoñanzas. And so we met up for a leisurely nightcap. Antoñanzas had been a McKinsey partner and became head of Seat after its parent company, Fiat, under pressure from persistent losses due to new manufacturers on the Spanish market, had given up on it. Seat, the pioneering company of modern Spanish automotive engineering, had once again become a wholly state-owned business. That evening, Antoñanzas presented his company to me in the McKinsey style – and in a favorable light, of course.

The Spanish automobile market, already the fifth largest production location in Europe in the early '80s and now the third largest, was a blank spot on the Volkswagen Group map. All manufacturers producing in Spain – apart from Seat these were GM and Ford, as well as Peugeot and Renault – had so far closed off the market to prevent new members joining the club.

Together with Portugal, Spain was, however, on the way to joining the European Community. In those day, Brussels still took the time to properly prepare candidate countries for integration. There were two per decade, which was certainly conducive to success. But how should VW build up a position in Spain when, with the country joining the EC in 1986 and all barriers to be abolished, the spoils had already been divided up and the market was one hundred percent occupied by the competition?

Added to this, we had certainly not created a very friendly atmosphere for VW in Spanish government circles. In the late '50s, the Spanish industry minister had traveled to Wolfsburg via Bonn, probably to invite us into the "club." But he had been turned away at the VW factory gate – a fairly unique turn of

events.

In the second half of the 1960s, my then colleague Frank Novotny was unable to inspire any great enthusiasm for Spain in Nordhoff, despite being very close to him. Nonetheless, the two of us tried again and again to obtain a production license for passenger cars. Each time, however, we were surprised by ever higher minimum production thresholds, so finally we gave up.

But thanks to Audi, we now had a truck factory in Vitoria, Industrias del Motor (IMOSA), which was founded in 1950, the same year as Seat. After buying Audi, I found in the IMOSA conference room a silver platter with an inscription celebrating the inauguration, engraved "Bruhn-Hahn," the name of the two founders of Audi. The company installed Mercedes diesel engines in a DKW fast truck and it had fared somewhat poorly. Novotny and I would now visit Vitoria regularly.

Since we were going through a phase of "fraternization" with Daimler in the second half of the 1960s, gentlemen from the Daimler executive board usually traveled to Spain at the same time. And so, besides CFO Joachim Zahn, his colleague Ulrich Raue, who was responsible for production, was part of the delegation. But in the talks that took place there, which were all about supplying IMOSA with engines that were produced by a Daimler subsidiary in Barcelona, there was very little fraternal spirit in sight. Unlike the less prestigious, alternative diesel engine from Perkins, this diesel unit from Daimler was high-priced and at the same time poor in quality, to put it mildly. We only gradually achieved improvements, but no breakthrough. Years later, Daimler was to take over IMOSA. Today it plays an important role in the light commercial vehicle business of the DaimlerChrysler Group.

And so, with our *faux pas* in the negative column and our Audi subsidiary IMOSA in the positive column, our balance in Spain in 1982 was zero, at best. Although VW primarily

produced in high-cost Germany for the world's open markets and our home market had not been subject to import restrictions for a long time, the Group was lacking a strategic plan for the common European internal market. Like Spain, all the other major countries in Europe that manufactured motor vehicles were almost completely sealed off from imports. The Volkswagen Group's exports were therefore limited to the small markets of Europe, which earned us fifth place in the European registration statistics.

On that January evening in 1982, Antoñanzas, W. P. Schmidt and I agreed in our guest house to devote the greatest energy to a due diligence investigation of Seat and to initiate appropriate discussions with the state-owned industrial holding company INI. Apart from the basic question of whether we were even desirable as partners, one key issue here was getting the state to release Seat from its mountains of bad debts – debts that amounted to the equivalent of three billion marks.

In the course of the due diligence, we soon came to the conclusion that we could very well put Seat in order and that the traditional Spanish company could become the most important building block for our policy of Europeanization. For me, there was no alternative to this, or at least I didn't consider Alfa Romeo, which was also offered to us at the time, as a viable alternative. The size difference alone and, no less importantly, the opening up of the Spanish market spoke clearly in Seat's favor. And taking on both companies would have overextended us, especially since we were still in the early stages at Audi. At the same time, Seat looked like a suitable spearhead that the Group could use to conquer the small car segment, which is disproportionately important in Europe's Mediterranean markets. In the end, all Seat products were Fiats by a different name, so they were perfect for these markets. What was completely missing, however, was distribution. So far, they had simply filled capacity gaps for Fiat on a case-by-case basis.

W. P. Schmidt had developed a strategy for the negotiations which provided for immediate technical cooperation with Seat and assembly for Volkswagen, as a first step. This maneuver was intended to first bind the company to us and make it "unpalatable" for the competition. This "blockade contract" didn't cost us a penny, in fact, it would immediately give us capacities for free and we would earn money on our parts deliveries for the assembly of Volkswagen Passat and Polo models. Incidentally, we had also determined the price formulas for buying back the vehicles. As a result, this contract gave us the opportunity to reduce production costs for the Polo to the Spanish level and to use the capacities that were freed up in Wolfsburg for the Golf, all without having to invest a penny in new capacities. Since all vehicles in the compact car segment - with the exception of the Polo - were produced in the lowwage Latin countries of Europe at that time, their cost structure determined prices. This would have put the future of Polo production in Germany into serious question in any case.

In addition, cooperation with Seat would also pave the way for the Volkswagen Group to tap the Iberian market more efficiently. Back in 1981, W. P. Schmidt had founded V.A.G. España, S.A. to build up a VW and Audi sales organization with its own import management. For us, this step was still a special case in those days, because unlike all our major competitors, we worked with independent importers. The only exceptions in Europe until then were V.A.G. France and an import company in Sweden operated by Scania, in which we held a thirty three percent stake. However, during my tenure we changed our strategy. The aim was now to be represented in every major Western European market (under the prevailing conditions, this meant an annual volume of more than 50,000 Group vehicles) by our own import companies. And so in late

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³⁵ V.A.G. España, S.A. ceased operations after the cooperation agreement with Seat was signed and its dealer organization was integrated into the Seat distribution system.

1984 we took over the Italian importer Autogerma S.p.A and on January 1, 1993, after two years of negotiations with the Lonrho Group in London that I conducted personally with Sir Tiny Rowland (who had roots in Hamburg), we also acquired the British importer V.A.G. United Kingdom. After France, Spain and Italy, sales and distribution in the UK had now also been transferred to the Group – and without resorting to legal action, which was quite an unusual feat in the case of Lonrho.

Seat, which was at that time the market leader in Spain, with a market share of almost thirty percent (although this was falling rapidly), was a prime example of a company that had been protected for too long by its quasi-monopoly status on the domestic market. In addition to its factories in Barcelona, all of which were no longer up-to-date. Seat had an assembly plant in Pamplona that it had acquired from British Motors. We chose it as the site for Polo assembly, and modernized and expanded it after the takeover. During the first phase of the assembly cooperation, it was already becoming the most important – and later the only – production facility for the Polo. The body shell plant came from the Fiat subsidiary Commau, which built these plants for automobile factories around the world. This spared us from taking any quality risks, and we discovered a first-class management team and first-class employees.

This first phase of the collaboration gave us a deep insight into the value of Seat in all areas, which we would use in the purchase negotiations; starting with the executives, through the organization, production and quality, its market position and sales organization, to the financial valuations and profits. I cannot imagine a better form of due diligence for a buyer.

To my surprise, however. my optimism regarding this project would first run up against more than one obstacle: the entire VW board, with the obvious exception of W. P. Schmidt, was not keen on investigating the project, but instead rejected it categorically. The "Triumph Adler adventure" and many other

setbacks, particularly those involving overseas companies, had left lasting traces and put the executive board into a state of paralysis. For most of them, the crisis of the mid-70s was also still fresh in their minds. Back then, after (overly) long negotiations at VW, mass layoffs had taken place at a time when the market was already demanding the opposite. In order to save face, they responded after a delay by reinstating employees who had just shortly before received financial compensation.

In the early '80s, the board was concerned with other matters and had little time to discuss a collaboration with Seat: VW was in the red after our production costs had increasingly diverged from those of our European competitors. There was therefore talk of "downsizing" the Group, not only by drastically reducing production figures, but also by saving on model equipment and technology and cutting back on model variants in order to supposedly make the vehicles cheaper. They were almost on their way to killing the technological "plus" that justified the status and prestige of VW.

"Downsizing," combined with the end of any technical aggressiveness, is a deadly synthesis for a company, a guarantee for its failure. At the very least, this strategy would have resulted in the loss of independence. To take our high-quality — and therefore classless — range of models and downgrade them to normal cars would first have destroyed our pricing policy and then our existence. In these situations it is hardly ever possible to reduce the fixed costs faster than the volume, only the latter would certainly have been possible without any problems.

Because of this, my primary task was to convey to my fellow board members in private meetings the importance of this long overdue first step towards Europeanization, and to once again instill confidence in them and in the management team. At the same time, it was important to explain the seriousness of the cost situation to the works councils and the shop stewards. Luckily our training center next door, "Haus Rhode," a beautifully situated old mansion, gave us an ideal space for constructive and, of course, controversial discussions, which as I recall took the whole day on three separate, somewhat stressful occasions. Together with my colleague Schmidt, I explained our European policy, the strategic role we envisaged for Seat, and the tactical steps in our approach towards Seat and INI, the state-owned industrial holding company. It was all about building up our position by acquiring not only a brand and its factories, but dealers with market share, i.e. customers, workshops and spare parts business. Capturing market share can cost more than an entire car factory.

In order to get our Seat policy passed by the supervisory board, however, I had to make a compromise with the works council. They only allowed us to relocate fifty percent of Polo production to Spain, despite the negative consequences for employment and earnings. In order to balance out the risks, they insisted on a second mainstay for the Wolfsburg parent plant.

A few years later we also agreed to relocate the rest of the Polo production to Spain. On the one hand, our works council had in the meantime got to know the factory in Pamplona, a location that not only produced our Polos at extremely competitive costs, but also in excellent quality. We never received a single complaint from our customers because of Spain. On the other hand, thanks to Pamplona, we were able to increase daily Golf production in Wolfsburg to 4,000 vehicles. There were days when Wolfsburg's plant manager Helmut Amtenbrink reported with justifiable pride on figures in excess of 4,000 Golfs produced. The triumph of the Golf as the market leader in Europe since 1983 had helped the works council to support the Polo move.

It should be mentioned, for the sake of clarity, that according to the Volkswagen Act, relocation of production must be approved by the supervisory board. And it's important to remember that members of the works council have to stand for re-election at regular intervals; their mandate is ultimately also a political office, with all the corresponding advantages and disadvantages for both sides.

The Seat commitment is an example of how outsourcing to a foreign country for streamlining reasons can not only result in positive employment effects for both sides, but simultaneously also set off a positive chain reaction in the domestic company with everything from increased productivity, to improved profit and loss statements, through to cash flows. Essentially, from the very first moment that Polo assembly started, we began to save up for the price of purchasing Seat through the supply network's contribution margins.

After we had not yet got out of the red in Wolfsburg in the 1983 financial year, the relocation of Polo to Spain in March of the following year was a first important strategic step towards cost reduction in the Group. The cooperation agreement with Seat also created the prerequisites for the Volkswagen Group to gain market leadership in Europe in 1985. Since the signing of the contract – i.e. within just three years – the expansion of the VW and Audi sales organization had also accelerated. Sales of VW and Audi models on the Spanish market increased twentyfold. The Volkswagen Group's market share in Spain climbed to 8.6 percent, after having been just 0.5 percent at the beginning of the 1980s. Ultimately, with Spain we increased our Western European market potential by more than ten percent.

The executive board's decision to purchase Seat was unanimous in the end, enabling the team headed by W. P. Schmidt and our colleague Frerk to open negotiations with the representatives of the Spanish manufacturer, the industrial holding company INI and the competent ministries. Even the King of Spain, Juan Carlos, gave us every possible encouragement. He was and is his country's foremost ambassador

A one-to-one conversation on the sidelines of a state visit with the Spanish Prime Minister González in Bonn helped to create mutual trust. The snub at the Wolfsburg factory gate back in the 1950s had now become a humorous episode. The Spanish ambassador in Bonn, Eduardo Foncillas, played a constructive and important role in all the political processes at that time. After his active service, I asked him to join the Seat board of management, to which we generally appointed respected Spaniards. After my retirement, Volkswagen dispensed with his services.

I met with the former number two at Seat, who would later become number one under us. Juan Antonio Díaz Álvarez, at the World Economic Forum in Davos, to foster through him the goodwill for our company policy that is essential for a productive and trusting cooperation with management. I pointed out that the association with Seat would be shaped by the idea of equal opportunities, and our aim would be to create an integrated Spanish automotive company and not an extended workbench, in contrast to every one of our competitors, without exception. Instead, our policy of divisional organization by brand was based on the idea that all brands should mobilize their respective national strengths within the framework of federal autonomy, exploiting Group synergies, in particular by using common platforms, with tight management, in particular through the Group product strategy committee and controlling department. The goal was to convincingly differentiate the model range in order to open up new market potential and also better meet the growing demands of the market. The transparency of internal competition like this arouses unforeseen motivation and creativity.

The purchasing negotiations conducted by my colleagues Schmidt and Frerk culminated in the signing of the contract at the INI premises in Madrid on June 18, 1986, four and a half years after our first nightcap in the guest house. In the same year, VW acquired seventy five percent of the share capital of Seat S.A. in two stages on the basis of a clean balance sheet. And so now we were faced with a substantial schedule of work and investment that would end up bringing additional managers and specialists from all divisions to Seat, sometimes for years at a time. In addition to building up and expanding a powerful VW and Audi sales organization in Spain, we were busy implementing three strategic tasks:

- 1. Improving the Seat sales organization in Spain and establishing a Seat sales organization in Europe and, eventually, the rest of the world
- 2. Improving the Seat product range and developing an independent Seat product range based on Volkswagen Group platforms
- 3. Rationalizing and modernizing Seat production, as well as integrating purchasing and consolidating the systems

Thanks to a competent Spanish manager, Díaz Ruiz, and excellent applicants for open dealer positions, we made good progress in expanding the domestic sales organization. In this way, we also gained significant distributors who had previously represented competitor brands, which was, of course, a double success. However, as I was traveling around Spain with my family in a VW bus on vacation in 1991, I noticed that Renault was placing and enforcing much higher demands on its dealers. They presented a much better image than our contractual partners. After my vacation, I sent Barcelona a collection of photos. We hadn't only stopped to admire the sights of the Spanish landscape and its cultural treasures, we had also stopped to inspect dealers along the way. Nothing beats unannounced visits to a dealer organization. For me, regular trips like this were always a must, simply to get a head start of several weeks on all our internal statistics and reports and to get an unvarnished feeling

for our figures and upcoming developments, completely unfiltered. Official dealer visits from "higher ups" are like a theater performance, with a script and previous rehearsals. It's important to spare everyone involved this embarrassing effort.

Outside of Spain, the name Seat was unknown. As a result, we couldn't count on large, powerful dealer applicants as we could in Spain – we just didn't have the necessary volumes yet. And so we mostly began with small family firms with relatively low cost structures. This meant they worked all the harder. We felt jointly responsible for their growth when deciding on product and marketing policies.

Our expectations would soon be exceeded. Everything went better than we had presented to the supervisory board in the Seat acquisition plan. With growth rates in the domestic market and in the export markets exceeding the twenty and thirty percent mark, our Spanish subsidiary continued to experience an almost explosive growth in sales figures in 1987, one year after the acquisition. Sales successes were racking up on the European export markets, particularly in the classic Fiat segments. Above all, the Ibiza – which had been developed by Karmann and Porsche before our acquisition – proved to be a bestseller. Its modern styling, impressive technology and highly competitive value for money won over many buyers, including outside of Spain. It was a key help in building up the Seat dealer organization from scratch, on the home market and throughout Europe. Overall, Seat achieved a European market share of two percent in its first year under VW, a rate that at the time corresponded to the market share of leading Japanese car makers. As a result, Seat became the leading manufacturer and exporter of automobiles in Spain, and in some years it was even the fastest growing automobile company in Europe. My friend Umberto Agnelli, who passed away far too soon, paid us the compliment of claiming we produced "the best Fiat."

The product strategy for the Seat brand was aimed at creating

a range of cars with a Mediterranean flair, with uncompromising quality and reliability, based on VW platforms. The Golf class would form the upper limit for the foreseeable future, with a clear focus on the vehicle classes below it. In the Latin markets, smaller vehicles up to and including the Golf represented over half of the total market, and so an excellent basis for the livelihoods of Seat and its dealers. At the same time, the Seat model range and our marketing policy posed a minimal risk of substitution within the Volkswagen Group.

While a vehicle like the little "Marbella" – a free license for the Fiat "Panda" compact car – had not been represented in the Group's range of models until then, and we initiated a cooperation with Suzuki,³⁶ who had excellent experience in this segment, we gave top priority to the development of a "Ritmo" successor in the Golf class. For us, it went without saying that the new top model from Seat would get a VW platform. As far as we were concerned, the platform of the outgoing Golf II was not only still highly competitive, it was also ideally suited from a technical perspective to Seat's price positioning and potential. This also ensured differentiation from the successor model, the Golf III, without inciting criticism from the press or customers. The body developed by Giugiaro did the rest. The Seat name ruled out VW price levels. All of our competitors were also forced to position their prices an average of six to ten percent below the strong Golf. This meant the Golf's growth was not at risk. No competitor could stand its ground against the Golf on an equal price footing.

When Díaz Álvarez presented the first vehicle developed independently by Seat, the Toledo, to the public in the presence of the Spanish king in 1991 in Toledo, it was met with an excellent reaction. After all, the Toledo was the first car to be developed in Spain since the era of the proud

 $^{^{36}}$ See also chapter 7, "Cooperation strategies," page 212 et seq.

Hispano Suiza in the 1920s, albeit with substantial support from Wolfsburg technicians.

The use of a Group platform that had already been written off on our own books but was still fully competitive for Seat also allowed an excellent return on investment. At the same time, development progressed on the new Seat Ibiza, which shared a platform with the Polo that followed a year later. Its front end was modified to also enable installation of the larger EA 827 diesel engine. This procedure was the opposite of the one used for the Golf and Toledo and it was characteristic of the flexible platform strategy practiced in the Volkswagen Group during my time, and which now virtually all our competitors pursue. The body of the Ibiza was designed by Giugiaro again. The creator of the Golf I body was rightly declared the best designer of the 20th century and one of the first to be inducted into the European "Automotive Hall of Fame" in 2001.

After we took over the company, we augmented the small existing technical development department at Seat, which had originally been tasked with adapting Fiat vehicles, and this gave us additional, cost-effective development and design capacities in the Group. At the same time, the use of the VW modular system enabled comparatively short development times. In addition to the resulting economies of scale, the capital-intensive manufactured platforms, components, systems and modules that were intended for Seat generated an additional cash flow in our German factories. In the meantime, other Group vehicles were also being developed at Seat, provided, of course, that Seat had first won the intra-Group tender for these. This is an incentivizing system that was introduced all around the world after my time.

Modernizing Seat production was another of the tasks included in our commitments in Spain. This involved significant structural changes and additions. And so the Pamplona plant was renovated from the ground up and

expanded to a capacity of 250,000 vehicles. We believed, for many reasons, that this factory should remain organizationally part of Seat, even if it operated exclusively for VW (Polo).

The old Seat factory in the port of Barcelona – the cradle of modern high-volume automobile production in Spain and founded by Professor Vittorio Valletta – was to be replaced by a new assembly plant in Martorell with a capacity of 1,500 vehicles per day. Seat already had a factory with a considerable amount of land to spare in Martorell, just outside Barcelona. The bottom line is that there would only be a limited increase in capacity.

Since our Group had obviously had a productivity problem a study that was unpopular in Europe from the Massachusetts Institute of Technology (MIT) titled The Machine That Changed the World³⁷ had highlighted clear shortfalls and a need for action in Europe, and not only at VW - our aim was to create a "state of the art" assembly factory that would not lag behind our competitors in terms of productivity and would not allow any excuses internally. Of course, it was a big risk to start up a new factory and a new vehicle, in this case the Ibiza, at the same time. When we presented the project to the supervisory board, we forecast start-up losses – not unusual for a new factory – but predicted that the Pamplona plant would compensate for these. Of course, there was also an important psychological factor behind this. After my retirement in 1993, production in Pamplona was transferred to VW for a few years and so it didn't perform the bridging function originally intended for Seat, even if this ultimately didn't matter from the Group's point of view.

Traditionally, our production tended to play it safe, and so factories were always planned with reserves. Due to chronic

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³⁷ The study was published in Germany under the title *Die zweite industrielle Revolution in der Automobilindustrie* (The second industrial revolution in the automotive industry).

lack of capacity, people had gotten used to this over decades, and as a policy it had always been validated, after all. But now we were living in a different world. So the objective was to set a benchmark with the Martorell plant. This prompted us to call on the Zürich-based company Hayek as a consultant, but they failed to come up with any significant savings. When the Martorell plant was already almost complete, my colleague Johannes-Josef Baumhardt, who had been in charge of quality assurance in the Group since the fall of 1989, was able to poach an entire team of technicians from a Japanese factory (Nissan) in England. Understandably, this measure was not warmly welcomed by everyone on our side, especially after they began to make impressive progress.

In 1993, during the European recession, Seat suffered a specific crisis that seemed for a while to make all our plans obsolete. I think it is in the company's best interests if I postpone the discussion of developments at that time to a later edition. Let's just say that, because of Spanish labor law, the young team selected and trained for the new Ibiza was the first to be laid off, followed shortly afterwards by the English engineers. This had a direct impact on the start of production, one which ensured negative headlines for the Seat name for a long time and eclipsed the excellent new Ibiza manufactured in Martorell.

Apart from this, the Martorell plant had prepared the technology and the personnel to manufacture the "Rose" saloon car, which we developed together with Suzuki. 38 With the decision to build the Lupo in Wolfsburg and the termination of the cooperation with Suzuki, however, this plan was rendered moot after my departure. And so the start of production of a VW high-headroom saloon car in this size class was postponed indefinitely. It will be interesting to look back on this era one day once enough time has passed and examine it dispassionately.

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³⁸ See chapter 7, "Cooperation strategies," page 212 et seq.

In my day, we always tried to closely coordinate the three large-series brands VW, Seat and Škoda, as they have the most in common due to their platforms and therefore need to be coordinated as sensitively as possible in competition with one another. It remains to be seen what advantages the current system of vertical integration with Audi will bring. For Seat, at least, it means an additional hierarchical level. In the former structure, the inclusion of the respective chairs of the brands in the Group executive board gave us the added benefit of forced control, in addition to the control function provided by the product strategy committee and the controlling department. The organizational structures of the 1980s thus avoided the creation of large corporate administrations.

Since the end of the recession in the mid-90s, Seat has been a successful company in the Volkswagen Group, and once again it enjoys great opportunities. For VW, it was the expected decisive step towards Europeanization. Compared to the brands acquired after 1992, Seat was extremely cheap in terms of its purchase price and integration costs and it was only surpassed in this respect by Škoda in 1990.

With close to 13,000 employees and 416,000 automobiles produced (in the 2004 fiscal year), the company is one of the key economic factors in Spain. Sales have been successfully developed in all Mediterranean countries. Latin flair is also popular in the rest of Europe, and not only for vacations, and countries such as Mexico, Brazil and Argentina also show a love for Seat vehicles. As promised, Seat has become the largest Spanish automotive company.

6 On the road to globalization: the Volkswagen Group as a pioneer in the People's Republic of China

In the second half of the 1970s, the Volkswagen Group began thinking about creating a second mainstay in Asia. After exploratory missions to Korea proved unsuccessful, my predecessor Toni Schmücker held initial talks in the People's Republic of China (PRC) as early as 1978. The Chinese leadership had sent out an invitation to all international automotive companies to invest in China. The idea was not to set up a passenger car industry of its own, because private cars were a luxury that no private citizen in the country could afford. The Chinese wanted instead to use the low domestic wages to assemble imported sets of vehicle parts and then export finished vehicles in exchange for urgently needed foreign currency.

In the industrialized nations, Germany included, there was a general reluctance in the late '70s and early '80s to become industrially involved in the Middle Kingdom, and forecasts predicted low growth prospects in the Chinese automobile market. As a result, the response to the Chinese invitation was muted. Volkswagen was one to the very few manufacturers to indicate an interest in the country. Initially, discussions cited an annual production of 150,000 cars, but there was never any justification for this figure. The plan was to assemble the VW Transporter, Golf and Santana.

The two sides were largely in agreement on a joint cooperation when the second oil crisis in the late '70s and early '80s put all plans on hold. Volkswagen got into difficulties and ordered that all projects be stopped. It took a lot of persuading to convince the executive board not to completely close the door to China. Credit for this goes to Wolfram Nadebusch, responsible at that time for corporate planning in the VW investment division, and Wenpo Lee from the research and development division at Wolfsburg

headquarters. The latter would later play an even bigger part in our success in China. The much more modest goal was now 30,000 units, with a sole focus on Golf assembly. Reaching an agreement with Beijing was faster and less problematic than expected.

By the time I returned to VW in 1982, the China project had made little noticeable progress despite years of discussion. Sometimes Wolfsburg was not ready to provide sample vehicles – but without these, the Chinese leadership could hardly be expected to give its approval – and sometimes our Wolfsburg production facility refused point blank to relocate assembly to China. And so everyone was going round in circles and getting bogged down in details, probably not least because VW's executive board wasn't exerting the necessary pressure.

I, on the other hand, saw a quick entry into this market, potentially the most promising market in the world (as I repeatedly emphasized in public) to be a key strategic task. I was not bothered by the fact that China was still far behind Nigeria in terms of car ownership at the time (there was one car for every 2,500 inhabitants), nor the low average per capita income. We assessed the minimum threshold for private customer business to be around \$4,000 annually, based on purchasing power parity. China was nowhere near this. But I was convinced by Deng Xiaoping's courageous and sensational politics and the unparalleled underlying essence that characterizes the oldest cultural nation in the world, with its four thousand years of history. VW was still weakly represented in Southeast Asia up until the '80s. Only in Japan were we the leading import brand, as we had been for decades thanks to the importer Yanase. Japan was once again economically dominant in the region.

From the spring of 1982 we tried to impart new substance to the talks with our Chinese partners in the hopes of bringing about a quick conclusion. Together with government representatives and a delegation from the Shanghai Tractor and Automobile Corporation (STAC) and the China National Automotive Industry Corporation (CNAIC), we very soon agreed that we would start with a "step-by-step" collaboration or, as the Chinese say, "yibu yibu." We began that same year with an initial trial assembly of five hundred vehicles in the *Shanghai Car Plant* (SCP).

Since its founding in the early 1950s, the SCP had produced the "Shanghai Sedan," a vehicle based on the Mercedes-Benz 170, to order and, with an annual capacity of around 7,000 vehicles, had become the largest car manufacturer in the country. The aim of our project was now to test our concepts for viability without having to take big risks. Pragmatism *par excellence*. After a corresponding contract was signed in mid-1982, full-scale assembly of the first VW vehicles in China started in Anting, 30 kilometers north-west of Shanghai, in 1983.³⁹

Our Chinese partners finally chose the Santana from our Passat class, which at that time was produced in Brazil and Europe. It was medium-sized and had a simple construction by today's standards, without "black boxes," and therefore relatively easy to manufacture. As a four-door model, it could also be used as a chauffeur car. Since demand in the early years would remain almost exclusively for official and fleet vehicles – later the Santana also replaced all the Japanese taxis in China – the car was well suited for the Chinese market. In addition, this vehicle represented a comparatively realistic degree of difficulty for building up the local supplier industry and coping with the learning process ahead of us.

The aim of our ongoing negotiations with the Chinese side was a long-term cooperation, and a joint venture in which each

³⁹ Today, after investments of five billion US dollars by the Shanghai government, Anting is an exemplary car city (modern VW production sites, suppliers, university etc.) and part of the metropolitan area of Shanghai with its own Formula One track.

side held a fifty percent stake emerged as the most practicable solution. Alternative forms of cooperation, such as granting licenses or founding a one hundred percent subsidiary, would not have achieved consensus nor were they realistic. It was also especially important to our negotiating partners to have parity in management. De facto, however, ultimate responsibility for the automobile would remain in our hands. The idea of a joint venture was not a Chinese invention, but came from the Americans (GM), who believed this was the only way to attract foreign investors to the country. But neither GM nor Ford were initially prepared to manufacture in China. Of the few American, Japanese and French car companies that used China as a production site in the first wave, only us and American Motors (now Chrysler) and Peugeot/Citroën (PSA) would remain. Toyota had already waved goodbye in 1978. Peugeot gave up later and sold its holdings to Honda, while Chrysler's Jeep production lagged far behind expectations, and according to reports, the situation in China was what would eventually give rise to the DaimlerChrysler group.

The idea of establishing a national automotive industry, including the associated supplier industry, in this, the most populous country in the world, first came from Volkswagen. But more importantly, we also succeeded in convincing the Chinese leadership to go beyond their initial plan of simply contract processing for export. We saw in China a national market that would develop into the largest in the world in the long term, far exceeding American orders of magnitude. If China were to achieve only the car density of Portugal in 1980, at that time the lowest in Western Europe, the country would need a stock of about 130 million passenger cars. ⁴⁰ The cost advantages that resulted from its sheer size would ultimately

⁴⁰ If you based the figures on Portugal's present vehicle density per capita, you would end up with a car ownership in China of more than 500 million cars.

result in China becoming the most important VW production site from a strategic perspective, including for exports to the Asia-Pacific region, and one day even to the United States.

The most difficult task at this stage was that of our negotiation team, which was made up of representatives from all the divisions. Initially headed by Wolfram Nadebusch, later by Heinz Bauer, it reported regularly to the executive board. In the subsequent, sometimes very controversial discussions with executive board colleagues, I thankfully succeeded time and again to bring about a decision in line with the team's proposals.

At the same time, it was important to create a basis of trust through open dialog with the leaders of the state – a role that fell to me. My most important interlocutor at first was Rao Bin, Minister for Mechanical Engineering, whose predecessor Chou Tzu Tsian took the initiative back in 1978 by being the first to visit Wolfsburg.

Rao Bin was a man with an extraordinary résumé, and he had already made a name for himself as a communist revolutionary in Shanghai before the Second World War. Over the course of our cooperation, he would prove to be an exceptionally talented engineer, a wise manager and a farsighted strategist. Despite our extremely different pasts and origins, we immediately managed to strike up a personal relationship. I explained our corporate policy to him and took Brazil as a parallel example to China; in that country, despite the lack of industrial prerequisites, we had played a significant role in setting up a successful automotive industry, including supplier companies. I paid particular attention here to the "infrastructural" components that we had voluntarily introduced in measured steps tailored to the respective host countries.

The actual contract negotiations turned out to be extremely difficult and slow-moving. China was, essentially, on its way to becoming a market economy at a breathtaking pace. But

there was inevitably a shortage of the necessary experience. At the same time, the relevant legal and institutional framework conditions were lacking. There was no patent law nor any law to protect capital, much less a functioning banking system.

Accordingly, relevant parts of our legislation had to be included in our contracts in order to rule out future discrepancies from the outset if possible, or to be able to fall back on a proven legal system in the event of differences in the interpretation of our contracts, which we safeguarded with arbitration clauses. At the same time, the Chinese negotiators had the highly complicated task of attempting to draw up the contracts so that they could be brought into line with laws that would later come into force.

As a result, veritable caravans of experts shuttled back and forth at regular intervals between Shanghai and Wolfsburg for marathon meetings. These involved fierce struggles; hardly surprising given that the mental starting positions and experiences of both sides were so very different. In the end, our team managed to negotiate the contract provisions that were essential to us in such a way that we could later fall back on a solid overall agreement.

At first there was a lot of skepticism about whether China would even be able to meet the infrastructural conditions for what would very soon become a modern mass production. At that time, our partner STAC's factory in Shanghai didn't even reach East German standards. But I was of the opinion that this nation, with its strong and scientific tradition – they were, after all, already building rockets to send into space – freed from the shackles of the command economy, would be able in the not too distant future to develop and produce competitive cars. It would therefore have been a bad idea not to take the lead in this development.

Since the start of Santana assembly in Shanghai, however, our negotiations had stalled again. But by a fortunate

coincidence, Vice Premier Li Peng came to our Wolfsburg Group headquarters in May 1984 as the first official Chinese state visitor. He took a whole day to tour our factory and our development center. The executive board showed him the entire product range and some of our prototypes, such as the successful, imaginative "Student" subcompact four-seater. To round out the day, Li Peng experienced his first drive at speeds over 200 km/h with me on our test track. When I met him again in 2003 in Beijing, he still remembered our drive together and the name of the subcompact prototype, the "Student," and the fact that it didn't have air conditioning, as he had remarked at the time.

During this visit, we obviously successfully conveyed the potential and entrepreneurial determination behind the Volkswagen name. Over the course of the day, a feeling of mutual sympathy and appreciation developed between our guest and myself, which was later to prove helpful to our project. When I put a VW jacket over Li Peng's shoulders during a meal together, I made the tongue-in-cheek remark that he was now on our staff and we were both obliged to ensure a speedy start to our joint project. To general surprise, we agreed before he departed Wolfsburg that the articles of incorporation for our joint project would be signed in October of that very year. This gave us less than six months, which increased the pressure tremendously on both sides and accelerated the negotiations dramatically. Li Peng's visit had brought about the breakthrough for our project.

The choice of date for signing the contract was no accident. Chancellor Kohl's state visit to China, which was important to the Chinese leadership on both the national and international stage, was scheduled for October 1984. Both sides needed spectacular contracts as a symbol of German-Chinese cooperation and as background music for the success of their policies. On the one hand, Kohl had clearly recognized the importance of entering the Chinese market, while on the other,

automotive contracts are particularly well suited as proof of a country's high level of technological maturity, and the specific case showed the confidence that Volkswagen had in the Chinese leadership and its policies. This resulted in a level of goodwill that we cultivated as an important asset.

As part of this state visit, the contract for the establishing of the "Shanghai Volkswagen" (SVW) joint venture was signed in the Great Hall of the People in Beijing on October 10, 1984, in the presence of Chancellor Kohl and Chinese Premier Zhao Ziyang Initially limited to a term of twenty five years, it included concrete agreements on the product range and manufacturing capacities for an initial stage of cooperation up until the early '90s.⁴¹

Signing the contract with Rao Bin, in such a grand setting and in front of such a backdrop, is one of the most memorable and beautiful moments of my life. Two days later, the foundation stone for our new Santana factory in Anting was laid, again in the presence of the Chancellor and the then Vice Premier of China, Li Peng.

But we were still a long way from reaching our goal. We had a lot of persuading to do if we wanted to get our Chinese partners on our side. Our strategy here was: seeing is believing. The implementation of our corporate philosophy in practice was best illustrated on the spot. And so I invited Rao Bin to gain a first-hand impression of our company and the practical application of its philosophy not only in Germany and Spain, but especially in Brazil. We were accompanied by Messrs Posth, Paul, Weber and Lee. Mr. Lee had in the meantime grown to become a mediator and an important advisor for both sides. His reputation even allowed him to call Li Peng directly at any time — a rare privilege. The telephone wires with his counterparts usually saw the heaviest traffic at

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⁴¹ On April 12, 2004, the term of the joint venture contract was prematurely extended by a further twenty years until 2030.

night.

The Chinese delegation on this, probably the most important business trip of our career, included Li Zhao Ji, Deputy Mayor of Shanghai, Zhang Xingye, Vice Chairman of CNAIC and designated member of the supervisory board of SVW, Chen Xianglin, Managing Director of SATIC, also headed for the supervisory board of SVW, Qiu Ke, who later became chairman of SVW, Zhang Changmou, designated member of the board of directors of SVW, and Fang Hong as the interpreter.

Brazil was our showpiece number one: in addition to the products (the Santana and the Beetle) and production facilities, the supply industry and the training workshops for apprentices, it was the exemplary social services in Brazil that really underscored our corporate philosophy - everything from medical care (including for families), through assistance for house building, to the canteens and daily transport to work. Even shopping malls (with discount prices) and sports clubs had sprung up there under our direction. Working for us, many of our Brazilian employees experienced for the first time in their lives what it was like to have enough to eat or visit a doctor. Added to this were the above-average pay and working conditions that Brazilians had previously not even dreamed of. As a "good corporate citizen," we have always felt just as committed to our employees as to our host countries. Our reputation for national and local commitment, export opportunities in our global network, fair personnel policies, training, occupational safety and environmental awareness preceded us. These attributes were assumed as a given for German companies in the world.

Experiencing how Volkswagen dominated the streetscape of Brazil and seeing the popular enthusiasm for the Beetle, which people proudly considered a fellow Brazilian, was more than impressive in itself. We were looked after on site by Wolfgang Sauer, head of VW do Brasil for more than a

decade, and by our major Brazilian shareholder Joaquim Monteiro de Carvalho.

On February 13th 1985, a strategy meeting initiated by Rao Bin took place in the Plaza Hotel São Paulo. He informed us that they would also be talking to General Motors and Cummins, among others. We knew, however, that the projects from the two manufacturers didn't really constitute serious competition for us, either in terms of their strategic alignment or their size. For example, the joint venture proposed by GM, unlike ours, excluded exports from the outset, while the Cummins project was limited to diesel engines for trucks.

The aim of this round of talks, Rao Bin continued, would be to discuss whether the ideas of both sides could be made compatible. The Santana was too small, the Audi 100 too expensive, but it was expressly the car that officials desired. These latter would be almost our only customers in the first few years, followed by the taxi companies.

For the time being, China could not afford "greenfield projects," existing factories would have to be used. They also wanted to introduce the Santana's successor at the same time as in Europe, with an annual capacity of 300,000 vehicles.

For our part, we emphasized a realistic national production share, the delivery of vehicle parts kits from Brazil, too, supported by the Brazilian government, a minimization of investment and a long service life for the Santana. Using the example of Brazil, it was also possible to convincingly demonstrate to our guests that building an efficient supplier industry took time. After all, it had taken more than ten years there. China would therefore also have to reckon with longer deadlines.

Our factory visits, including sites in Mexico and North America afterwards, brought the breakthrough and the de facto decision for a close cooperation with VW. The trip could hardly have gone better. Rao Bin was now finally convinced that there was no better partner for the People's Republic of China than Volkswagen. Over the course of our joint field trip, some close personal relationships developed among the participants that would later prove conducive to the success of our project. We always took great care to maintain these personal relationships and to comply with agreed deadlines. In doing so, we created trust and ensured reliability and continuity, which helped to win our Chinese partners over. We were awarded the contract, even if competitors sometimes (theoretically) offered better conditions, which later earned us their admiration.

Following the successful tour of the Americas, Posth and Paul started their work in Shanghai on March 10, 1985, and the first board meeting⁴² of Shanghai Volkswagen (SVW) took place on March 20, 1985. A dozen VW contract employees started their work on site at the same time. They were later joined by more workers, but there were never more than thirty four, although the contract stipulated sixty five. The costs of the thirty four expatriates made up half of the personnel costs of Shanghai Volkswagen at the time, so it was not a bad thing that STAC initially oversupplied us with 1,800 Chinese employees.

After the formal establishment of Shanghai Volkswagen as a legally autonomous and independently managed company in the spring of that year, production assembly of the Santana began in September in STAC's completely outdated factory halls in Anting.

Martin Posth vividly describes this start as anything but a walk in the park in his review of the founding years of Shanghai Volkswagen:⁴³ "Nothing worked like it was meant to. The Santana parts from Germany took days to pass through customs, construction material for our new factory buildings

⁴² From the VW executive board, Messrs. Claus Borgward, Günter Hartwich and Werner P. Schmidt were represented on the board of the Shanghai Volkswagen joint venture.

⁴³ See *BusinessForum China*, edition 1/2005, page 38 et seq.

disappeared without trace, we discovered a highly toxic, mercury-mixed sludge in the old paint shop ... We were permanently irritated by the fact that nobody kept their workplace clean and tidy."

Every leadership position at SVW was double staffed, right up to the duplicate leadership with a Chinese managing director and his German deputy. The shareholders on the Chinese side included, besides STAC (25%) and CNAIC (10%), the Bank of China, Shanghai Trust and Consultancy Company (BOC) (15%). Nowadays, the Shanghai Automotive Industry Corporation (SAIC), formerly STAC, owns forty percent of the shares.

During Chinese Premier Zhao Ziyang's visit to Wolfsburg in June 1985, we assured him again that – despite the modest figures for the first year – our commitment to China was an absolute priority for us and that we considered it the most important task for the future of our Group. Of course, the Chinese government knew that the automotive industry is a key industry that not only provides all kinds of impetus to the entire economy and to technical progress, but that it was also very important to internal politics.

We now had the basis of trust for a close partnership. A special personal relationship had grown up between Rao Bin and me, although I wouldn't describe it as a fraternization. Unfortunately, he died far too young after a stroke in our Shanghai factory on August 29, 1987, at the age of seventy four.

At the car show in Shanghai in the summer of 1985, we were met by an unimaginably huge crowd and our brochures flew off the shelves. We had to fly in as many as brochures from Germany as we could find; old ones or new ones, it didn't matter. For people at that time, it was enough simply to marvel at the quality of the paper and print and to dream about owning a car. Hardly any of the visitors back then could probably imagine that within twenty years, half of our production would

be aimed at private consumption.

On October 28, 1985, I attended the second board meeting of Shanghai Volkswagen as a guest. I purposely did not become a member of this body, but I was always present. During my visits to China, I tried to spread confidence both on the board and in government circles, in spite of the many difficulties that repeatedly plagued day-to-day business. Evidently, I was not entirely unsuccessful in this attempt, as I found out afterwards.

The problems in our path were daunting. Our project was of key importance to the political leadership of the country, so they were initially far more involved and paid much closer attention to the details than a German supervisory board would. I would experience this for myself very soon. For example, on the sidelines of a UN general assembly, Zhao Ziyang complained to Chancellor Kohl and Foreign Minister Genscher about the quality of our products and the inadequate localization of production. As a matter of fact, not all the horns in our cars were at first up to the strain of constant use that they were put to in China, and they were modified accordingly. Ziyang also complained that technical approvals also took too long, and we were too "German," too strict, for example with the Santana steering wheel. When we explained the reasons for our safety requirements, this particular problem was soon no longer an issue.

The next year, Li Peng, who was taking a personal interest in our project, took me to task (to put it mildly) at the Four Seasons Hotel in Munich because of squeaking rear door stay hinges. A subsequent trip to the Tokyo Motor Show allowed Posth, Paul and me to take a detour to Nissan, which at the time manufactured the Santana under license. They had solved the problem with the door stay hinges and, as a courtesy, immediately sent two hundred sets to Shanghai. The main complaint from the Chinese side had now been resolved. But this experience also made me realize that our quality assurance

systems needed a thorough overhaul. After all, the Santana had already been in production in China for three years - as well as in Germany, Japan and Brazil.

As in all countries that are in the process of building up an internationally competitive automotive industry, the Chinese car sector also had to be rigorously protected from import competition in its early days. The relatively high capital costs compared to the small annual production figures resulted in prohibitive unit costs, which in our case multiplied the price of the Santana, with endless product cycles before the modelspecific investments could be amortized. Incidentally, the same also applied to the supplier industry in the country. On the other hand, a drastic limitation of vehicle imports was urgently required, also in view of the difficulties with balancing foreign payments. Even in 1985, China had imported 200,000 vehicles, mainly from Japan. The foreign exchange amounts needed for this were larger than the total investment that had been spent on developing the automotive industry since the founding of the People's Republic in 1949. As a result, from 1986 onwards, the Chinese government began to handle vehicle imports extremely restrictively and efforts were concentrated on modernizing and expanding the domestic automotive industry.

Our first investment phase had earmarked outgoings of nearly 600 million marks, one third of which was funded by our own equity, meaning a capital injection of 100 million marks from VW.

Of course, it was already clear to us then that we would have to catch up to our international product cycle by the late '90s with appropriate volumes, possibly supported by exports. But in the first few years, the outlook for exports was mostly restricted to tiny quantities to countries such as Burma.

The government contractually required a national production share of over eighty percent to be achieved within seven years, and not only because of the balance of payments.

We were all agreed that the only way to substantially reduce the need for foreign currency was to nationalize production as quickly as possible. This meant planning from the outset not only a car assembly line including a large press shop and a paint shop, but also an engine factory. This would be used to produce our tried and tested 827 standard engine, which, including diesel, covers a displacement between 1.3 and 2.0 liters. The plan was to reach annual capacities of 30,000 Santana and 100,000 engines by 1990, of which 70,000 would be exported to other Volkswagen Group plants as what are known as short engines for the Group's coordinated production. This would — and did — make the People's Republic an exporter of power trains to the Western world for the first time.

To further relieve the foreign exchange balance sheet, we developed and implemented a catalog of measures which also involved an important degree of goodwill: these measures included a contract to build two 30,000-tonne ships for the Ahrenkiel shipping company for our VW charter fleet, each with a transport capacity of 4,500 vehicles, ⁴⁴ as well as purchasing Chinese machine tools and body presses, in addition to awarding research contracts and initiating research partnerships. Furthermore, the Volkswagen Foundation, which is independent of Volkswagen and of which I was a member of the Board of Trustees, provided substantial support in many scientific fields. It had declared China a funding priority.

Our efforts to increase the national production share soon produced their first results, too. Under the guidance of my colleague Claus Borgward, work teams with representatives

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⁴⁴ Volkswagen has a fleet of eighteen charter ships. The wholly owned subsidiary VW Transport has ended every financial year with satisfactory results. The company's income also comes from transporting competitor products.

from various divisions were formed for this sole specific purpose. Ultimately, the overall success of our project depended very much on the progress made in this area. If we met the state requirements, we could increase imports of parts sets and so increase production. In turn, higher output improved profitability thanks to economies of scale, which helped us reduce prices at the same time.

In addition to Shanghai Volkswagen's in-house production, sixty five percent of what was referred to as local content came from the supplier side. In order to fulfill the local content share while still maintaining the prescribed quality, we understandably required government help for our specialists. Thanks to Li Peng and the ever present support of Zhu Rongji, we did in fact receive this help, in part from the defense industry (North China Industries Corp., NORINCO). At the same time, Chen Zutao, who was then President of the CNAIC, formed working groups to help improve local content in accordance with Zhu Rongji's motto "solve problems on site, don't send telexes."

In addition, we brought more and more suppliers into the country who, with their capital and know-how, would become an important catalyst for economic progress, which consistently earned them significant positions in the economy of the People's Republic of China. Sometimes, our colleague Münzner had to force them to accept these lucky positions. At that time we deliberately exerted pressure, despite the risk of small unit sales, all the political uncertainties and low purchasing power. Sometimes, relocating production was simply unavoidable because the quality of products suffered too much due to the long transport route to China, as for example in the case of some coatings. We increasingly began to relocate even our technical approvals to China, in order to reduce costs and speed up the process.

Nevertheless, maintaining our quality standards was always

the top priority from the start. We categorically rejected the Chinese proposal that vehicles intended for the domestic market would not have to meet the high quality standards for export vehicles. Our philosophy of uniform quality standards initiated an important learning process.

In doing so, Volkswagen not only made a decisive contribution to the development of the Chinese supplier industry, but inevitably also provided support for subsequent investors from the automotive industry. That these foreign investors – especially those from Europe – are still missing twenty years later remains a mystery to me to this day. On the other hand, it shows how difficult it can sometimes be in large corporations to change direction. There are still companies that haven't realized that you can't reach your goal simply by sending out expert committees.

However, I warned against building a factory with an annual capacity of 300,000 units by 1990 already, as the Chinese side was demanding. To me, it seemed we couldn't be thinking about that scale before 1995 at the earliest, as indeed later turned out to be closer to reality. Our sales had already stagnated, and at a much lower level of production, because as many as half a million cars were still entering China from Japan through the island of Hainan, until Li Peng finally put an end to this black market trade.

For an industry as capital intensive as ours, low labor costs like those we found in China essentially provide no noticeable relief during the startup phase. On the other hand, as a pioneering company, our product range gave us a fifty percent share of the entire Chinese market for passenger cars for almost two decades. This relative volume advantage over our much smaller local competitors resulted in excellent profits, which, however, were never fully reflected in our results due to the valuation method used in our consolidated financial statements. Among all the joint ventures in China, we were

always at the top in terms of earnings, which was also true for comparisons within the Group. The return on sales fluctuated between ten and sometimes even more than fifteen percent. When combined with depreciation and amortization, this enabled Shanghai Volkswagen to always finance its expansion and investments itself, to the delight of all shareholders. In addition, the contractually agreed dividend was always generated. This now also applies to the First Automobile Works (FAW), our second joint venture with Chinese partners in Changchun. Today, the thresholds for entry and initial investment are much higher and inevitably associated with long-term start-up losses, and not with self-financing opportunities on our scale.

Thanks to our incremental approach and the quantity of supplier parts we imported from Germany, which in the first few years was still very high (albeit decreasing) for what was by our standards a tiny production rate, our financial risk as an investor was always small, as far as it was not already covered by insurance. The contribution margins for the VW vehicle parts kits exported to China enabled us to finance our own capital contribution. We had therefore taken a risk that we could afford, and expanded using our cash flow.

On the other hand, the complexity of the business required an exceptionally high commitment of our scarcest and most important resource, namely our managers and specialists from all departments. Everything we set in motion in China swept avalanches of work towards Wolfsburg, in all board divisions. At no time would we now have fewer than a hundred Chinese employees visiting our German sites, whether for coordination tasks or for training purposes. These visits were as much about getting to know the latest production and development techniques as they were about learning international accounting rules, for example, including converting Chinese financial reporting into a German commercial balance sheet. Very soon, my fellow board

member Günter Hartwich, who was responsible for production, employed a Chinese engineer as his assistant as if it were the most natural thing in the world. Many of these former employees now have responsible positions in their home country, making up the backbone of today's Chinese automotive industry.

Whenever we received a high-ranking visitor from the PRC – which was something we worked hard at, and in which we received invaluable help from chief of protocol Werner Graf von der Schulenburg in Bonn – that visitor could be sure of an enthusiastic welcome from an impressive crowd of Chinese Volkswagen employees waving flags. Nothing can replace the backdrop of our Wolfsburg factory and the atmosphere that our staff convincingly radiate.

Although we didn't have to set up supermarkets for our employees in China, we did set up a training workshop for 250 young people there in the initial phase – as we do everywhere in our VW world. It would soon be the equal of the training facilities at our German sites and play a pilot role for a general introduction of dual training in the Chinese mechanical engineering industry. Our German instructors were surprised and impressed by the ambition and hard work of our trainees there, not to mention the discipline, which resembled that of a Prussian cadet institute. It was a big contrast to Germany, where our trainees are greeted as equals by Human Resources and the works council – as well as the IG Metall trade union - from the very first day of their apprenticeship. They learn everything about their rights, but far too often they learn too little about their duties and the realities of our world today, which they enter with privileged status, for sure, but in which they will soon have to compete against rivals from Asia.

Our expatriate employees were doing hard work, and it was just as hard to create tolerable living conditions for them in China, with difficulties ranging from accommodation in Shanghai to schools for their children. The tireless municipality (Shanghai will soon reach a population of 15 million and is planning for 30 million) eventually built new houses for our employees. At that time, however, neither Pudong nor Shanghai had thousands of skyscrapers of twenty stories and more.

For more than two decades, the driving motor in Shanghai was Zhu Rongji, first as Deputy Chairman of the State Economic Commission, then as mayor from 1987, and finally as Vice Premier of the State Council. In 1998, he then succeeded Li Peng as premier. He was the Ludwig Erhard of China. I regard him as the most successful economic policymaker of our time. His ability and strategic talent was decisive for China's success, but so was his assertiveness, which required extraordinary courage. After all, introducing a market economy practically always meant curtailing the powers and privileges of functionaries in the centralized economy. The best way to do this is by drastically slashing the number of employees and jobs in the bureaucracies. Very soon we were able to see in the Soviet Union the dangers and risks of converting an economic system, and compare the results. China's economy was much poorer than the Soviet Union's, which was at least rich in natural resources and scientists. The challenges in a country the size of China had no parallel. In the recent history of this country there had probably not been a single generation that had not been decimated by famine.

In the early '80s, China was still living with the very recent trauma of the Cultural Revolution, with its millions of human victims and tragedies and unimaginable cultural and economic losses. Given this, the results and the pace of Deng's reforms were all the more remarkable. His family had also experienced painful losses during the Cultural Revolution and been forced to live, suffer and work in degrading

conditions for many years.

In contrast to Gorbachev, however, Deng did not start by blowing up all the structures of the system that was to be abolished, but instead systematically built for a controlled, step-by-step conversion. He made clever use of the machinery of the Chinese Communist Party in doing so. Unlike, say, Japan or Korea, he wasn't afraid from the outset to bring foreign capital and expertise into the country, which helped give the development process its unique pace.

In my opinion, Deng's path to a "socialist" market economy with the vehicle of a communist party is also accompanied by an unstoppable process of democratization within the framework of Chinese needs. It is crucial that this process remains steerable, that its pace does not get out of control, so that the Russian experience is not repeated in China – on a much more dramatic scale. However, China's economic success has strengthened the political class. The Communist Party knows full well that economic failure would herald its end, as is the case for almost all authoritarian states.

Zhu Rongji's bold mastery of the process initiated by Deng's policies is evident when you consider that, of all countries, it is the giant China that was able to become the fastest growing economy in the world over the course of more than two decades and be the first to lift one quarter of a billion people out of extreme poverty. The country even handled the Asian financial crisis without currency devaluation, which helped decisively to contain and finally overcome the crisis.

Of course, in 1984, when we signed the joint venture agreement, China's reforms were still a long way from reaching the point of no return. But this didn't stop us from fully focusing on China, while we deliberately left India and the Soviet Union – and later its successor states – on the sidelines, without completely taking our eye off them. Today, Russia and India are also on the move.

The Chinese leadership team would remain our partner up

until the 21st century with hardly any changes – certainly a rare continuity. They had all studied in Moscow or Leningrad themselves but now they sent their own children to study in the United States. Hundreds of thousands of young Chinese followed on this path, making the US education industry one of the country's key export branches. For the future of China, the US education of the country's elite is fundamental to the continuation of Deng's policies, and for investors it is a topranking stability factor. We shouldn't forget here that China's domestic market will become one of the most fiercely competitive in the world, as many industries are already starting to painfully realize. Not only are many of China's top political leaders engineers, they also have significant professional experience in business. Li Peng was an engineer and had worked in the energy industry. Many top leaders come from the elite talent incubator at FAW, such as Jiang Zemin, for example. Today's young political elites in China generally also have sound economic experience and have had to put themselves to the test in practice. They are entrepreneurs. One of the vice mayors of Shanghai, Tang Dengjie, holder of the business portfolio, worked as the head of industrial engineering at Shanghai Volkswagen, for example. The Chinese, in my opinion, have developed the American and French system of revolving doors between government and business even further. In contrast, in Germany politics is mostly a – lifelong – profession. Incidentally, it is probably the only important profession without training regulations, and instead it generally ensures a guaranteed dependence on the respective party for life.

In agreement with the government, and also under gentle pressure from our customers, the functionaries, we very soon started revising the Santana. This wasn't actually planned, as the car was set to be discontinued. Specifically, the rear entry was improved by widening the rear doors and extending the footwell with all the associated endless changes, starting with

the wheelbase extension. This also involved a "first": a Chinese and a Brazilian engineering team working under German management came up with this major facelift together via satellite link between São Paulo and Shanghai.

The key to success in managing all these different tasks was the quality of the German management on site. American Motors had started out by dispatching only one tried-andtested foundry manager to China, with unsatisfactory results, to put it mildly.

By contrast, we had the perfect team in Martin Posth and Hans-Joachim Paul. Posth had previously been Head of Human Resources at Audi and, to the amazement of many career thinkers, then switched to this small company, while Paul had taken a leading position in our Kassel transmission plant, the largest transmission plant in the world. Thanks to their creative, entrepreneurial actions, both received maximum plaudits from the highest ranks of the Chinese government, who viewed them as partners, equals and friends, and honored them for their achievements. Over the years, the two of them wrote a piece of German-Chinese industrial history and for this, they have earned their place in the annals of the automotive development of China.

I ensured that the two of them had the necessary independence from headquarters in their new responsibilities. I sent our "China Paul" on his way with a piece of advice: do not plan a single square meter or a single person more for production – while ensuring top quality, of course – than the best Japanese factories do. Incidentally, we all wore uniforms in China – a novelty for us at the time and only common in Japanese factories at home and abroad. Since then, this has also become par for the course in the VW world.

The first time I walked through our new assembly plant in

 $^{^{45}}$ In 1997, Martin Posth was made the first honorary citizen of the city of Shanghai.

Shanghai, with body presses from Erfurt in Germany, I "missed" the areas for rework that are unfortunately such a feature of European and American factories, and are often the size of soccer fields. There, rectifications are made directly at the end of the assembly line, i.e. repairs are carried out on vehicles that have just been produced but didn't pass quality control. Paul had not made provisions for this in terms of floorspace, nor did he need these zones. Fully ninety seven percent of the vehicles were first time runs and left the line in perfect condition. In Europe, this was a level of quality that had not been achieved, or even planned for. For me it is further proof that China has all the prerequisites to take a top position in the global automotive industry one day in the not too distant future, with all the resultant consequences for this industry, including the development sector and the cost and price level.

You can refuse to share know-how or actively do so and thus exponentiate your own knowledge. The latter option was my policy at all of our sites. After all, you're stronger when you're at the forefront of these developments, setting the pace and able to prepare for global integration, division of labor and segmentation. VW was able to demonstrate this to its competitors for two decades in China – all on its own.

In the '80s, the Chinese central government initiated three major projects to accelerate development of the national automotive industry: in addition to the VW joint venture in Shanghai, the SAW project (Second Automotive Works) with Peugeot/Citroën (PSA) and FAW (First Automobile Works, Changchun) – preferentially with Chrysler – which was then the fourth-biggest truck factory in the world. Now, it's the biggest.

The FAW truck plant had started with Soviet help and was completed by China on its own after the abrupt political separation from the Soviet Union in 1953. All the Soviet advisors had fled China overnight.

Wenpo Lee, who had successfully headed the VW

representative office in Beijing since the mid '80s, found out in 1986 that a huge car factory was being built at FAW in Changchung, something not covered by their habitual truck range. After the FAW management had initially negotiated with Chrysler, first contact with VW in Shanghai was made through Lee at the end of 1986. However, there was little love lost between the two sides. Our team in China refused the offer of collaboration.

My friend Walther Leisler Kiep found out about this in passing during a stay in Beijing in 1987. Thank goodness, he immediately "disturbed" me on my summer vacation with the news. Kiep worked in insurance and was a member of the VW supervisory board, treasurer of the CDU Christian-democratic party in Germany for many years, and a member of the first Albrecht cabinet as Lower Saxony's finance minister. I had brought him and Albrecht together in my house, which was then still in Lüdersen near Hanover, for an American-style breakfast. In the CDU select committee, he was responsible for contacts both with the Comecon countries and with the USA. Back in the early '80s, an important channel was opened up to the East German trade ministry on Kiep's initiative – more on this later – making this warning the second time he had given us a nudge with far-reaching consequences for our Group.

Luckily, it was the first year I had a fax installed in my summer home. On my small Japanese typewriter, I wrote a letter by return of mail to Director General Geng and within twenty four hours, I had received an invitation to visit.

In September 1987, at my behest, the executive board member for production at Audi, Hermann Stübig, and Heinz Bauer from our investment department, also from Ingolstadt, set out on an initial exploratory trip to Changchun. The two of them returned extremely impressed. I then decided to take a look at the place for myself as soon as possible.

After the motor show in Frankfurt, we went on a trip to

Beijing in October 1987. The program included audiences with Premier Li Peng and Minister Zhu Rongji. In between official appointments, Borgward, Posth, Lee, Weber and I made an unofficial trip to Changchun, which we kept a secret from the Chinese government. When we landed there in a Tupolev on October 20, passing endless rows of obsolete MiGs, the plane stopped in front of a tiny airport building, in front of which a huge reception committee was waiting with a Hongqi ("red flag"), the country's long state car, and winter coats for us.

Changchun itself made a dismal impression on us. As our police escort whisked us along wide streets, we overtook endless rows of silent cyclists. The cyclists, wrapped up against the cold, were as unimpressed by the police sirens as they were by the shouted instructions from croaking loudspeakers.

In the end, we didn't take off those winter coats for the next twenty four hours. The heating season only started on November 1st, and we had arrived a few days too soon. With the exception of the rooms housing the factory's IT, the temperatures everywhere were icy: in the modest FAW guest house, in the truck factory and in the gray, uniform city of two million.

Immediately after our arrival, very intense talks began, with every word and each step recorded by video cameras. The dinner, at which we also wore our winter coats, testified to a Chinese cuisine that was well adapted to the climate. Our negotiations dragged on until one o'clock in the morning. I started these off by proposing a collaboration in the field of "local content." However, we were particularly interested in a joint venture for producing the Audi 100. I emphasized that we could supply an Audi 100 tool set from South Africa at short notice and at a fair price. Finally, we also discussed the possibility of producing Golf cars, which the Chinese side also showed an interest in.

Zhaojie Geng, the top boss at FAW, knew from his knowledge of the international markets that he needed a Western partner to start production of passenger cars. The way he saw it, a pilot run should start in 1989, to then be followed by a "production phase I" from 1990 to 1995 with an initial capacity of 30,000 vehicles from 1992, succeeded by a second stage with an annual capacity of 150,000 vehicles. The local production share was to be gradually increased to sixty percent by 1992 and then to eighty percent by 1995.

The FAW leadership strongly criticized the almost six years of negotiations that had been needed for Shanghai. This length of time was completely out of the question for Changchun. After all, they were about to sign the contract with Chrysler. I then startled our interlocutors with a promise to wrap up the contracts in just five months.

The next moment Geng interrupted the negotiations in order – as we now know – to call his delegation in Detroit on the phone and stop them from signing the finished Chrysler contracts. Of course, he didn't tell us this at that time, only pointing out that he already had a 2.2-liter Chrysler engine with the associated production facilities. This contract had apparently been signed right before his phone call, while the contract for manufacturing passenger cars was due to be signed next. It was all a question of minutes.

As far as the engine issue went, I was able to reassure Geng that the power unit in question must be a drilled-out version of a VW four-cylinder engine built by Chrysler under license, which would also fit into our vehicles without any difficulty. Geng then demanded greater export freedom, also under the name Volkswagen, which we had to refuse. We discussed every conceivable variant endlessly, from a joint research and development department to the immediate delivery of radiators and wheels for Shanghai. In the end, we seemed to reach an agreement and we were determined to push our plans to fruition. At night, the contents of our suitcases provided

additional warmth. The hardest part was jumping into the bathroom the next morning. Unfortunately, the water hadn't frozen in the pipes.

During the day we visited a seemingly endless truck factory, almost without mechanization, with an in-house production depth starting right from the foundry and forge. Where the engine blocks were cast, containers holding the liquid cast iron were conveyed automatically from the electric melting furnaces to the raised casting platform by an overhead cable winch, and the first task for the foundryman was to intercept these. To do so, he had to grab hold of the switch hanging from the lower end of the cable — a life-and-death acrobatic feat. Only then could the casting ladles be operated, and the empty containers traveled back to the electric melting furnaces.

This gymnastic stunt didn't always succeed, as Geng confessed to me many years later over breakfast at the Four Seasons Hotel in Shanghai. In his early days at FAW, this had been his workplace, and he had suffered dreadful injuries there. When we said goodbye that day in March 2003, Geng gave me a model of the FAW's new "red flag," a vehicle that was a little longer and at least as elegant as today's largest luxury sedans. It now has a proud place in my collection. The real version would pick me up from the airport in Changchun a few days later. The modest building still stood there, the old MiGs were still parked there, and once again I was received by an oversized delegation from the provincial and city governments as well as from FAW, and now also from FAW-VW-Audi, together with a police escort. What particularly impressed me on this last trip was that Changchun itself had, in the decade since our first visit, developed into a modern metropolis that can certainly compete with China's coastal cities. I was appointed an honorary citizen, which touched me deeply. This was my fourth honorary citizenship, after Wolfsburg, Chemnitz and Zwickau.

But let's return to the negotiations with FAW, which finally

resulted in the following agreements:

- 1. FAW was to start licensed production of the Audi 100 to replace the "red flag." As a gift to mark the end of my active involvement, the government gave me an original "red flag." It was the first one to find its way to Europe and is now in a depot at the Auto Museum in Wolfsburg.
- 2. Negotiations would begin on the companies to be established and the necessary contractual agreements as soon as we had received the relevant board approvals.

Later, after Audi assembly had started up at FAW, the contracts would be extended to include license production of the Golf and the Jetta.

The Golf production facilities that were no longer needed in Westmoreland, Pennsylvania would then also be used in Changchun. Geng personally visited our factory in Pennsylvania after it had already closed, with a team of 120 employees. They camped out in the factory and documented and filmed all the processes on video, including the dismantling. All the plants were dismantled and packed in order to be rebuilt and put back into operation in Changchun just a little later. In the initial phase, FAW received supplier parts from VW of South Africa, which was also very convenient for us at the time because we were looking for exports for our South African subsidiary.

As Changchun was Volkswagen's second joint venture in China, we had to accept a stake of just forty percent. Our proposal to involve a trusted Taiwanese partner, Dr. Shi Hui Hwang, who assembled VW Transporters for us, with a ten percent stake in the project was rejected by the government. We had to accept the decision, even though this solution would have strengthened us considerably. And so, although FAW assumed the majority of our joint venture with a sixty percent

stake, they have shared management responsibility with us fifty/fifty ever since.

In addition to the major projects, the government's plans also tolerated a number of other small and micro automotive factories, including some domestic manufacturers that have in recent years acted as bridgeheads for latecomers in our industry. And so there were still plenty of opportunities for the Volkswagen Group to gain other Chinese automobile factories as partners, even if only so as not to leave them to the competition; after all, we still had Seat and Škoda in reserve. But Wolfsburg evidently took its eye off the Chinese market, especially regarding product policy and capacity planning, in the second half of the '90s, focusing instead on acquiring luxury brands and developing premium class models and spectacular record vehicles. In addition, they allowed Posth to take his know-how and his relationships with top Chinese leaders to the management consultancy firm Arthur D. Little, while Paul became head of the Group's energy supply. Lee found a new professional challenge in China under Hayek at the Swiss watch manufacturer Swatch. Anyone who is familiar with conditions in the People's Republic of China knows that in no other country in the world does a personal relationship of trust play a more important role as a prerequisite for the continuity of cooperation.

As expected, on our return to Beijing we had to hold difficult talks with the government, starting with Li Peng. Among other issues, these talks concerned options for increasing the local production share and improving the balance of payments by exporting spare parts for the Santana, production of which was being discontinued in Europe (there were around five million Santana cars around the world). Other questions related to the delay in our engine project. Li Peng confirmed the blocking of automobile imports and at the same time approved our CKD imports for production of the Santana.

Zhu Rongji, in particular, was having none of our FAW

plans at first. He was extremely upset about our trip to Changchun, for which we didn't have permission. He also didn't see the point of a division of labor between Changchun and Shanghai. There was too much focus on the specific local sites, which were in fierce competition with one another. We'd be better off doing our homework in the area of local content and competing against FAW as another competitor on the market. He was sure we would be stronger and win ...

At first I suspected that Zhu, who came across as likable and dynamic in equal parts, had not yet given up his Chrysler option. His goal had always been to establish at least one other large car plant at each site in order to ensure intense competition right from the start. From his position, this was the right strategy, and GM in Shanghai and later Toyota in Changchun eventually gave him the chance to implement it.

It was only afterwards that I found out the immediate reason for Zhu's annoyance at the time. He was about to return to Shanghai, and he would have liked the Audi 100 to also be made there. When the car ended up not being built there, this triggered a lot of resentment in Shanghai's political circles.

The top Chinese leadership included strategists of exceptional stature in the field of economic policy. In March 2003, Li Peng reminded me of the opportunities that German industry leaders had missed out on back in the '80s through a lack of belief, and how they had missed the train.

To mark the conclusion of that particular Beijing trip, Jiang Zemin invited us as guests of honor to a dinner in the Great Wall Hotel – in spite of our escapade to Changchun – to which the German ambassador Fischer and commercial attaché Junker were also invited. It was human gestures like these that made a lasting impression on us and demonstrated the quality of our connection. Our hosts had style.

And the final award of the contract for Changchun was certainly a vote of confidence in us. It was preceded by threeman talks between Lee, Zutao and Zhu Rongji. As was so

often the case before, many people probably had a hand in the success of these talks. At the end of the day, the close personal relationship between the two leadership levels were just as crucial as our negotiating team's strong experience of dealing with their Chinese counterparts. On the part of the Chinese leadership, this was also the logical continuation of a strategy, quite pragmatic in its implementation, to gain time with a reliable partner, but without taking their eye off the goal or their foot off the gas.

From the beginning, we tried to move our interlocutors towards a planned decentralization of the automotive industry. The enormous geographical distances in China – similar to those in the United States – called for appropriate economic structures, but not a repeat of our Wolfsburg experience with a factory that had grown too big in only one location. After all, engine and assembly plants were ideal instruments for decentralization and balanced industrialization of a national economy. In the case of China, this would have meant a move away from the coastal regions. Originally, however, the focus was mainly on Shanghai, and certainly a traditional local egocentricity prevailed. We would have preferred a wideranging decentralization of our engine plants from the start. Now that the infrastructure has been expanded considerably, it is still not too late for this, especially considering the huge expansion volumes to come in China.

We flew back to Wolfsburg more than satisfied. After I proudly reported on the results of the delegation's trip, our success and the strategy for Changchun, particularly with regard to Audi, in the following board meeting, I was met with unanimous rejection. I was particularly surprised by the negative reaction from the Audi chairman. At that time, he still didn't know that the profitable figures that Audi reported in 1991/92 would to a large extent be down to additional business with China. It took a lot of work to convince the board to approve the Changchun project.

At that time, a major and thoroughly justified debate arose around the question of whether a manufacturer that had previously produced only trucks – the "red flag" car was a one-off production – would ever be able to achieve the quality standards required for passenger cars. Our production department and Audi finally agreed after inspecting the site, albeit with great trepidation regarding the new, gigantic amount of work (where would so many new top executives come from?). No one was talking about the success of our mission.

For our expatriate workers, the situation in Changchun, Jilin, would initially be much harder than the situation in Shanghai. In the end, it took an evening of bowling with Geng for our Ingolstadt employees to be allowed to enter even one public swimming pool. Luckily, unlike our Audi experts, who were well-trained in this field, the boss of FAW didn't know anything about bowling. He and I were in the same boat. Nevertheless, that evening I won on his American alley. This victory was a breakthrough for our team. Our executives and specialists deployed abroad, including more and more "senior experts," have always been our country's best ambassadors throughout the world.

Audi assembly began in Changchun under rather improvised conditions in old halls. But our excellent team from Ingolstadt and Neckarsulm did us proud, even if we couldn't get used to the paint shop designed and built by FAW. In return, during my first visit to Changchun after the start of assembly, I was forced to listen to a string of complaints about the poor quality of the Audi supplies. Thankfully, this time it wasn't Li Peng doing the complaining, but rather Geng and his Audi team, which was more than enough for me.

On November 20, 1990, Geng, Weber and I signed the contracts in Berlin to establish our second Chinese mainstay, the "FAW-Volkswagen Automotive Company," which began operations in February 1991 and, from the end of the year,

started producing the first Jetta⁴⁶ cars on a CKD basis in the former production facilities from Westmoreland.

Geng didn't hesitate to immediately add to his ongoing, large investments. He was helped in this by his ties to Beijing as an influential parliamentarian. For my successors, however, this was the start of a rather bumpy, difficult stretch of road with losses in Changchun before the books were finally balanced. In the meantime, however, both Audi and VW are financially sound in Changchun, and quality has long since ceased to be an issue; indeed, they are at the top of the Group in this area. In my time, we wouldn't have dared dream, even in Europe, of the quality levels that have now been achieved in Shanghai and Changchun.

Since the end of the 20th century and the beginning of the 21st century, China has become the most important engine of the global economy, it has replaced Japan as the largest importer to the USA and is beginning to set the pace of competition in some branches of industry. Two thirds of the photocopiers and DVD players produced in the world and half of all digital cameras now come from China, as do half of all televisions in the USA, with the latter having recorded an average annual price decline in the double-digit percentage range in recent years. The list could go on and on. It also testifies to the entrepreneurial success of the Chinese leadership.

It is no longer textiles, shoes or millions of bicycles that are pushing China up the rankings: currently the world's fourth largest trading partner, it continues to advance. The country's major scientific and academic centers and more than 600,000 engineering graduates each year (India has 350,000, the USA 70,000) will be setting a new pace in research, development and productivity.

There are now also one hundred percent Chinese automotive

⁴⁶ Notchback version of the Golf.

companies. I see no reason why they shouldn't also become global players in the foreseeable future, like the Koreans, with the difference that the latter only have a domestic population of fifty million to draw on. The white goods manufacturer Haier or the electronics group TLC, the world's largest manufacturer of television sets, are perfect examples of how this development has long since become a reality in other sectors of the Chinese economy.

The acquisition of half the shares in the fourth largest Korean automobile manufacturer "SsangYong Motor" by our powerful Shanghai joint venture partner SAIC (Shanghai Automotive Industry Corporation) speaks volumes and reveals long-term thinking. The takeover negotiations with Rover that failed in the spring of 2005 will not discourage Shanghai from its goal of establishing itself as an independent car manufacturer on the international markets, too.

SAIC, which now also owns thirty one percent of General Motors Shanghai, is well on the way to becoming the largest holding company in the world for suppliers to the automotive industry. This impressive development was largely financed by dividends from SVW. In the ranking of the world's largest companies published by *Fortune* magazine, SAIC was already number 461 in 2003 with a turnover of 11.8 billion US dollars and profits of 689 million US dollars.

So we have plenty of warning about what exactly awaits us, and we can prepare ourselves with dedication and maximum efficiency. That said, it is and will remain a daunting challenge. However, it would be downright disastrous to be left trying to catch up with expansion investment. After all, the sales plans this investment is based on can't be left on ice until they are needed and then defrosted later. This applies even more to product policy, which surely must increasingly also be made in China. VW already has the first facilities needed for this, such as a dedicated test track. In future, it will no longer be "Made in China," but "Designed in China." The

growing demand for automobiles on the Chinese domestic market will not only push national industry to an unparalleled pace of expansion, it will also open up major export opportunities for the global automotive industry, until China itself starts exporting automobiles in significant quantities. This will most likely already be the case before 2010, and it will restructure the way automotive labor is divided around the world. India (Tata) is already exporting passenger cars and goods vehicles to Asia and the Middle East, as well as to Europe and Africa. Only companies that stay competitive can benefit from this. Given the expected intense competition, there would appear to be limited opportunities to make up for past failures. In view of the unprecedented speed of growth and technical progress, as well as the completely new dimensions, considerable difficulties are to be expected, especially for latecomers.

In a peaceful world, China will become the largest economy even before the middle of the 21st century. It already held this position almost continuously up until the 19th century. Measured by purchasing power parity, China will probably overtake the USA before 2020, provided that it continues its pace of growth, currently at nine to ten percent, ⁴⁷ at rates of around seven to eight percent in the coming years.

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⁴⁷ See *Economist*, October 8, 2004.

39 Satisfied Audi and Beetle convertible customers: Spain's King Juan Carlos with Queen Sofia in Wolfsburg. Behind them Prelate Holling, an honorary citizen of the city and a friend. When the queen got into my VW bus, she first greeted my driver Herbert Zgrzendek with a handshake.





40 A visit to the Spanish Prime Minister Felipe González in 1983, accompanied by the young Seat boss Juan Antonio Díaz Álvarez

41 Federal President Richard von Weizsäcker visited Seat in Barcelona in 1989 and oversaw my planting of an oak tree on the site of our new factory in Martorell.





43 Jiang Zemin (right) surprised the world with his ingenuity and vision. He came from the talent incubator at the First Automobile Factory (FAW).



45 A handshake with Zhaojie Geng sealed the contract between First Automobile Works (FAW) and Volkswagen on November 20, 1990. This established our second joint venture in the People's Republic of China. Behind me to the right: Paul-Josef Weber.

42 In the presence of Federal Chancellor Kohl and Chinese Premier Zhao Ziyang, the joint venture agreement for the establishment of Shanghai Volkswagen was signed by Minister Rao Bin and me on October 10,1984 in the Great Hall of the People in Beijing. Second from left in the top row is Otto Wolff von Amerongen. He introduced my father to the banker Baron von Oppenheim in 1948 and later, as Chairman of the German Eastern Business Association, was a pioneer for many years in building economic ties with the Soviet Union and China.



◀ 44 Zhu Ronghi became the Ludwig Erhard of China, implemented Deng Xiaoping's vision and made his country the engine of the global economy.





46 Together with members of the government and the Central Committee of the People's Republic of China, we celebrated Shanghai Volkswagen's fifth anniversary in spring 1990. Premier Li Peng congratulates me. At the far right, State Councilor Zhou Jiahua.ert mir.

47 Reunion with two old companions in Wolfsburg in 1995, with Hans-Joachim Paul, the chief technology officer at Shanghai Volkswagen and the chairman of Shanghai Volkswagen Lu Jiang.



48 The high-headroom mini car developed with Suzuki under the code name "Rose," here in its current version. In the mid-90s, the car would give Seat a first in a class of vehicle that today dominates many countries around the world.

49 Hermann Josef Abs, a key figure in German business and the most powerful banker during the Economic Miracle, rejected a merger of Volkswagen and Daimler-Benz in the mid-60s.







50 Ford boss Donald Petersen and I sign the AutoLatina contract in 1986 in the Wolfsburg research and development department. Behind us, left to right: Lyn Halsted, Helmut Arndt, Günter Hartwich, Wolfgang Sauer, Phil Benton, Wolfgang Habbel, Wayne Booker, Paul-Josef Weber and Peter Schindler.

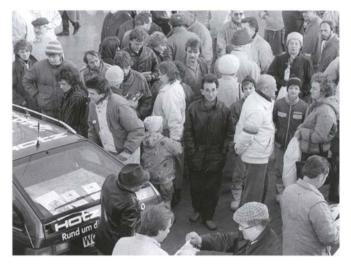


51 Meeting up with the Porsches was always a pleasure. Here in Zell am See to celebrate Ferry Porsche's 80th birthday. Left to right: Lee Iacocca, C. H. H., Mrs. Iacocca, Edzard Reuter, Eberhard von Kuenheim.

52 Erich Honecker in conversation with Walther Leisler Kiep and me in 1988 at Villa Hügel in Essen.



53 Tens of thousands came to Wolfsburg from all parts of East Germany at the weekends after the fall of the Berlin Wall. We were enthusiastic hosts and our dealers assured roadside assistance for all brands, not just for those from our own company.





54 After the fall of the Berlin Wall, VW pressed ahead and founded "Volkswagen IFA-Pkw GmbH" on December 22 1989, even before German reunification. Next to me, IFA General Director Dieter Voigt signing the document. My colleague Horst Münzner (far left) looks on. Far right: Volkhard Köhler.

55 Volkswagen Sachsen GmbH's Mosel-Zwickau car plant has developed into a success story.





56 In the same year as German reunification, Saxony's freshly elected Minister President Kurt Biedenkopf started work on a highway connection to our assembly plant in Zwickau. Next to the premier, his wife Ingrid smiles in the crowd.



59 My team and my daughter Pia help me celebrate my nomination as an honorary citizen of Chemnitz, the city of my birth. My family lived there and in Zschopau (DKW) from 1922 to 1945. Left to right: Hans-Viggo von Hülsen, Herbert Zgrzendek, Pia Hahn, Lieselotte Grothe, C. H. H., Ute Krause.



57 Laying the foundation stone for the new VW engine plant in Chemnitz in June 1992. Next to me is Saxony's Minister of Economic Affairs, Kajo Schommer. Four years earlier, the first VW engine in East Germany had been manufactured at this site. Not far from there, in 1940, I had worked at the vise in the Auto Union apprentice workshop.

58 I received the "Bambi" award in 1991 in recognition of our policies in the former East Germanay. ▼



60 On the floor of the German Embassy in Prague, I thanked the team that had concluded the negotiations. Left to right: Hans Holzer, Volkhard Köhler, C. H. H., Dieter Ullsperger, Kristian Ehinger and Henning Straubel. The statue of the Trabant – designed by the artist David Czerny – commemorates the liberation of the refugees from East Germany who sought asylum in the embassy in autumn 1989.

61 The conclusion of the contract in Bratislava in early 1991 secured VW an additional low–cost foothold. It was the beginning of a breathtaking pace of development for Slovakia. From 2006 the country will have the highest per capita car production in the world.

62 During a Central Europe conference of the World Economic Forum in Prague in 1994, which I had the honor of chairing, I was reunited with my old friend Tom Bata. His company has been making exemplary use of the benefits of globalization for 100 years.







63 A glass of sparkling wine after the Škoda contract was signed on March 28, 1991, with Professor Tucek (left) and the then Prime Minister of the Czech Republic Petr Pithart.





64 Václav Havel, then President of the Czech Republic, also attended the Central Europe Conference in 1994.

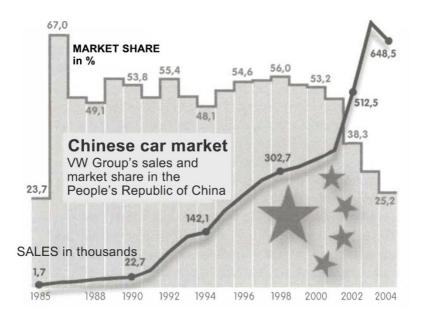
65 Bratislava 1990: A factory on the outskirts of the city designed for expansion has meanwhile become the engine of the Slovak automobile industry and economy.





66 In September 1992, Mr. and Mrs. Gorbachev came to our home in Wolfsburg. Mikhail Gorbachev had responded to an invitation from the "International Partnership Initiative" that I had initiated.

The Volkswagen Group is uniquely positioned for this dramatic shift in the center of economic gravity and the associated opportunities for expansion. However, there is no guarantee of success for the future. The Chinese market is already extremely important for Volkswagen today. In 2003, China became for the first time the biggest market in the world for VW and Audi models, with sales of almost 700,000 cars.



In Asia, three billion people are on the move – half of humanity – almost everywhere, with great determination and unity, and a strong thirst for knowledge and learning. As Europeans, we have to prepare for this changing global balance of power in time if we want to benefit from it and not be overwhelmed by it. I believe it is important to take account of these new dimensions in our corporate governance structures, too. In my opinion, a global presence right up to Group's top management is just as essential a prerequisite for

future success as the transfer of more responsibility to local decision-makers. After all, a Chinese person of course knows the domestic market much better than anyone, and so it's logical to have a Chinese management team at the top responsible for anticipatory corporate policy and, even more so, product policy. China, which will soon be the largest market in the world, can't be managed from distant corporate headquarters. We can only continue to participate in the development of this country as a truly integrated partner, not as strangers.

For the People's Republic of China, the path to a globalized world was marked by a major setback right at the beginning, with the tragic events on Tiananmen Square in 1989. The idealistic youth felt an understandable desire for democratic freedoms that, according to the Chinese leadership, were incompatible with the status and pace of the transition process. Western countries had a lot of sympathy for the young revolutionaries. But they forgot that yielding at this point in time would have led to worse conditions than in Russia – exponentially so, given the size of China. I came to the conclusion at the time that China would have been plunged into misery like in the times of the Cultural Revolution, for many more decades, if the students had prevailed. This could have set a global catastrophe in motion. After many companies began pulling out of the country, I wrote to the Chinese government assuring them that Volkswagen would stick to its China strategy and that I considered the Chinese evolutionary path to be the right one. Further developments have proven us right.

The people of China do not have the freedoms that we know and cherish, and not infrequently abuse. But are they really aiming for our form of democracy in this stage of their development? For them, isn't the fact that they are no longer threatened by hunger, as every previous generation was for centuries, their top priority? Isn't the progress that every Chinese person today proudly notices on their Sunday walk a priority, even if there is still a lot in the interior of the country that remains to be done? Besides, a gradual, if only local, democratization has already begun, and China should determine the scope and speed of this, not foreign theorists. Didn't it take us a hundred years in our Western culture to learn democracy and develop functioning democracies? These are still far from perfect, but we expect perfection in others right from the start.

On the occasion of a discussion with young Chinese intellectuals initiated by the weekly newspaper *Die Zeit*, former Federal Chancellor Helmut Schmidt also raised this issue. ⁴⁸ For him, "the existence of a functioning state authority" is of great importance in the case of China. "It shouldn't be provided by the military, but if it's a big party that provides it, that is a possibility. There is no developing country in the world that has progressed without strong government authority. This is especially true for China: How do people think about democracy in a country that has a three thousand year history without democracy? For three thousand years, it was the emperor and his mandarins that decided what was good or bad for the nation. The history of China's cultural evolution would suggest continuity even today."

Schmidt, who has been traveling to China for years, draws the conclusion "that these (democratic) developments take time. For China, one step after the other seems much more promising than a revolution."

If you look at policy since Deng, you reach the conclusion that this great power is not only pursuing a very wise and successful policy that is humane for the masses, but also extremely important for the Western world. Besides, for several years now, we have China to thank for a third of the growth of the world economy, as well as the long period of

⁴⁸ Published in the weekly newspaper *Die Zeit* on March 4, 2004.

low interest rates. Seen in this light, it is even more of a growth engine than the United States.

Mrs. Thatcher was right to sign the Hong Kong Treaty. I am convinced that this century can be peaceful, if Washington and Beijing manage a rapprochement. The Taiwan question must not become a world-threatening obstacle. Hong Kong was and is a good reference for the PRC. Some of the next generation of leaders of the People's Republic will have studied in the US and will be able to further advance the process of democratic progress that has already begun, in a manner that is commensurate with China's traditions and values. Market-based advances — not least Taiwan's huge investments in the Chinese mainland — will have a catalyst effect on this process and on democratization.

Jiang Zemin has pursued a very far-sighted strategy in foreign policy, especially during the most recent international crises. For me, Jiang Zemin and Zhu Rongji are two personalities with great human substance, both of them are humanists in the broadest sense. They are certainly not apparatchiks. Jiang Zemin not only corrects the German or English of his translators, he is also a connoisseur of Shakespeare and classical European music. You have to be very well-informed and well-read before you enter into a discussion with him about a market economy or theoretical economics. He read Hayek, Schumpeter and Keynes, not just Marx and Engels, during his student days in Moscow. Assessing the results of his policies according to human values, one should be sparing with one's criticism. Did any government of the 19th or 20th centuries ever present a better balance sheet for their people in terms of progress in general quality of life, especially if one takes into account the starting point and the scale of the task? This gives me the confidence that they have also made the right choice with their successors.

In October 2004, the Volkswagen Group marked its twentieth anniversary in China, and I would love to have been

there to celebrate with them. Volkswagen has done important pioneering work in many areas over the past two decades. This includes systematically building up the supplier industry and implementing an uncompromising quality policy, as well as introducing the dual training system and developing and expanding a customer service network. In the agreement we drew up for Shanghai, we also created important legal principles, thus clearing the legal path for subsequent joint ventures. Finally, we also made sure that German patent law, financed by the Federal Ministry of Research and Technology, was adopted in China to the letter. Companies that settled in China later have reaped the fruits of this labor. Because business activities always also have a political significance, we indirectly provided significant impetus to the reform process in the country. Almost the entire Chinese state leadership has demonstrated the importance they attach to working with us by visiting our corporate headquarters in Wolfsburg over the years.

Thanks to the continued expansion of the Chinese economy, we can look forward to an unprecedented future, regardless of the occasional dip in growth. We will play our part in this process as a committed, integrated industrial partner.

The successful continuation of the reform process in China is of crucial importance for the future of the entire world, not just from an economic and ecological point of view but more importantly, for the preservation of peace in the 21st century, once we again enter bipolar world in the not too distant future.

7 Cooperation strategies

In an increasingly complex world, the automotive industry – like any other industry – cannot manage without a variety of different types of cooperation. This way, you add to your product ranges, capacities and distribution channels and try to optimize the use of capital and technology to minimize risks. In doing so, you make opportunistic commitments for a time, also in order to learn.

The collaboration between VW and Porsche has its origins in Ferdinand Porsche. Porsche Salzburg is now the largest independent VW importer in the world, responsible for Austria, Slovenia, Hungary and Romania. In addition, it acts as an importer for Japanese and Korean automobiles and Japanese motorcycles in France as well as providing countless retail outlets for various manufacturers in Europe. Porsche Salzburg, set up by Louise Piëch, daughter of Ferdinand Porsche senior, also made key contributions to the financial development of Porsche AG in Stuttgart. Both companies are controlled by the Porsche/Piëch families.

Wolfsburg, in turn, enabled the production of the first Porsche sports car after the 1948 currency reform, the legendary Porsche 356. It was based on a further development of the Beetle platform. The same applied to its engine. Porsche also used the worldwide Volkswagen organization for its sales, wherever and whenever this was opportune. In 1968, Lotz had acquired for VW an option on twenty five percent of the equity in an import and trading company for VW and Audi vehicles to be newly founded in Austria together with Porsche Salzburg. In the 1970s, VW finally returned this option for free.

Due to a lack of development capacity and experience in Wolfsburg, VW worked together with Porsche a disproportionate amount in the early years, not least thanks to the technical superiority that the sports car manufacturer had built up in the '50s and '60s in racing. Porsche gained a unique brand image in the process. Under pressure to constantly improve the performance of its sports cars, Porsche gradually moved away from deliveries of VW parts for its series products. But then the cooperation intensified again: in the second half of the 1960s, initially with the construction of the mid-engine sports car VW/Porsche 914/6 and later — in the course of the switch to water-cooled front engines at VW — with the development of its successor.

In the crisis year 1975, Schmücker recognized, however, that the launch of such a sports car from VW would have sent completely the wrong signal to the public and could not be considered. Introducing new volume models, especially the Golf, was the top priority at the time. And so VW left the already finished sports car to Porsche, which was urgently looking for a successor to the 911, whose rear engine design was no longer considered upgradeable at the time. An agreement was reached with Porsche on a percentage stake in each vehicle sold in order to recoup the development costs already paid to Porsche. The car was launched in 1976 as the Porsche 924. In the mid-80s, it was followed by the Porsche 944. The production of this series in Neckarsulm saved the Audi NSU plant there from closure. Thanks to the investment grants given to this project by the state of Baden-Württemberg, Porsche, in turn, received a particularly costeffective production location. In the end, the sales success of the Porsche 924 made the deal a lucrative one for both parties. At the same time, the vehicle formed a bridge to the new technical prospects of the 911 concept. Whereas the 924/44 and 928 model series ultimately left typical Porsche customers cold, the 911 is still one of the sports car manufacturer's cornerstones. It embodies a class of its own in the top image category, with virtually no direct competitors.

Cooperation between VW and Porsche has continued in new ways since 2002 with the production of the bodywork for the Porsche Cayenne at the Volkswagen plant in Bratislava. The Audi engine factory in Győr also supplies Porsche with a six-cylinder short engine for the Cayenne. These examples of successful cooperation are an expression of the solid trust that exists between both partners.

For Porsche, however, it was initially difficult to find a suitable partner for the Cayenne project. Daimler-Benz, which was the company's original favorite, only agreed to cooperate with the sports car manufacturer in exchange for equity, a demand that was strongly rejected by Porsche. Volkswagen, however, was much more modest and made its subsidiary in Bratislava – its most cost-effective capacity – available for Cayenne production. Without a strong partner and the subsequent success of the Cayenne, Porsche would have sailed into choppy waters, as sales of its aging 911 and Boxter models were noticeably declining.

From the perspective of the Volkswagen Group, the question is whether it would not have been more interesting to develop an SUV model for Audi at the same time as the Touareg. Ingolstadt will only enter this market with the Audi Q7, more than four years later, in early 2006.

The collaboration with Karmann was similar to the work with Porsche in terms of how specialized it was, especially in the area of convertibles, first with the Beetle, then with the Golf. Then there were the VW Karmann Ghias, the elegant two-seater from the '50s and '60s, followed by the VW Scirocco in the '70s. Up to 50,000 cars were produced for VW each year with bodies that had also been developed by Karmann.

The explosion of different models and shortening model cycles has brought companies like Karmann to the forefront of the automotive industry. By taking on development and production tasks, they have become satellites of the

automobile companies, enjoying greater flexibility than their, by now, giant customers and with a potential for growth stretching all the way to China. DaimlerChrysler, in particular, has seized the strategic opportunities of rapidly expanding its product range – without needing to invest in new capacity of its own - by using Karmann, after the relocation and then discontinuation without replacement of the Golf convertible had freed up capacity there. 49 In the meantime, however, faremployment guarantees by the reaching automobile manufacturers have created a noticeable reduction in outsourcing, with resultant effects on employment at contract manufacturers such as Karmann. In this way, the workforce of the smaller companies with IG Metall union members end up footing the bill for the applauded, non-market successes of IG Metall at the auto giants.

As a pioneer and market leader in large-scale production of vans with engines derived from passenger cars, it made sense for VW to also take a look at the weight class above the one metric ton payload. After the in-house development and production of the VW LT, which covered the range from 1.5 to 4.5 metric tons, we opened negotiations with Daimler-Benz about a possible cooperation in this tonnage class in order to achieve more economical quantities. In 1991, an initial conversation took place in my office with Helmut Werner, who was responsible for the commercial vehicle business on the Daimler-Benz Board of Management at the time, and Jürgen Schrempp. The project came to fruition after my time. The commercial vehicle has since been produced in two different versions and is now in its second generation on the market. The expectations of both partners have been met.

As early as 1977, Volkswagen signed a cooperation agreement with Maschinenfabrik Augsburg-Nürnberg AG (MAN) to jointly develop, produce and sell medium-weight

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⁴⁹ Overall, from 1979 until the final discontinuation of the Golf Cabrio in 2001, Karmann produced more than 600,000 cars of this type.

commercial vehicles in the class of six to nine metric tons. It was possible to significantly reduce the costs of the project by using the VW LT driver's cab, which set standards in terms of space and comfort, together with MAN engines. Two years later, in November 1979, the first truck rolled off the assembly line at the VW Transporter plant in Hanover. The vehicles for the MAN and VW sales organizations only differed in their branding.

The cooperation with MAN in the weight class up to nine metric tons was only intended as a starter. After VW had finally overcome its crisis, the plan was that it would then buy MAN in the late 1970s. In line with this intention, VW and MAN had already developed a joint South American strategy. There was then going to be a collaboration with Chrysler, with the equal participation of all three partners, in the Chrysler truck factory in Brazil. At the last minute, MAN suddenly pulled out. The company preferred to push forward its North American activities by joining White Motors in the United States. After VW had looked in vain for another partner to provide know-how for the commercial vehicle business in South America, they decided to risk building up a truck business in Brazil on their own by purchasing the old Chrysler factory. After a lengthy and arduous process, the goal in Brazil was achieved in full. We had allowed our cooperation with MAN to peter out. We have also repeatedly sought strategic partnerships with key competitors. Nordhoff had been pursuing the idea of a collaboration with Daimler since the mid-50s. He first held talks with Fritz Könecke, the then Chairman of the Board of Management of Daimler, who, like Helmut Werner, had come from Continental. Ten years later, contact continued through Joachim Zahn, who was at first CFO and then also CEO of Daimler. Initially, they didn't want to tread on each other's toes on the product side, later Nordhoff and Zahn considered a merger of the two companies. As good analysts, Könecke and Zahn perceived Volkswagen's selffinancing capability, which was unique for the time, and thus its extraordinary earning power.

Banker Hermann Josef Abs, the legendary head of Deutsche Bank, was skeptical of the merger plans from the start. Friedrich Flick also had reservations. Despite this, a visit by the VW executive board to Daimler in Stuttgart in June 1965 was soon to be followed by more. From Wolfsburg, we looked on helplessly, as we were very poorly informed about the previous exploratory talks. These had mostly been conducted by Frank Novotny. In many respects he was Nordhoff's right-hand man, far exceeding his official remit for public relations and government relations. He was our *éminence grise*, with influence both inside and outside the company, and very clever. As Nordhoff's next-door neighbor, he held quite a few conversations with the boss over the fence.

Under VW's corporate governance rules at that time, a normal board member would not have had any insight into the company's finances beyond the published figures, and he would certainly not have had any insight into the cost accounting. And so I was flabbergasted on my first day of work in January 1959 at Englewood Cliffs, New Jersey, as the newly appointed boss of VW of America, when I looked at the balance sheet for a – my – VW subsidiary: under the heading "time deposits," I was astonished to see 300 million US dollars at three percent parked at Schroeder, New York - at least 1.26 billion marks at that time, more than the balance sheet total for the parent company Volkswagenwerk GmbH. Financially, VW was well prepared for the shift to the post-Beetle era, traditionally conservative in its financial conduct under the expert hand of O. W. Jensen, the deputy managing director of Volkswagenwerk GmbH. Blank checks from wholesalers that were kept in our safe went to the bank when a car transport train left the factory station. Our American wholesalers paid as soon as the mast tops of the VW charter ship could be seen on the horizon from the port of unloading.

This all led up to a memorable meeting of the boards of Daimler and Volkswagen at our offices in Wolfsburg. Advance rumors suggested that Nordhoff was to be the head of the merged company. Zahn waved the front page of the Bild newspaper on the day of the meeting. The headline read: "Merged!" The topic was the only item on the agenda that day. During the debate, with its elegant explanations, I felt impelled to argue against the project. I couldn't see any tangible benefits or any strategy for a merger. My colleague Thomée, VW's CFO, came to my aid immediately. Nordhoff commented on our various opinions with a smile as if it were the most natural thing in the world, and asked us to stop for lunch. To this day, I am glad to have stopped this development even as it was gathering more and more momentum. Auto Union and many other things besides are testimony that we didn't have either the experience or the management back then to handle what would have been a veritable colossus for the time, with such a potential for and pace of growth.

I can only assume that Nordhoff and Zahn had tried to create a *fait accompli*, but gave up the idea in the face of emerging opposition, especially since Abs had already spoken out against the project. At that time and through him, Deutsche Bank was in control of economic activity in Germany in a very businesslike, realistic manner. Nordhoff never mentioned the subject again in my presence. Neither did he appear to be resentful, even though my attitude must have been a painful affront to him. In later years, Zahn would claim to me that he had been against this project from the outset.

On the afternoon of the dramatic day of the meeting, in order to resolve the embarrassment, the "DAUG," the "Deutsche Automobil Gesellschaft," based in Hanover, was founded – a big name for something that was not really all that big. DAUG, structured with equal representation, initially dealt with battery developments. Its existence has been extended again and again, including during my tenure, and it will soon celebrate

its 40th birthday. However, the two chairmen of the executive boards of Daimler and VW have not been number one and number two at DAUG for a long time now.

I should mention in passing that, in the mid-50s, apart from an exchange of apprentices, there were also talks about business cooperation with Renault. My friend there from my days at the OECD, Monsieur Bosquet, proposed an agreement aimed at largely synchronizing sales growth and the pace of progress in both companies, a proposal that didn't appeal to us at all. In the 1980s, we worked with Renault to develop an automatic transmission. But excessive communication problems resulted in the termination of the collaboration. Our discussions about purchasing Citroën in the mid '60s also went nowhere. Something very similar happened with Fiat during a later attempt. This only resulted in a temporary relationship. Evidently, the cultural differences between Europeans are often greater than assumed.

When I returned to VW in 1982, a collaboration with Nissan made headlines. This was preceded by exploratory talks with various Japanese manufacturers starting in 1979 about a cooperation, conducted by Siegfried Höhn, the head of our finance and investment planning department. VW's first choice was Honda, but they weren't interested in working together. While Mitsubishi and Mazda had already found other partners in North America, Suzuki, Subaru and Nissan indicated their willingness to enter a collaboration.

With this cooperation, VW wanted to create a production base in East Asia outside China, in order to expand its role as a leading importer in Japan. At the same time, the low Japanese manufacturing costs would also be used for exports to the USA. In return, the Japanese partner would receive international cooperation.

In November 1980, European automobile manufacturers had met with their Japanese counterparts in Tokyo and discussed voluntary market access restrictions. Specifically,

the idea was to create self-help for the auto industry in response to state market regulations. After the negotiations, Schmücker and Takahashi Ishihara, then president of Nissan, met up for a discussion in which they both agreed to an extensive cooperation. The sustainability of the relationship was to be tried out with an annual production of 200,000 VW Santana cars for the Japanese market and for export. It is not difficult to imagine the reaction of our European competitors. Accordingly, the press was filled with headlines about Schmücker.

With this partnership, Nissan wanted to push forward the internationalization strategy initiated by Ishihara, gain knowledge and thus strengthen its position vis-à-vis Toyota. However, it very soon turned out that the objectives associated with the project were built on illusions. This applied to the choice of vehicle type and the desired volume – not even ten percent of the target was ever achieved— as much as it applied to the commercial planning and the underestimating of cultural obstacles.

Although, unlike Nissan, we didn't lose money, we certainly lost face. Even several exquisite lunches at the Nissan canteen in Tokyo over the course of 1982 and 1983 – the waiters in tails, the Château Margaux in our glasses and the fine French cuisine would not have gone amiss in Paris – could not dissuade me from my position, which from the first day had been to withdraw from the project. Unfortunately, there was no fair equivalent that I could have offered.

Nevertheless, we were still interested in a cooperation with a strong Japanese partner. Despite a certain fondness among VW staff for Mitsubishi, I would have preferred Honda because of our largely identical technical philosophy. However, Honda was and has remained a loner. Certainly, Nissan was also one of the technically superior Japanese automobile companies. But the company had fallen very much under the influence of the banks and it was no match for the

policy of "cautious dynamism" expounded by the Toyoda family. This wouldn't change radically until the partnership with Renault in 1999. During the breakup with Nissan, I began to renew my relationship with Sōichirō Toyoda. During a visit to Tokyo, I was met by Toyota's entire management team. A collaboration with the most important Japanese automaker of all, which had set so many benchmarks in manufacturing just a few years after starting mass production while at the same time also remaining a leading textile machinery producer, seemed to me an important addition to our network.

In Eiji and Sōichirō Toyoda, I got to know two extremely humble entrepreneurs, whose intelligence, consistent corporate policy and reliable fairness made a deep impression on me. Fairness was a quality I found in abundance among the Japanese in general, from which friendships developed, some of them when I was still with Continental, and which have continued to this day.

During the Davos World Economic Forum in 1986, we continued our conversations in our hotel rooms late into the night. The idea arose to produce a Toyota pickup at VW under license and in two versions for the Toyota and Volkswagen sales organizations in Europe. Our aim was to acquire enough know-how to produce a similar vehicle on our own later, after finding a sufficiently large, low-cost location. Pick-up trucks represent one of the highest-volume and most fiercely contested segments in global automobile production, while in the USA it is the biggest segment of all, starting right from the lowest price ranges. In Europe, on the other hand, this vehicle category has tended to lead a shadowy existence to this day. A partnership with Toyota also offered us the opportunity to learn more about the real philosophy of this company that is still setting new standards in our industry to this day, and which in late 2003 became the second largest car manufacturer in the world, although this is probably also only one more interim step for them. In terms of profit and liquidity, they have

been number one for a long time and by a large margin.

So there were many good arguments in favor of a collaboration. Moreover, at the back of my mind was the hope that we would be able to set up a joint assembly plant for passenger cars in Germany in the foreseeable future. However, there was also a warning: General Motors had already tried to tap know-how through a cooperation with Toyota in California. Hordes of GM managers made the pilgrimage to the joint assembly plant in Fremont, which was being managed by Tatsurō Toyoda. They were assembling a Toyota vehicle there for both GM and Toyota. The results of the knowledge transfer were disappointing for GM, but the production itself was anything but. From this, we concluded that without the "Toyota spirit," copies work poorly, not at all, or even cause damage.

Toyota, in turn, was very interested in gaining a foothold in Europe, and our project at the Hanover plant fit into this concept. Immediately after the contract was signed, the Japanese installed a liaison office on site. The production preparations were then carried out in record time.

Employees from our Hanover plant who were to be deployed in the joint project – from assembly line workers, through foremen and engineers, to works councils – were sent to Toyohashi for training. They returned from Japan fired up with enthusiasm and reported frankly on manufacturing processes that they considered exemplary. Start-up and production rampup to peak production took place at a speed way beyond anything in the United States or Europe.

When it finally came to discussing the assembly times proposed for us, our working time specialists discovered from Toyohashi that in Japan there was no process for recording time in production as we knew it, i.e. with a stopwatch. Employees on the assembly line optimized their movements and maneuvers independently and made suggestions for simplifying assembly in order to improve productivity and

quality. All feedback was short, uncomplicated and mostly dealt with overnight. This meant that responsibility was to a large extent in the hands of those directly involved in production, so it was largely possible to dispense with the involvement of staff or management. We soon also began more and more to mobilize our employees in this direction. This process was systematically promoted by my colleagues Günter Hartwich and Folker Weißgerber from the late 1980s onwards.

In early 1989 and in the presence of Eiji and Tatsurō Toyoda, the first pick-up trucks in the one-metric-ton weight class started rolling off the assembly line in the Volkswagen plant in Hanover as the Volkswagen Taro and the Toyota HiLux. It was generally a given that whenever an important event occurred, a member of the Toyoda family would be present. Developing a vehicle like this in Europe on its own would not have been worth VW's while. In the Japanese market, we also cooperated with Toyota on a large scale in the sales sector. This helped us overcome the correct but painful separation from our general importer Yanase without any setbacks. It remained a dealer partner for us.

Working with Toyota was fruitful and has influenced us a lot. Since then, our own factories have also started setting benchmarks, primarily at our foreign sites. In any case, thanks to Toyota we got to know the pick-up business and all of its requirements in terms of design, production and sales. Not long after my retirement, however, the collaboration with Toyota in the pick-up sector came to an end.

Building on the preparatory work carried out by Karl Anker, the secretary of our product strategy committee, we spent the second half of the '80s systematically visiting our Japanese competitors and also studying the Koreans intensively. They had sealed off their market perfectly and were pursuing an export-oriented, aggressive growth strategy from behind their protective walls. They received technical assistance and

licenses from the Japanese (Mitsubishi and Mazda) and design assistance from Giugiaro, in particular, who was being foolishly overlooked in Europe. The consequences of this can be seen today on the streets of the world.

The Korean manufacturer Kia impressed us especially. It had built an exemplary assembly plant with a press shop right next to the sea for exports. Its suppliers were located in the immediate vicinity. When it came to producing a Mazda derivative, Kia was fully the equal of its Japanese licensor. In terms of working hours and intensity, they even exceeded the Japanese.

We developed a good relationship with Kia and commissioned a feasibility study for an A00 project, a vehicle below the Polo, the body of which was approved by the product strategy committee. Our calculations envisaged production in Korea and delivery of VW power trains and axles from Europe. Unfortunately, the product turned out to be uncompetitively priced for Europe. There wasn't enough refinancing volume from sales in Korea itself. Even licensed production of the Audi 100 in Korea to better open up the Asian market failed to pay off. A later attempt, with the involvement of Ford and Mazda, for global production of a compact car also fell apart. Previously, talks with Samsung, now the second largest semiconductor manufacturer in the world, about a collaboration in the automotive sector had also failed to bear fruit. Piëch and I were very impressed by this company, where they showed us consumer electronic products that they were having to hold back for the time being because the Japanese had not yet caught up in terms of development and the Koreans were still reliant on the Japanese to open up markets for them.

Political developments in Europe at the end of 1989 required us to change our lines of attack. We now had to concentrate our efforts on Central Europe for the present, amplify our efforts in China and continue to look for additional development capabilities outside the Group.

Undoubtedly, years later during the Asian financial crisis, VW had the financial clout to buy automotive companies in Japan and Korea. Renault, DaimlerChrysler and GM seized this opportunity with widely differing results. Ford had long been present in the region through its stake in Mazda and thus indirectly in Kia. If we look at the emerging role of Japanese and Korean companies in the People's Republic of China today, the relocation of a lot of production to the country, their reaction speeds and costs, and their geographical and mental proximity to China, we can see the scale of the advantages enjoyed by the companies that went to Japan and Korea in time and made the most of the opportunities offered by the Asian financial crisis.

Even if the small car project with Kia was unsuccessful, we couldn't continue to defer the issue. For Seat, we had to replace the Marbella (Panda) from Fiat, which Giugiaro had also developed. And so I commissioned Wolfgang Beese to continue the search for a Japanese development partner for a small sedan. Under Wolfgang Beese, we had recruited an international and multifunctional team that dealt with the future of mobility in our society and with our role and task as an automobile manufacturer.⁵⁰

In Japan – poor in resources and known for its high traffic density – the government had regulated and promoted an automobile class of vehicles with micro external dimensions and engines of no more than 660 cubic centimeters. Known as kei-cars, these could be no more than 3.41 meters long and had not only sold in considerable quantities, they always impressed me technically whenever I was in Japan. In an exception to the regulations that otherwise applied, when you bought one of these micro cars, you didn't have to provide evidence that you had a parking space. Kei-cars are now number one in the

⁵⁰ This division has since been disbanded.

Japanese market.

I asked Beese, who reported directly to me, to contact Suzuki first. This Japanese manufacturer had come to my attention for its motorcycles and racing successes,⁵¹ but also because it was the only one of the smaller Japanese automobile factories to always be highly profitable, even though its range only stretched at that time from the kei-car class to the Polo class. In addition, Suzuki dominated the Indian market and also had production facilities in Spain and Hungary. So the company offered more than enough food for thought.

The first time I visited Mr. Suzuki in Yokohama in 1990, together with Beese and Robert Janson, ⁵² we were particularly impressed by the production there. We had never seen a better use of space in production halls. We quickly developed a good rapport with Mr. Suzuki. His company offered a lot of potential for a long-term cooperation. There was only a minor GM holding at the time. I saw no obstacle to securitizing the cooperation with shares, but I didn't want to just barge in.

We came up with a specific project assignment very quickly. Under the code name "Rose," Suzuki developed a high-headroom passenger car below the Polo that was optimized with components from both partners, starting with a three-cylinder engine, and was intended for the world market. After our Korean experience, we decided that production should take place in Europe for the time being. In 1992 we applied to the European Commission for approval of this cooperation. As an ideal product range supplement for the VW brands and especially for Seat, we were looking at the Latin markets in Europe in the first wave, but also put AutoLatina, our joint

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⁵¹ They had siphoned off racing experience from MZ (formerly DKW, Zschopau), especially the legendary race director Walter Kaaden, whose father was my father's driver.

⁵² Robert Janson was our liaison with the Japanese automotive industry. From time to time he also held management functions at our Japanese Group companies.

venture in South America, on notice. This concept seemed to put us ahead of our competitors and back on the road to becoming a real, proper People's Car in line with the times.

In 1992, Piëch and I agreed to a draft styling by Suzuki in Yokohama. Since Piëch preferred to drive a Suzuki Pajero on the island where he had his holiday home, it was just a short step to a Suzuki derivative for a VW SUV⁵³ in the Golf class, with a four-cylinder VW engine and minor panel modifications. In turn, Piëch suggested a V6 cylinder for Audi. This meant we would be entering two large additional new market segments in 1995. Unfortunately, the "Rose" project, about which we had kept the supervisory board constantly updated, was terminated soon after I left.

It is safe to assume that we would have expanded the "Rose" vehicle concept upwards to the VW Sharan minivan, with an estimated volume of half a million vehicles in the first few years. Our goal was to be a pioneer in opening up this new market segment, which is still growing even after a decade.⁵⁴ The plan for the car was that it would not only expand our market position in Europe and around the world, but, more importantly, win new customers for our capital-intensive German engine plants. Our plans also included producing the "Rose" vehicle in the old Zona Franca Seat plant for a transitional period. If necessary, production could have been transferred at any time to the Martorell plant, which was still under construction at that time. Seat would bitterly miss these "Rose" volumes later on. In addition, there would have been opportunities for new assembly capacities in Asia (China) and for better utilization of our Brazilian plants. manufacturing costs of the vehicle were to be kept under 6,500 marks.

⁵³ Sport utility vehicles, sporty off-road vehicles.

⁵⁴ Volkswagen entered this market segment for the first time in 2003 with the Touran, and immediately took top position in the monthly sales ranking. In 2004, 200,000 cars of this type were delivered to customers.

We were systematically following a strategy of strengthening and stabilizing the volumes and costs of Volkswagen's core business by appropriately expanding of our product range, in order to make us invulnerable as possible. I am convinced that a high-headroom vehicle below the Polo class with corresponding Polo derivatives could have netted the Volkswagen Group a total market share of twenty percent in Western Europe after we had made the leap to European market leadership so quickly. A short while later, the Toyota Yaris demonstrated that a large market volume could be achieved with this concept.

Suzuki also provided the option of producing in Japan. At the time, however, we only discussed range additions such as Golf assembly on the sidelines, because our specific first-phase projects already gave us more than enough to talk about. The same was true for India, where Suzuki still has a market share of over forty percent, in particular thanks to the vehicle concept that we developed together. ⁵⁵

Ford and, even more so, Renault show how successful you can be both in Japan and in Korea, and how important these countries can be not only for the Asian region, but also for a global corporate strategy, especially in terms of reaction times for model policy. We will be seeing the results of this potential on the streets even before 2010. The "Rose" car has been produced in Poland by Opel since 2000 and it is sold under the name Opel Agila. Its twin, the Suzuki Wagon R+, is assembled in Hungary.

I also opened discussions with the British government through its trade minister Lord Young of Graffham about our interest in Rover, or rather Range Rover. These talks proved bumpy, because we were thwarted by Mrs. Thatcher right from the start. In 1992, I again made contact with Rover after Mrs. Thatcher's solution of shunting Rover over to British

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⁵⁵ In India, Suzuki holds the majority of shares in the automobile manufacturer Maruti, which is the clear market leader there.

Aerospace had proved unsustainable. After my retirement, however, the project was not pursued any further.

With our platform strategy, we could have been just as successful with Rover in England as we were with Škoda in the Czech Republic. The platform strategy implied deliveries of parts and power units from our German plants, which would in turn at least partially finance our investments through contribution margins. This would also have meant an impetus for employment in Germany.

Range Rover would have been a "two-for-one" bonus. In addition to its sales organizations and market share – and not only in the UK – Range Rover had a significant list of established military and civilian customers, together with the associated spare parts business. Ford ended up swooping in and taking the prize. If we had seized the opportunity, BMW wouldn't have the Mini today. We wouldn't have made the mistake of failing to technologically integrate Rover, as our brand and platform policy demonstrates. The Japanese have offered convincing proof that you can operate highly productive and profitable car factories in the UK, in spite of the currency risk. Rover also had expertise and licenses from Honda.

In our endeavors to fully cover the lower market segments and on the initiative of my colleague Daniel Goeudevert, we also looked into Hayek's idea of building the Smart compact car. The product and marketing idea appeared convincing, but the concept of a two-seater city car stood in the way of the later VW objective of a fully-fledged four-seater. And so, after my retirement as head of VW, this project was terminated in 1993.

With the Smart, we were also targeting new markets, aiming for new employment and attempting to shore up our global competitive position. DaimlerChrysler has since demonstrated how an entire family of vehicles can be developed for young people from the idea of the Smart, with enough potential for an independent brand and sales organization. But evidently they are not entirely at home in this market segment, especially given that this is a price class that would certainly better fit VW, its brands and its technical structures.

For many years, VW developers had been occupied with a different project: filling the product gap between the VW Transporter and the Passat Variant with a minivan. Initial studies had been carried out in Wolfsburg all the way back in the late '70s. The vehicle was to have six or seven seats, plus easy entry and car handling characteristics, but it should offer more space with greater flexibility in the interior at the same time. It was extremely difficult to assess the chances of success for a vehicle like this because nothing comparable was available on the market. Cost pressure and a lack of resources presented further handicaps and made it impossible to go it alone.

So what to do? Plans for a collaboration matured, and the search began for a European partner who was willing to share resources and risks in creating this new vehicle category. This search ended up proving far more difficult and time-consuming than expected.

Meanwhile, US manufacturers, Chrysler first and foremost, began to successfully introduce the first minivans to the market. In Europe, Renault followed in the mid-80s with the Espace, at first cautiously in small quantities. A temporary collaboration between us and Peugeot, which I welcomed, was again stopped after we couldn't reach an agreement over a model designed by Peugeot. I told my French partner Jacques Calvet, with whom I had a very good relationship at the time, that we would reposition ourselves.

The issue of minivans also brought us together with Chrysler. I had a number of conversations with Lee Iacocca in his suite at the Waldorf Astoria as well as in his Detroit office. The VW executive board and a Chrysler management team also met later. The primary goal here was to find a broader base for Audi in the USA, while Chrysler was particularly

interested in Audi platforms. But this never resulted in any collaboration, because we believed that, given the balance of power in the US at that time, we would end up the losers. After all, we were still in the early days of building up Audi to a premium brand.

Our positive experience with Ford in our South American joint venture AutoLatina prompted us finally in 1987 to open negotiations with them on cooperating in the minivan segment. The combined sales volume of both brands suggested that the necessary profitability would be achieved. After a fair struggle, they accepted our vehicle concept and we reached a mutual agreement on the key points of cooperation. According to this, we would be responsible for development while Ford would be in charge of production and sales.

After carefully auditing suitable locations in Western Europe for the new company, which went by the name of "AutoEuropa," an assembly plant was eventually built in Portugal, in Setubal, near Lisbon, where series production of the new vehicle started up in 1995. This site was chosen, specifically, because of all the alternatives available, Portugal offered by far the largest funding opportunities.

And so we entered the highly competitive multi-purpose vehicle (MPV) market relatively late. After a few start-up problems, the success of the new model would exceed the expectations of our Wolfsburg team under Ulrich Seiffert. The VW Sharan and Ford Galaxy – which were later joined by a Seat version, the Alhambra – became popular with buyers and were soon the best-selling minivans in Europe. The joint venture was terminated in the late '90s and VW took sole ownership of the factory in Portugal, which has become our most cost-effective location in Western Europe.

With our model and marketing policies - special mention

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⁵⁶ Drawing on AutoLatina in South America, the name AutoEuropa was intended to highlight the strategic alignment of the collaboration with Ford.

should go here to Hans J. Hungerland and Harald Wischenbart under Werner P. Schmidt – we moved to the top of the sales rankings in Western Europe, initially against fierce resistance from long-term market leader Fiat. But the signs also pointed to expansion and market leadership in Asia, thanks to China, and, shortly thereafter, in Central Europe.

In contrast, our investments in South America had been developing into a cause for concern since the early 1980s. The Brazilian government believed it could curb its galloping inflation with price controls. This was a common misconception in many countries – not only in the Third World – and one that was hard to eradicate. It is always the large enterprises and the average consumer that suffer the most from these. Major companies are among the few participants in the economic process that the state can easily control with its pricing policy. At the downstream, decentralized level of retailers, it is the market that again dictates prices – under the counter, if needs be. The consequences of such a policy are serious misallocations of resources and capital, most of which then find their way abroad, untaxed.

In South America, we couldn't see either the political will or the capacity to reform a policy that ends up costing the masses so dearly, nor could we seen an end to the volatility in the region. With a monthly rate of inflation in the double digits, any delays to official approvals of price increases could end a company in just one month. And so, for better or worse, we were dependent on the governments in Argentina and Brazil.

It is not possible to successfully rationalize against these forces of turbulent, price-controlled inflation. Instead, corruption was encouraged. Exporting trucks for Paccar to North America, followed by car deliveries to Volkswagen of America and VW Canada, created somewhat of a safety valve. With the VW Fox compact car in Brazil, we created a model specifically derived from the small Gol for the North American market. Finally, we carried out one of the greatest barter

transactions in the history of our company – and probably the history of Brazil, too. We supplied more than 50,000 Brazilian Santana cars to Iraq, and in return, they sent us petroleum. The 1,000 tanker trucks that we had acquired transported the oil day and night from the Iraqi oil fields to Aqaba, Jordan, from where it was shipped by tanker to Brazil. The drop in oil prices resulted in an increase in the delivery volumes, which we delivered under contract to Petrobras, the Brazilian state oil monopoly. However, none of this was a permanent solution. We urgently needed to find a new strategy to protect our investment in the long term.

At that time, we were even considering withdrawing from Argentina altogether. But Paul-Josef Weber, the former CFO of VW do Brasil, and now responsible for global support of our subsidiaries and for the area of mergers and acquisitions since 1983, looked for alternatives and found what he was looking for.

At that time, Ford was having similar deliberations as we were with regard to its commitments in Argentina. After initial exploratory talks, an idea was born to merge not only in Argentina but also in Brazil. This would enable us to reach the critical mass to survive the storms in South America – or to be the last to go under.

I knew, of course, that this proposal would meet with opposition. After all, VW do Brasil was at that time the largest German foreign commitment anywhere in the world, an outstanding symbol of successful German corporate policy. There was also the question of what the head of VW do Brasil, Wolfgang Sauer, and his management team would say. What would the balance sheet for the mutual outflow of know-how look like? Would we let one another look at each other's cards, allow insights into our plans for the future? Could we create synergies quickly enough without losing market share? How would the VW and Ford dealers react, given that they would continue to be in competition with one another? Would the two

corporate cultures fit together? Would we be able to put together a harmoniously qualified management team that balanced the interests of the shareholders, with fair opportunities for our managers?

My colleague Münzner and I visited all the Ford plants in Brazil and Argentina in a dizzying chase and held discussions with the management levels. This was followed by complex negotiations conducted by our teams. Just five minutes before the signing of the contract, Ford boss Donald Petersen made a final attempt to set up an equal participation. But we stuck to us taking over fifty one percent of the company's shares and appointing the chair of both the executive board and the supervisory board. The new company was to be called AutoLatina.

At that time, Kuwait and the Monteiro Group still each held ten percent of our equity. One of Brazil's major businessmen, Joaquim Monteiro de Carvalho, was immediately willing to support our objectives by selling his shares to VW do Brasil. So that left the Kuwaiti shares, which meant finding a complicated special solution. Under the leadership of Wolfgang Sauer and his two Ford partners Wayne Booker and Jacques Nasser, AutoLatina had a successful start. The cooperation turned out to be exemplary. While our purchasing, and technology departments, in particular, demonstrated their strengths, we were able to learn from Ford in the area of planning and controlling, as well as process organization and sales financing. The reorganization of the business areas for product strategy planning and the review of the value chain went quickly and almost without a hitch. Our project teams had identified an astonishing potential for synergy. From then on, the entire future passenger car range was based on VW platforms. The designers converted the external appearance of the vehicles to match the respective brand image so that neither company lost market share, nor was there any unease among the VW and Ford dealers. The

two existing truck series were optimized into a new core product, which in turn represented the starting point for a Ford and VW series for both sales organizations. In addition, a joint factory was built in Córdoba for a VW gearbox, mainly intended for export, which became very important to the Argentine economy and which also supplied Ford in North America. As a one hundred percent VW subsidiary, it now supplies gearboxes to our Group companies around the world.

The planning and introduction of new products, mostly developed in Brazil, proceeded at record speed. It was even more important to both parties to ensure that our dealers also shared our optimism. Of course, there were harder changes for our suppliers. But in return, they got the opportunity to grow to very different dimensions; after all, the existing market share of the two joint venture partners for the common platforms was around thirty and twenty percent, making up half of the Brazilian market in total.

We even managed to synchronize our corporate cultures, by and large, and we both learned from the process. German managers posted to management positions often had stellar careers at VW after their time at AutoLatina, such as Bruno Adelt as Group board member for controlling and accounting or Bernd Wiedemann as spokesman for the executive board of the VW commercial vehicle division. Gerd von Briel, from Audi in Neckarsulm, also belongs in this group. I had chosen him to succeed my colleague on the board of directors, Münzner, who was responsible for purchasing. However, fate would have it that this highly talented and personable colleague was killed in a helicopter accident near our factory in Anchieta in March 1989. It was a painful loss, for VW too.

And so we had become a de facto merged company in South America without significant frictional losses and in record time, even if the company actually only existed virtually, without any legal status. Overnight, the eleventh biggest automobile company of the world had been born. Thanks to its size, the company suffered less than before under the economic conditions of both countries, and excellent profits amounting to as much as one billion dollars were soon coming in, and dividends were being handed out for the first time in a long time.

One reason for the success was undoubtedly the greater political influence that US companies traditionally enjoy in South America. The employees took heart and quickly came to trust one another and their new management. The objective was simple, pragmatic and demanding: "No fresh money from the parents."

By connecting with Ford, we also gained insight into the practice of US accounting rules in accordance with GAAP,⁵⁷ which have now also made their way to Europe. What was striking here was that income earned from AutoLatina was reflected very unequally on the balance sheets of the two parent companies: due to the different valuation principles, the reported profit at Ford was normally around fifty percent greater than ours. Without our traditionally conservative accounting policy, growth from a zero position after the German currency reform in 1948 would have been unthinkable, particularly given the much smaller capital markets in Germany and Europe than in the USA back then.

For VW and Ford, the AutoLatina joint venture, based on trusting, outstanding cooperation, was without question a significant gain and an important, long-term risk reduction. It also resulted in our joint venture in Portugal, which represented the biggest industrial investment that the country had ever seen, with all its beneficial consequences for the Portuguese economy.

Shortly before I left VW, in November 1992, Piëch, Weber and I met the management of Ford, CEO Alex Trotman and Executive Vice President Wayne Booker in London. The aim

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⁵⁷ Generally Accepted Accounting Principles.

of our conversation was to arrange a seamless transfer of management for the VW/Ford strategic collaboration in the era of the two new company bosses Piëch and Trotman. At this meeting, Piëch took the position that from now on there was no longer a need for strategic partners because the Volkswagen Group had enough of its own brands and its sales volume would in a few years exceed the five million mark, sufficient for its platform strategy. This marked the beginning of the end of the cooperation with Ford.

After my retirement, the Brazilian market was opened up, including for automobile imports, thus intensifying the competition and forcing the dissolution of AutoLatina. Pierre Alain De Smedt, who had come from VW to be president of AutoLatina, headed the separation negotiations and then carried out the division, without losing the trust of the two stakeholders in the process. In the years after AutoLatina, both sides had to cope with considerable financial burdens and market losses. During this phase, VW had to make extensive investments in assembly and power unit capacities in Brazil and Argentina. However, it has not yet been possible to make the most of the important new plants that were built since then.

Back when AutoLatina was still around, I had the idea of entering the bus business; I may not have been around to celebrate the birth of this new segment, but I have certainly followed its impressive achievements with pleasure. The truck factory designed by Lopez in Resende, which is still considered to be the most cost-effective in the world, was a big win for Volkswagen. Its superior cost structure and flexibility paved the way for the VW truck to become number one in Brazil from the mid-1990s. It surely won't be long before the Brazilian VW bus has also reached the top. There are great opportunities for these top quality VW trucks in many parts of the Third World. Even in my day, the first VW heavy trucks were being exported to China.

The hoped-for gains after the separation from Ford were a

long time in coming. Truck production in Resende is the sole exception. In the passenger car sector, VW in Brazil also lost its market leadership in 2001 for the first time in forty nine years. Whether our plans work out will also depend on the success of the policies pursued by Brazilian President Lula da Silva, our union partner from the '60s, as will the question of whether Brazil can find its way out of the volatility that once led us to found AutoLatina.

8 Europe's reunification - East Germany

It is almost impossible to overstate the global significance of the dramatic events that led to the peaceful reunification of Europe and the implosion of the Soviet Union thanks to the courage of the East Germans and Central Europeans. As so often in the last twenty years, we were surprised by the events and, despite an all-German ministry with a thousand civil servants, we were not prepared either politically or economically. Reagan's appeal in 1987 at the Brandenburg Gate for the Berlin Wall to be torn down had looked to most people, including people in Germany, like nothing more than a political ritual.

At that time, the West was faced by a East German Army that was armed to the teeth and Soviet forces tanked and munitioned, ready to leap into action in less than an hour and – unlike the West German armed forces – without any leave, and certainly no weekends.

During the eleven years of my time as CEO, from my office window on the fourteenth floor I could see the tower of St. Catherine's Church in Oebisfelde, almost twenty kilometers away from Wolfsburg on the other side of the Iron Curtain: a constant reminder of the people in the East, but also a reminder of the threat that we in the West had got used to living with.

Would this system suffer a heart attack first, or would it attempt to break its way out through war? This seemed like the central question of our lives, indeed our survival. It was down to the struggles of people in East Germany and Central Europe that we got the chance for the third and best option, peaceful reunification – sooner and, thanks to the US, with far fewer compromises than we ever could have imagined, let alone predicted.

Few people today seem to be aware of how lucky we are that the internal collapse of the GDR – and even more so the

USSR – did not end in a blood-soaked disaster for Europe, as the downfall of the Third Reich had done. This represents the key difference between the two systems, so similar in other ways. Let's not forget that all the generals and officers in the East German National People's Army were confronted by a question of conscience: whether to accept a de facto capitulation over night, indeed whether to put on the uniform of the class enemy. Our compatriots in the East had endured the East German regime for more than a generation, shaping their lives under it, unless they had had the opportunity, strength and courage at the right time to flee to the West.

Despite all our objections to the GDR regime, we at Volkswagen believed that facing reality meant maintaining contacts with East Berlin, to hear what was going on, how things were developing, what to expect from the future. And so in the late '70s, under my predecessor Schmücker, a barter transaction – considered spectacular at the time – was worked out in which we received car parts and machine tools from the GDR in return for a delivery of 10,000 Golf cars. In Wolfsburg, a planetarium from the city of Jena in East Germany that was included in the deal for good measure is a reminder of the transaction to this day.

Even before my time as CEO, Volkswagen had concluded counter trades with body presses in Erfurt, Thuringia, procuring bodywork tools from the Ore Mountains. Tools from Schwarzenberg in the Ore Mountains were also used to manufacture the first Beetles before the Second World War. The Erfurt body presses would prove their worth in our plants in Germany, and later in Mexico and, after Germany Reunification. in China, too. This was only possible because we soon brought our East German suppliers up to Western standards of quality and performance after the initial orders. After 1978, the majority of Golf headlights also came from the *Fahrzeugelektrik Ruhla (FER)* state combine in Thuringia. This company in Eisenach continues to this day under the

name FER Fahrzeugelektrik GmbH and is now one of the most creative and efficient in its sector, supplying all the major European vehicle manufacturers.

Shortly after starting work in 1982, I received a call from my friend the politician Walther Leisler Kiep. There was an opportunity for us in the GDR. He wanted to introduce me to Gerhard Beil, at that time State Secretary and later GDR Foreign Trade Minister. I accepted immediately, and in early June 1982, we traveled together to East Berlin.

In Gerhard Beil, we met a competent partner who avoided political discussions and presented the situation of the East German economy in largely sober terms. He had already made a name for himself in the West German business world and proven to be a reliable partner. Over the course of the conversation, I developed a proposal that had occurred to me during the preliminary meeting with Kiep: we could sell to East Germany the license for our smallest engine, the "111" (a four-cylinder engine with 1,100 to 1,300 cc displacement), along with manufacturing equipment and a knowledge transfer. I remembered that we had a superfluous transfer line for the crankcase of this engine in our Hanover plant. We were also planning to streamline our factories and concentrate German engine production at VW in Salzgitter, now that this plant was no longer in consideration for vehicle assembly after the discontinuation of the K70, which we had inherited from NSU.

The great advantage of this transaction for the GDR economy was that it would significantly reduce fuel imports from the Soviet Union, because our engine had a dramatically lower fuel consumption than the two-cylinder two-stroke engine of the Trabant, which was developed way back in my father's era from a motorcycle engine. Furthermore, the 40 hp VW engine, besides all the comfort and convenience it offered, would mark a noticeable improvement in the engine of the 1964 Trabant P 601 and be generally better for the

environment. In 1983, we received a Wartburg car, in which we also installed an 11-liter engine without any major problems. When the car was sent back to the workers in Eisenach, it also contained a VW wheel trim cap with greetings from their colleagues in Wolfsburg.

It became a tradition for our hosts in East Germany to invite us after our talks to a meal in the newest hotel for foreign visitors. This way, they gave us the impression that there were no shortages of anything. Apart from the fact that ordinary people weren't even allowed to enter these hotels, essential kitchen produce came from West Berlin. Only the "Palace Hotel" had a terrace that could be accessed by East German citizens. As Kiep and I were sitting having a coffee there during one of our visits, a line of people formed in front of him asking for an autograph. I have never forgotten those brave Berliners.

Before long, we received a positive signal to commence negotiations, which my colleague Horst Münzner, originally from Chemnitz in the East, primarily conducted through Volkhard Köhler, who was his point man for the Comecon countries. When our plans were published prematurely in *Spiegel* magazine, there was initially an uproar in the Central Committee, which was certainly very unpleasant for Beil and life-threatening for our project. Münzner finally smoothed things over in the course of several nerve-wracking conversations. Otherwise, the negotiations were conducted in a very professional atmosphere, and we were satisfied with the conditions. Even more importantly, from then on we had a bridgehead, a seismograph in the GDR.

When the contract was signed in the newly built "International Trade Center" in East Berlin, little did we suspect that this project, relatively minor by our standards, represented a critical, unimaginably large endurance test for the GDR economy. When engine production started up and the pilot run for the Trabant got going in the summer of 1988,

the end of the GDR had almost begun. My regular trips to East Berlin accompanied by Münzner and Köhler showed us the rapidly descending trajectory and the unsettling emaciation and decay of the GDR's economy, which could no longer be concealed.

From the outset, we built close personal relationships with the leaders of the East German vehicle manufacturing industry association, the IFA, based in Chemnitz, especially with its capable general manager Dieter Voigt. After the fall of the Berlin Wall, we rescued him from political difficulties, and he found a job with us in the USA.

At our suggestion, in the mid-1980s, Beil also gave us the order to develop a successor body for the Trabant, which we presented to him in great secrecy in Wolfsburg in 1988 and then delivered to East Berlin. Once there, it disappeared without a trace, evidently after being presented to Honecker.

The GDR leadership was aware of the political importance of the car. Every attempt by the IFA engineers in Zwickau to create impressive new developments in the Golf class, including the CMEA⁵⁸ car type 760 in cooperation between Eisenach and Škoda, failed less because of the political interest of the party leadership and certainly not because of the skills of the engineers in Saxony, but because of the systemic economic realities. Commissioning us must therefore be seen as a desperate, if completely unrealistic attempt by a system that was going under to pacify the people once again with something that they could no longer afford. The GDR economy was on the brink of collapse.

We experienced the fall of the Berlin Wall up close in Wolfsburg. Every weekend we greeted tens of thousands of our compatriots from the East. They received their welcome money, information material and a small gift, received food and drink, and were invited on tours of the city and factory.

⁵⁸ CMEA – Council for Mutual Economic Assistance, also known as Comecon.

Many people from Wolfsburg were out on the streets and proved to be warm hosts, while at the same time VW dealers everywhere were ready to volunteer help moving people around. I will never forget the encounters and conversations I had in those days. They gave a deep insight into the hearts and expectations of our East German fellow citizens.

On the business side, we were surprised after the fall of the Berlin Wall by a brand new, mothballed assembly factory just outside Zwickau that was designed for an annual production of 100,000 passenger cars. As with the body project, there had simply no longer been the economic strength to get the factory up and running. The capable IFA skilled workers instead produced the Trabant in halls that had not changed since August Horch's time in the 1920s, with the rain leaking through all over the place.

Conditions for these workers were inhumane, especially in bodyshell production, with its high temperatures and cotton dust. After calendering, Soviet cotton was dipped in a special synthetic resin, molded under pressure in hot presses and subjected to a kind of vulcanization. This created a good surface which did not corrode in any way, but it put the occupants at high risk in the event of accidents due to the brittleness of the bodyshell.⁵⁹

The conditions in these halls symbolized the failure of a system that, despite the greatest ingenuity, diligence and skill of its citizens, was on its last legs. Since 1945, people had continuously put in countless unpaid hours to try and make Marxism work. Now, the expropriated capital and the entire infrastructure of the East German economy had been used up. What remained were the debts.

For VW, this was a good starting point to rush over to Saxony after the fall of the Berlin Wall. At the beginning of

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⁵⁹ In 1990, I bought a Trabant convertible used by the police and made of sheet metal with a VW engine at the front and a rear fuel tank, which still gets me around to this day when I'm on vacation on Sardinia.

December 1989, we visited the heads of IFA in Chemnitz. We made every conceivable effort here to ensure they weren't pushed into the role of the vanquished, second-class Germans.

On our first visit to the factory in Zwickau, where entire streets were closed due to the risk of collapse, we were surprised by the large number of foreign workers, from Poland and Vietnam in particular, but also from Angola and Mozambique. Their lives were tough. The students from these countries surely had it better over in their dormitories. Beil proudly reported that over forty percent of Vietnam's "scientific intelligence" had been trained in the GDR. Unfortunately, we failed to seize the invaluable future strategic advantage offered by this country in Southeast Asia with its more than eighty million inhabitants.

Wherever we went, we tried to inspire courage and confidence, including every time we made a TV appearance or attended am IFA works meeting. All the employees turned up to these works meetings in Zwickau in their Sunday best. It was a moving sight for me. The East Germans solemnly expressed their readiness to work for a cause that was now good, in a church-like atmosphere. Most of them were familiar with the West from television, but they were even more familiar with the total collapse of their own economy.

After the fall of the Wall, the people of the GDR dictated the agenda and pace with their political dynamism. One after another, all our plans and negotiation results were rendered obsolete, such as for example a contract for a 50:50 planning committee from December 22, 1989, between IFA and VW, which we concluded in Wolfsburg, or the intensive talks with Dr. Luft, the vice-chair of the Council of Ministers, on the future of the automotive industry. Dr. Luft turned out to be an extremely interesting and interested person from the other side. She had previously been the rector of the University of Economics in East Berlin. We learned to respect her. Her two sons commuted every day to West Berlin and seemed to be a

mine of information for her. But time and again we were overtaken by political events, often just after speaking to her, to Premier Modrow, or finally to Premier de Maizière. While waiting to speak to Mr. Modrow or Mr. de Maizière, we would bump into an old friend – Gerhard Beil. At that time, I was busy trying to convince my colleagues on the executive board to make inroads into the East because, with the exception of Münzner, for them (as for most West Germans), Saxony and East Germany in general were a blank spot on the map of their experience. It is too easy to forget that in pre-war Germany, given mobility at that time, only a few had the privilege of visiting the whole country. Besides, the number of people who knew and had survived Germany from the pre-war period was shrinking all the time. However, there was one exception in East Germany: troops from the East German tank division had worked as truck drivers and gained an intimate knowledge of the relevant topographical conditions in West Germany. It was not uncommon for them to observe military maneuvers "by chance."

In early 1990, we started a comprehensive fact-finding mission to Saxony and Thuringia. This gave us an insight into the catastrophic situation in factories and services there. But at the same time, it demonstrated to us the high qualifications and craftsmanship of the people, who mostly had to work with pre-war technology, while workers in Saxony were producing relatively modern machine tools, primarily for the USSR.

Our engine project had triggered many scattered individual investments. As soon became evident, it was not so much the economic viability of an individual supplier part as the relationship between the respective works manager and the planning machinery that decided how big a slice of the modernization cake you received. Construction capacities in Chemnitz and the surrounding area were booked out for years in advance. Nothing happened on schedule.

In the end, our final plans were distilled very quickly once

we knew that German reunification was imminent. A new engine plant was designed for Chemnitz on the site of the former headquarters of Auto Union AG, which was on Bernd-Rosemeyer-Straße when I was young. We were not interested in the Eisenach site, except that the GDR's plans had set up our cylinder head production there, and this continued to run for a few years. We concentrated on Zwickau, the home of Horch and Audi

As early as the spring of 1990, only six months after the fall of the Berlin Wall, production of the Polo was supposed to start up in the previously mothballed assembly factory in Zwickau's Mosel suburb: little wonder, given that the head of VW production planning, Folker Weißgerber, came from neighboring Chemnitz. He later became a member of the Volkswagen's Group executive board for the production division.

The precipitous events of 1990 confirmed that our resolute action in East Germany had been the right one. When the economic and monetary union came into force on June 1, 1990, with an exchange rate of 1:1, the East German economy lost its competitiveness overnight, and the country's outdated automobile production was affected more than most. An annual capacity of well over 200,000 vehicles was obliterated from one day to the next; waiting lists for the Trabant of thirteen years and more disappeared without a trace. The market was open and people's desire for Western products was unlimited. Cars were at the very top of the wish list. An extraordinary pull in demand developed, including on the Western European used car markets.

This situation favored any Western European manufacturers who were able to deliver immediately, while our options were limited due to the high level of capacity utilization in the Group. This reality was also reflected in the different market shares compared to West Germany. On the one hand, engine production in Chemnitz and Polo assembly in Zwickau would

help open up part of our market potential in the former East Germany. But on the other, we urgently needed more capacity. The other issue was providing work and prospects for the people in East Germany, and unfortunately this failed over and over again. We were virtually the only automotive company to make the attempt, apart from a small GM Opel assembly plant in Eisenach.

At that time, based on my simple "rule-of-thumb" estimate proportional to the population growth of a united Germany, we were planning for an additional demand for new VW assembly capacities of 250,000 vehicles per year. This was not very scientific, but it was pragmatic and it turned out to be right in retrospect.

In Mosel near Zwickau, right next to the previously mothballed factory, an assembly plant was built in line with the latest technology. We also broke new ground with exemplary and pioneering work in the environmental and social sectors. In close partnership with municipal representatives, we promoted the development of a modern, high-performance infrastructure. All the authorities were working at top speed.

With the establishment of a Volkswagen educational institute, which started teaching in September 1990, we also made a contribution to the qualification of employees at our two locations in Zwickau and Chemnitz. The institute was open to the whole economy.

VW gedas, which is responsible for information technology within the Group, also set up a subsidiary in Zwickau. Finally, there was also a sales company, initially founded in July 1990 together with the passenger car division of the IFA state combine. This didn't bring us any model companies, but it did give us a dealer network overnight that could be expanded quickly. The first East German VW dealership meeting in Wolfsburg is one of my fondest memories.

When visiting Saxony, we were soon able to fly to a Soviet

military airport outside Altenburg, near Zwickau, which dates back to the time of the Third Reich. Its unusually wide runway, suitable for parallel take-off by multiple planes at once, and the aircraft bunkers, and its location just a few minutes' flight from the zone border, bear witness to aggressive plans. But the size of the potholes, the decay of the cannibalized buildings and the emaciated Soviet soldiers who sometimes opened the barrier for us in their slippers, suggested a completely different reality.

When we set off for the East immediately after the peaceful revolution, we still believed that we would be facing a battle to carve up the sites with our European competitors. We were utterly wrong on this count. In the West, many competitors looked at me with pity and commented in the media on my "megalomania," fully ignorant of the situation and the industrial tradition in Saxony on which we were building. This tradition was alive and kicking, even though it was considered good form in the West German press to claim the opposite. Before the war, some thirty percent of German cars had been produced in Saxony, and DKW had the largest motorbike factory in the world there at that time. Essentially, the region's industrial tradition goes all the way back to the silver mining in the Ore Mountains, with the oldest engineering school in the world in Freiberg, dating from 1765.

It was also popular to speculate that I was influenced, even seduced, by family ties. This was not even close to true. That said, these ties certainly accelerated my pace because we were on home turf and surefooted. Of course I am deeply grateful today that we acted and that it was my role to provide the initial spark for the reconstruction of the Saxon automotive industry.

Finally, we could once again feel national pride and national joy as people waved our flag in a way we had only ever seen our European neighbors and Americans do.

The widespread ignorance in the West about the East was

generational and therefore understandable. On the other hand, people were not very proactive about closing the gaps in their knowledge by visiting and finding out on the ground, as we did. Back when the GDR was still in existence, I had made a routine of watching the East German news or listening to Honecker's speeches almost every day, even though he was an exceptionally poor public speaker and constantly told the same old story.

In today's fast-paced world, the head of a company should always approach strategy as something very much alive and give it top priority. You have a much stronger negotiating position if you take the lead in key tasks. This results in better profits estimates and a faster pace. However, being the first also opens you up to a greater personal risk. For many, this is reason enough not to pursue such a path in the first place. At US corporations, in particular, the first man is protected like the king in a game of chess. This is part of "corporate policy." I've always done the opposite in practice, and not just in Saxony.

Today we know that we achieved all our goals at VW; in fact, we exceeded them in most cases. Our management teams in the East and the West worked hand in hand. The first boss of VW Sachsen, Gerd Heuss, played a decisive role in this, as did the workforce, who very sensitively realized that strictly aligning wages and working hours with Western standards would have meant a loss of future opportunities. At times, there were tensions with works council members imported from the West, who by insisting on harmonization at any price were obviously focused more on their union careers than the welfare of the people in the East. In these conflicts, our management team could not always rely on Wolfsburg covering their backs.

In Chemnitz these problems were successfully avoided. The leading position our engine plant enjoys in terms of quality and productivity, and its expansion beyond the original investment is therefore to a great extent not only a credit to our managers in East and West and to the workforce, but particularly also to the local works councils, headed for many years in an entrepreneurial spirit by Elke Kilian and Klaus Bilek. I would like to mention both of them here as representative of many of their exemplary colleagues in East Germany. Our expectations were thus more than met, the new capacity was more than utilized, further capacities were added and additional jobs were created.

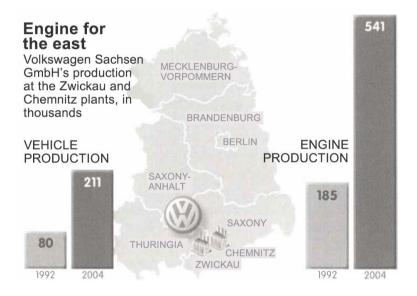
The growth of our Saxon subsidiary fills me with particular joy and satisfaction today, especially given that just before my retirement as chairman of the board at VW, with looming clouds on the economic horizon, substantial doubt emerged about the wisdom of long-term investment in the former East Germany. In view of the worsening sales situation, my board colleague Goeudevert, then head of the VW brand, announced his intention to reduce planned capacities at Mosel by half, to just 125,000 vehicles. After I left – by which time criticism of my policies had intensified – VW decided to thin out its investments in the eastern states, a decision that led directly to a lack of capacity once the recession was over.

Despite this, Volkswagen developed into the biggest industrial investor and employer in former East Germany, and very soon it was also issuing development orders to institutions and universities. In terms of turnover, Volkswagen Sachsen GmbH is the largest company in the eastern states, not to mention VW's purchasing volumes or the role of the company as the largest taxpayer.

- Since 1990 (up to and including 2000), around 1.8 billion euros were invested in setting up the eastern German VW production sites. Since then, between 100 and 150 million euros have been invested annually in upcoming model and technology maintenance measures.
- · Including the staff of 7,100 employed at Volkswagen

Sachsen GmbH, VW's commitment to the region has meant that more than 37,600 people in former East Germany have found jobs.

- In 2004, 211,000 Volkswagen cars and 541,000 engines were made in Saxony.
- To date, more than two million Volkswagen vehicles and seven million VW engines have been produced in Saxony.



The establishment of a complete supply industry also drew in many more investors. These, in particular, prepared the ground for small and medium-sized businesses, which rarely thrive in an industrial desert. The government almost always failed to recognize this timeline in its funding policies. The highly modern automotive supplier structures that had arisen in Saxony would, more than a decade later, tip the scales in its favor when BMW and Porsche were choosing new sites. VW's investments in Chemnitz and Zwickau also sent out a signal to other industries that had no connection to the automotive sector, such as the pharmaceutical industry.

Without VW's key investments, this region would be faced

with almost insoluble tasks. In this way, however, the Free State of Saxony became the model state among the new federal states. Its people were the real winners. They turned out to be as reliable, hardworking and as well trained as I remembered them in my heart from my time spent working at Auto Union in Chemnitz as an apprentice and factory worker in my summer vacations during the war. This personal experience had a particular influence on the decision-making process.

The cityscape of Zwickau, which had been blackened by a coking plant since even before the days of the GDR, has at no point in its history been as impressively beautiful as it is today. These days, it is not only the Golf and the Passat that are produced there: in the proud tradition of Horch, the body of the Phaeton and the little Bentley are also made in the town. And so the old new 100,000-capacity factory, too small for large-scale production, has now come back into favor after we initially used it simply as a stop-gap solution to send out a signal.

Chemnitz has it much harder because the labor content in a modern, capital-intensive engine plant is comparatively much smaller than that in assembly plants. In addition, Chemnitz was bombed and largely destroyed on March 5, 1945 for no military reason. The carpet of bombs fell right up to where my family home stood.

At the end of my active time at Volkswagen, Birgit Breuel, who was then head of the Treuhand agency (tasked with privatizing East German state enterprises), and Tyll Necker, the president of the BDI (Federation of German Industries) proposed that I take charge of the BDI's "Purchasing drive in the new federal states" which they had come up with: this was a task close to my heart. In this campaign, we brought together many thousands of entrepreneurs and their employees from East and West starting in 1993 and saw dedicated work from everyone involved. In the framework of the BDI's "wir"

business initiatives, this work continued under the executive board member Jürgen Bauer up until the end of 1999 and was overseen by me. The final balance was certainly encouraging: the initiative not only reached the original purchasing objectives ahead of schedule (the target was a volume of 50 billion marks), it also made an important contribution to the transfer of capital and know-how to the east. After it fulfilled its aims, we dissolved the "wir. Wirtschafts-Initiativen für Deutschland" association on schedule - not an everyday occurrence in itself. German reunification saved the West German economy from a recession in 1990/91. However, even since the beginning of the new century, something in the range of eighty billion euros more of goods and services go from west to east than vice versa. This large-scale Keynesian job creation measure in favor of West Germany whitewashed our growing structural problems in the early 1990s. Instead of correcting these problems, we exported them to East Germany, where economic development has stagnated despite substantial transfer payments amounting to almost five percent of GDP. These enduring financial burdens were ultimately one of the main causes of our escalating deficits.

For unrealistic reasons and in the heady rush of reunification, the wrong economic policy course was set in 1990. Realistic East Germans had never expected an exchange rate of 1:1 for their currency. This destroyed their economy overnight. Karl-Otto Poehl, one of those to warn against this policy, drew the necessary conclusions and resigned as president of the German central bank.

In no other Central European country did the adjustment process go as badly as it did in East Germany. Instead, these other countries are now achieving growth rates on their own that set an example to us. By contrast, our transfer payments to the new federal states are mainly frittered away on consumption, changing far too little for the better and emaciating the German economy in the process. After all,

didn't we in West Germany benefit so exceptionally after the currency reform in 1948 because of the favorable US dollar/Deutsche Mark parity of 4.2:1, together with a restrained wage policy, creating more jobs from one day to the next than we had workers?

Of course there are proud isolated cases that impressively demonstrate the potential of eastern Germany. A number of smaller companies are now internationally successful, prospering thanks to technical and entrepreneurial creativity, committed employees and competitive personnel costs, most of which are not tied to collective agreements. Generally, however, our policies have led to a weakening of the German economy. Profound corrections are therefore overdue. But they need to start in the western part of our country.

None of this changes the fact that Kohl had the vision and found, in Gorbachev, a partner with the courage to accept the lessons of his ailing and inhumane system.

9 Central Europe⁶⁰

European reunification moved Germany – and VW – from a geographically extremely unfavorable and dangerous location at the edge of Europe rights to its center at the heart of the continent. This meant that all the political and economic fundamentals on which we had based our previous strategies were suddenly obsolete. One world had changed radically and for the better, even if it wasn't the "end of history." From one day to the next. Europe had grown by over a hundred million people, a historical event only comparable to China's entry into the world economy in the '80s. We should be alarmed that these developments did not lead to a sustained boom in Germany. All the European interdependencies, divisions of labor and location policies had to be reconsidered, there were new competition parameters or these would soon emerge – everything was in a state of flux. In the words of Heraclitus: panta rhei. Europe's political border could be shifted all the way to the Urals, its economic border probably as far as Vladivostok one day, across as many time zones as between Frankfurt and Hawaii, heading west. During a round-table discussion at the Frankfurt Motor Show in 1991, I said that probably no one could imagine the full dimensions of these changes, but that everyone would need to redesign their strategy from the ground up to avoid being "too soon," "too late," or "unrealistic." Former Chancellor Schmidt realistically remarked that the road to a market economy would take one night, nine months and forty years for Russia and the Commonwealth of Independent States.

Almost in parallel to these political upheavals began the revolution of the internet age. Since 1988, I had been

⁶⁰ I use Central Europe as a geographical term here to refer to the following countries: Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Albania and all the successor states of the former Yugoslavia.

connected by email to our management teams around the world, all the way to Shanghai. This gave us a communication tool that was not only inexpensive, it also ignored hierarchical levels. After 1990, the new technology was a key help for the economy, making it possible to handle the new orders of magnitude and the inexorably accelerating pace of change, and to experience and react to these in "real time."

Geographically, historically and culturally, Germany has for centuries been an important bridge to Central Europe and on to Eastern Europe. The new political realities were both a challenge and an opportunity for VW. We did not expect to be on our own in opening up the Central European markets. To our surprise, however, with two serious exceptions, this ultimately turned out to be the case, by and large. Our Western competitors were for the most part not prepared, either mentally or by experience, for such a radical change, or they had not understood this change. And so no one stopped us from tapping the entire core area of Central Europe and building up a clear leadership position there by opening new production sites

And yet we were, in fact, overstrained at VW at that time. The cumulative effect of events around the world kept us in a state of suspense: the start-up of the AutoLatina joint venture in South America, the integration of Seat in Spain, the

Strategic decisions in the Volkswagen Group, 1983 - 1993

1983

- assembly plant, Michigan/USA
 - Start of VW Passat production at SEAT, Barcelona/Spain

1984

- Start of VW Passat production
- at SEAT, Barcelona/Spain

 Acquisition of the Italian importer "AUTOGERMA S.p.A."

1985

 Founding of the joint venture "Shanghai Volkswagen Automotive Company, Ltd.," Shanghai/China

1986

 Acquisition of majority interest in "SEAT, S.A.," Barcelona/Spain
 Sale of Triumph-Adler

1987

- Closure of South Charleston plant, West Virginia/USA and transfer of pressed part production to Puebla/Mexico
- Merger with Ford to form "AUTOLATINA" in Brazil & Argentina

1988

- Closure of Westmoreland plant, Pennsylvania/USA and transfer of vehicle production to Puebla/Mexico
 Acquisition of 50% share in
 - Europear and merger with VW interRent

1989

- Introduction of direct dealer system in Germany
- Start of Toyota pick-up production in the VW commercial vehicles plant, Hanover/Germany Sale of Fort Worth VW plant
- (a/c units), Texas/USA

1990

- Founding of "Volkswagen Sachsen GmbH," Zwickau/Germany
- Start of construction on the Mosel automobile plant, Zwickau/Germany

1991

 Consolidation of financial services in "Volkswagen Finanz GmbH"

- Founding of the joint venture "FAW-Volkswagen Automotive Company, Ltd.," Changchun/China
- Acquisition of an initial 31% stake in "Skoda, automobilová a. s.," Mladá Boleslav/Czech Republic, and acumption of management respon-
- Founding of "Volkswagen Bratislava, spol. S.r.o.," Bratislava/Slovakia
- Founding of VW/Ford joint enterprise "AutoEuropa Automóveis Lda.," Setúbal/Portugal
 - Start of construction on the new VW engine plant in Chemnitz/Germany
- Award of contract to Győr/Hungary as the site of the new Audi engine plant
 - Start of operations at SEAT plant
 Martorell/Spain
- Start of operations at Transax gearbox plant, Córdoba/Argentina
 1993 January 1st
 - Acquisition of the British importer "V.A.G. United Kingdom Ltd"

establishment of AutoEuropa together with Ford in Portugal and, last but not least, our projects in China and East Germany. Without exception, all our divisions, especially the technical division, were stuck in a marathon around the world due to the company's global expansion. Huge plans needed to be drawn up and implemented, billions in investment had to be accounted for and financed – all this in addition to the actual day-to-day work for which we were resourced.

And now I was expecting these overworked teams to follow me to Central Europe and multiply their stresses and strains. I would have perfectly understood any opposition to this course of action. But everyone recognized the uniqueness of the situation and the opportunities of Europeanization and globalization and came on board. When, after our involvement with Škoda in Mladá Boleslav, we added Bratislava and the second engine plant in Chemnitz, some colleagues urged me to stop and be satisfied with what we had achieved because I had already reached all of the important goals. But sometimes you have to pretend to be hard of hearing.

Today its seems a miracle to me that we were able to handle so many projects at the same time and successfully. I can't imagine a greater testament to the skills of our Wolfsburg management team than the results that we achieved. All the flows of work and responsibility at this time ended up on the desks of my colleagues Münzner, Frerk, Hartwich, Seiffert, Schmidt and Ullsperger.

Up until the present day, not enough attention has been paid to the fact that we were able to finance these expansions and absorb the advance costs in our profit and loss statement. And all this in high-wage Germany, after the 35-hour week came into force and without being able to benefit from the advantages of the new low-cost locations that my successor enjoyed. Quite the opposite: in addition to the up-front costs for the new sites, there were also product adaptation and development costs.

Apart from Toyota, I can't think of any other car company that has ever achieved a comparable pace and dealt with it as well. At the same time, our balance sheet ratios remained invulnerable, and we always had considerable liquidity. Added to this, we had unused syndicated credit lines from international banking consortia for times of crisis amounting to 7.5 billion marks. Moody's and Standard & Poor's, internationally probably the most well-regarded of the rating agencies, classified us as first-class debtors up until I left, thus enabling us to have extremely favorable refinancing conditions worldwide.

The press, by contrast, often criticized our "lean" profits while failing to deduce from our cash flow figures how uncompromisingly conservative our balancing of accounts was: as an example, we were the only automotive factory to fully utilize border region depreciations, to the amount of up to 1.4 billion marks each year, apart from 1992.61 As a result of these measures, the Volkswagen Group's net income for the 1991 financial year was around twenty six percent below the figure that would otherwise be reported, for instance. At that time, you couldn't capitalize development costs, either, although the IAS⁶² guidelines have now made this the rule in our industry, which results in highly praised profits, even if according to the German Commercial Code, de facto losses should actually be reported. For us, the priority was not on maximizing reported profits, but on ensuring a long-term cash flow to secure future investment. Our dividend was standard for Germany.

Since our company was as leaky as a sieve, our most confidential information, supervisory board reports and plans would normally end up in the press, must to the delight of our competitors, among others. I have to admit, however, that the entire industry has now more or less reached the level of the

⁶¹ Investments were written off at fifty percent in the first year.

⁶² International Accounting Standards

world of politics in this area. The media are constantly being supplied with opinions and intentions, plans and forecasts about the future that used to be kept top secret. This has created a new dimension of reporting that my generation was spared. A lot of management seems to take place in the marketplace now.

Certainly, we took risks back then. But anyone who could analyze a balance sheet (admittedly not a very widespread ability) knew full well that VW was significantly strengthened - financially and in its competitiveness - by these policies, that we could afford the risks and that they improved our strategic cost position invaluably. Waiting and watching would have been by far the greater risk, as events have since proven. In any case, the professional rating agencies understood us, as did our supervisory board. At the beginning of my tenure as CEO, back in 1982, Fiat was behind Renault in the European ranking of new car registrations, at number two, later reaching number one, and thus way ahead of us in fifth place. But the failure to adapt to the new European and global economic realities led to a crisis of existential proportions at Fiat, correspondingly serious effects on the Italian economy. No government and no special laws can help once strategic errors of this magnitude are committed over so long a period. This would also have been disastrous for Volkswagen.

What would have happened

- if we hadn't neutralized our dependence on Germany in terms of costs?
- if we hadn't advanced into Central Europe so dynamically?
- if competitors had filled our current Central European positions?
- if our German, capital-intensive factories couldn't be the main suppliers and buyers for our new brands at internal transfer prices?

Our very existence would be at risk and we would no longer even be able to maintain fifth place in Europe. Even a Volkswagen Act would then no longer be any help. It's easy to forget that the strategic factor of time cannot be rewound.

Some in the media attacked me aggressively during the years of upheavals. Megalomania was the mildest accusation thrown at me, enriched with quotes from the competition. Worst-case scenarios from our supervisory board documents — the originals of which somehow ended up in the hands of certain newspapers — were used to produce one-sided doom and gloom to boost circulation. Of course, campaigns like this left their mark on our team and on the supervisory board under Karl Gustav Ratjen and, from 1987, under Klaus Liesen, who nevertheless had the courage to support and approve our policies without a single curtailment. The same is true of our major shareholder, the state of Lower Saxony, and our employees' representatives on this committee.

It was not at all easy to convey the line of argument that every investment abroad not only safeguards German jobs, but even created additional ones. But we managed. At the same time, we opened up unimagined opportunities for advancement for our management team, as we needed new board members and executives for subsidiaries in droves around the world almost every year. Naturally, this made us attractive as an employer.

But opportunities have the shortest half-lives. They come – generally unannounced – and just as quickly, they go again. This is what makes them so dangerous. By the early '90s, European opportunities would once again all be gone, new industrial road maps on the table and we were once again fighting for our position. The window of opportunity in Japan and Korea was open just as briefly for strategic thinking American and European investors after the Asian financial crisis in the 90s. But even an opportunity seized in such a brief window is by no means a guarantee of success, as Daimler's Chrysler and Mitsubishi commitments show.

The McKinsey statistics are filled with failed mergers and collaborations, with wrecked enterprises. In the case of Volkswagen, we can now see that, unlike the policy of diversification in the '70s, our expansion policy in the '80s and early '90s was an unmitigated success. When I was at Continental, I managed the same success by purchasing Uniroyal in 1979, except that back then we had only a single victory under our belt.

Thanks to Central Europe, we rebalanced our European production structures, completely redesigned our division of labor and optimized the manufacturing costs for our products and power units in close cooperation with the suppliers. It was also the time during which reducing vertical integration became increasingly important.

Our European competitors stuck almost without exception to their national locations, completely unlike the American and Japanese car companies, who thought and acted at a European level from the outset when deciding on locations for the Old World.

With the Europeanization of our Group structures, i.e. through our involvement in Spain and Portugal on the one hand and in Central Europe on the other, we have for the time being freed ourselves from the stranglehold of costs in high-cost Germany. But the sites in the former East Germany also showed pleasing cost advantages compared to western Germany thanks to high productivity, greater flexibility and longer working hours at lower wage costs. Since each of the factories was state-of-the-art, these advantages were particularly evident, helped by subsidies and special depreciation options.

By isolating our real Achilles heel, we were once again competitive in terms of costs and were able to demonstrate our technical superiority. But the earnings increases resulting from the new Group structure in the second half of the 1990s were obviously too seductive ... At least, the necessary attention was not paid to the traditional mass segment and associated,

important niches, i.e. the daily bread for our factories and dealers, which opened up unexpected opportunities for our competitors.

The various offers from the Soviet Union that came our way since the beginning of perestroika always seemed unrealistic to us, however much Gorbachev impressed and inspired us. And so we were surprised when competitors signed projects for automotive factories with capacities of up to 900,000 vehicles per year that we had written off as completely unrealistic. These then never came to fruition. Sadly, events since in Russia and Ukraine have confirmed our assessment. But a window of opportunity has now opened up there too. although it will not close as quickly. History has shaped this region differently than the Central European countries to the west of it. Moreover, Russia has almost eighty, not just forty, years of communism behind it. Most of the Central European nations, by contrast, had always been a part of the western cultural sphere and, in some cases, had a great industrial tradition, as in the case of the Czech Republic since the times of the Austro-Hungarian empire.

During German President von Weizsäcker's state visit to the ČSFR⁶³ at the beginning of 1990, I closely shadowed his every step. I worked the corridors everywhere, which is not really my style, but it seemed necessary. From now on, Prague would become a permanent fixture on my schedule – in addition to the trips to East Germany – very soon combined with Mladá Boleslav, the headquarters of Škoda, as well as Poznań and Bratislava, once known as Pressburg and very close to Vienna. Bratislava thus offered a point of connection to the entire western infrastructure system, starting with Vienna Airport.

As in East Germany, we had always maintained contacts with all of the automobile-producing Comecon countries during the Cold War. Any visitors from there were always welcome. We had also already installed a VW engine in a

⁶³ The Czech and Slovak Federative Republic (1990–1992).

Škoda Felicia and knew it would fit. Gorbachev's policies made us suspect more and more that there would be some opening up. And so we were determined to keep our finger on the pulse.

To us, Škoda was the Pearl of the East. Even in some Western countries, this traditional car company and brand dating back to the early days of the automobile still carried some weight. The actual roots of the company can be traced back to the Laurin & Klement works named after the two founders, which had been manufacturing automobiles since 1905.

The Czech truck manufacturer Tatra had also achieved world renown with its unique construction principle of the backbone tube chassis for heavy trucks as well as with its streamlined passenger car with air-cooled eight-cylinder rear engine and aluminum cylinder block. Tatra is still successfully contesting the Paris-Dakar rally with its trucks. Even in the days of Nordhoff, we made a one-off license payment for various Tatra / Baron Ringhoffer patents used in the Beetle. As far as I know, the Reich Association of the Automotive Industry (RDA) had already suggested this payment back in 1935.

Bohemia was the cradle of many great pioneers of the automotive industry, from Baron F. Ringhoffer, through Hans Ledwinka, to Ferdinand Porsche. Up to this day, there are very many people who can trace their roots back to there or to Austria and who have made a name for themselves, especially in the German automotive industry. You need only think of Dr. Jakob von Deutz, my development colleague on the VW board, Prof. Ernst Fiala, Prof. Eberan von Eberhorst, the heads of research and development, respectively, at Auto Union before and after the war, or Ferdinand Piëch. My father was one, too, known as "Two-stroke Hahn" from DKW Auto Union.

For us, Škoda in Mladá Boleslav was the most important objective, with no alternative. We had to bet on victory. But how could we win against a well-known competitor from France, a country to which leading Czech politicians felt

obliged because of its political support? This was obviously also one of the reasons why they wanted to sell us Bratislava first.

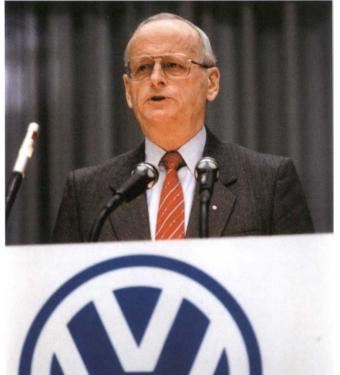
When we (Volkhard Köhler and I) first met the foreign trade minister of the ČSFR, Slavomir Stračár (who sadly passed away far too young) together with the Czechoslovak deputy minister of industry Jozef Uhrik at the coffee bar of the somewhat down-at-heel Prague airport on February 4, 1990, they immediately directed us on to Bratislava, but not to Mladá Boleslav.

Once again, I was confronted here, on a greenfield site just outside the city, with a factory that was, admittedly, already ten years old, but still brand new, even larger than "Mosel 1" near Zwickau, and had never produced a single car. And under its roof, next to a small styling studio, it had the largest tool shop we had ever seen. It was only exceeded in size by the tool shop we would encounter next, at Škoda in Mladá Boleslav.

The ČSFR had a production capacity for the T-72 tank that probably exceeded the total tank production capacities in Western Europe – no doubt much to the delight of its major customer, Iraq. But Prague was endeavoring to diversify the industrialization of Slovakia away from the export-intensive arms industry. For this reason, they came up with the idea in the late '70s of building a modern assembly plant for Alfa-Romeo licensed production outside Bratislava, but in the end it never opened. Bratislava's capacity was enormous, but it had no brand and no market share, no sales organization and no staff. Apart from a few dip tanks for a paint shop, there weren't even any manufacturing facilities. What could we do with this behemoth?



67/68 My last works meeting at the main plant in Wolfsburg in December 1992.





69 On January 19, 1993, in the imperial palace of Goslar, Marisa Hahn looks on radiantly as her husband retires (supposedly). It was my official farewell as CEO of VW. Behind my wife from the left: Ferdinand Piëch, Helmut Werner, C. H. H., Umberto Agnelli, Werner Niefer, Eberhard von Kuenheim und Wendelin Wiedeking.

70 My favorite supervisory board membership was the Gerling insurance group for more than forty years. VW, located directly next to the Iron Curtain, was a long way from the German decision-making centers. Supervisory board memberships gave us important connections. To the left of me, Paul-Robert Wagner, to the right, Hans Gerling, a great entrepreneur and a great friend. Next to him: Harald J. Schröder.





71 Kyrgyzstan, located in the heart of Central Asia, is one of the most beautiful, but also one of the poorest countries in the world. Ernst Albrecht, former Minister President (center) made it our mission to support Kyrgyzstan in its reform effort. The long-time president of the country, Askar Akayev (right), was the only head of state in the successor states of the Soviet Union who had not been part of the communist nomenklatura, but was an internationally respected professor of physics. His work was not perfect, but probably no one in the CIS countries made better progress than he did up to his fall from power.

72 Albrecht and I fell in love with this beautiful country, located at an average elevation of 3,000 meters (almost 10,000 feet) above sea level, and its people with their great nomadic traditions. Shown here: a strategy discussion near Osh.



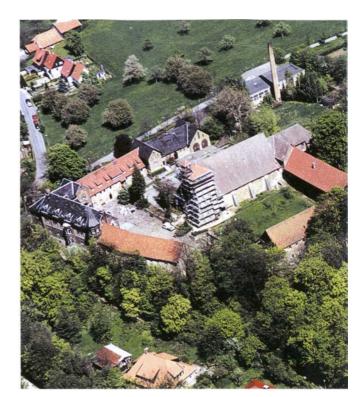


- 73 Wolfsburg is not linked to the world only by cars, but also by the art museum I initiated. Thanks to the generous donations from our patron, Asta Holler, it is largely privately financed. Its international reputation we owe to the founding director, Gijs van Tuyl.
- 74 Theaterplatz in Chemnitz survived the Second World War without major damage, but after the fall of the Wall, it needed a lot of renovation. As part of a citizens' initiative, we set ourselves the goal of returning St. Peter's Church (on the right) to its former glory. In the middle is the opera, the building on the left houses the Chemnitz art collections.

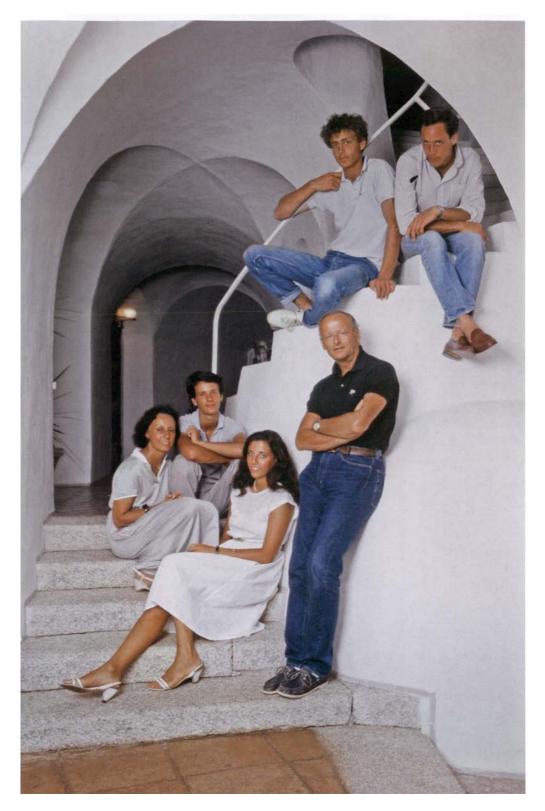


75 Since my retirement, I have never been short of work. For example, the Benedictine monastery at Ilsenburg: under Maria Princess zu Stolberg-Wernigerode, we on the board of trustees for the Ilsenburg monastery work to preserve and restore this 1,000-year-old historical cultural monument.

76 Audience with Pope John Paul II: the Holy Father received us on the occasion of a meeting of the European automotive industry in 1990 in Rome. In the middle is Umberto Agnelli.







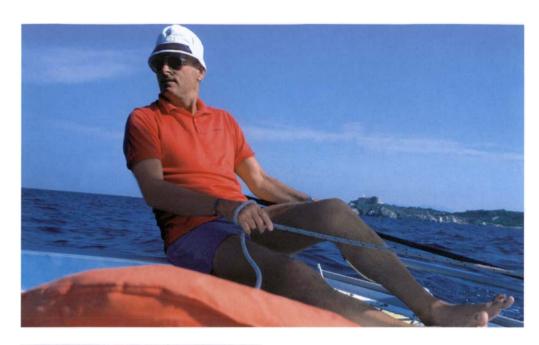


78 Family summer vacation at a dude ranch near Jackson Hole in the Teton Mountains. It was not always easy to combine family and work in such a way that no one was neglected. Work and responsibility never stopped, and they didn't recognize any geographical or time limits.

◀ 77 We enjoy the most beautiful days of the year on Sardinia.

79 The city of Wolfsburg celebrates its 50–year anniversary – a good reason to get out the champagne.







80 At the tiller oft my Hobie Cat 14 (later 18(!)) "Marisa," I unwind ofti the coast oft Sardinia. It is the ideal place for new ideas – or at least up to wind force 4.

81 At the Engadine Ski Marathon with its 12,000 entrants, the VW and Audi participants would outrun me every year. But sport right across all the hierarchies is a great cement for teams.

82 A spot ofi fiun befiore breakfiast.



The government wanted to get rid of the harder-to-sell object first – indeed, they had to. This made our situation tricky: without negotiating on Bratislava, we wouldn't get to Škoda, where we actually wanted to go. And so I felt quite uncomfortable in my skin during that first visit, like an inexperienced con man. It took some time before we realized how we could win and capitalize both aces.

As planned, our interest in Bratislava meant that the government also showed us Škoda in Mladá Boleslav. There we were very pleasantly surprised. Everything was in stark contrast to the tired old IFA factory in Zwickau and the dreary Trabant, as ingenious as its body – born out of necessity – undoubtedly was. The ČSFR had evidently got through the Comecon period more in the spirit of the Good Soldier Švejk. The Škoda Felicia gave us a modern car in the Polo class that we could sell everywhere, although in the West only after some corrections. The market also still added a "Comecon discount" to the price, which calculating customers knew to make the most of. We were particularly pleased and flattered that the rear axle was copied from the Golf. Škoda was not the only one to copy our twist-beam axle. The list of imitators reached as far as Detroit and its German offshoots. Škoda's production took place in a large car factory that had grown up over time, including everything from ancient facilities to a sophisticated automated body shop with the latest KUKA robots from Germany and, next to the entrance, a prison with political prisoners for unpopular, physically demanding operations.

Our visit confirmed to us that it was worth fighting for Škoda, that a successful future could be built with its management team and employees, its vehicles and factories, even if its sales force in the Comecon countries had only a fading customer base and a weak one in the West. In addition, there were intermittent difficulties in keeping production running after the Velvet Revolution freed the political prisoners.

What a difference to East Germany: while the old Trabant

factory in central Zwickau was unusable for us, and Trabant production and the spare parts business dried up overnight after the introduction of the Deutsche Mark, with Škoda we would initially get by with the existing vehicle without noticeable losses. After improvements to the technology and quality, and a successful facelift by Giugiaro , the Škoda Felicia proved its commercial viability up to the launch of the new models, built on a VW platform like at Seat. On closer inspection, a 1.1-liter Škoda aluminum engine even showed so much potential that it soon found its way into a VW model, which saved us a large chunk of investment for the time being.

As this transaction involved large amounts for a gradual purchase, with considerable follow-up investments, tough negotiations were to be expected. My finance colleague Dieter Ullsperger became the key figure in a negotiating team that included all the departments. He was supported by Volkhard Köhler and our legal experts under Ehinger. The Minister of Industry and Trade of the constituent Czech Republic, Miroslav Grégr, received legal advice from White & Case in the United States, and financial advice from the investment bank Credit Suisse First Boston (CSFB). And so our counterparts were professionally prepared. In general, we found that the ČSFR had always remained in contact with the West, quite unlike the GDR. Even politicians like Václav Klaus had been able to study in the West. We soon got the impression that although the GDR had always topped the Comecon's economic league table, the people of the ČSFR were clearly ahead of them in terms of quality of life and intellectual independence. Something similar applied to the situation in Poland and Hungary. Did East Germany maybe have the better statisticians?

But we weren't the only ones interested in Škoda. Renault was also on the agenda. As is so often the case in our industry, though, the Renault top management didn't even consider turning up themselves and sent their representatives into the fray on their behalf. At the same time, they used diplomatic

channels to build up massive political pressure in Prague, confidently hinting at things that affected our historical mortgages. This certainly did not make it easier for the Czech side to arrive at an objective judgment. We were also unable to offer recommendations from Paris or preferential industrial treatment, which the other side could do quite effectively thanks to its status as a key state industry.

In the end, however, we were able to convince the government of the Czech constituent republic of the advantages offered by an in investment on VW's part based on our well-grounded offer. In large part, it was thanks to the personal commitment and unbureaucratic approach of Prime Minister Pithart, Industry Minister Grégr and his successor Vrba, and especially the Deputy Prime Minister Vlasák, that the negotiations, which were tough but always fair, were brought to a successful conclusion.

Hans Holzer at the ČSFR consulate in Basel also played a major role, selflessly and tirelessly providing us with advice to a degree I have rarely experienced before or since. Added to this were courtesy visits to top government officials, such as the then finance minister, Václav Klaus, the chancellor, Karel Schwarzenberg and the President of the ČSFR, Václav Havel. Of course, we also kept the German federal government informed at all times, as well as our ambassador, Hermann Huber, in his historic Palais Lobkowicz.

Because my father's family had lived in southern Bohemia since at least the 17th century and as a child I had visited my grandfather hundreds of times in the small village of Gratzen (Nové Hrady) near České Budějovice (Budweis) on the Austrian border, I was familiar with the mentality of the people. Many even believed that I spoke Czech, which was true of my father, but unfortunately not of me. Quite a few industrialists from Czechoslovakia had frequented my parents' house. JAWA had been a DKW licensee after Wanderer stopped building motorcycles in the 1930s (the name "JAWA" was a contraction of Janeček and Wanderer). JAWA also

assembled a DKW car based on CKD parts kits. In any case, people seemed to believe in my inner connection to this country, which eventually led to a trusting partnership.

While Renault entered the battle with the help of its government, we focused our efforts on winning over Škoda's rank and file. In doing so, we concentrated on the various Škoda plants, kept showing our faces at the factories and established an intensive dialog with managers and works councils. At the same time, return visits and VW management courses were arranged for Škoda employees – for quality management, for example, when we were just beginning to negotiate with the government of the constituent republic.

Prague was realistic enough to realize that in today's automotive world, no matter how competent a factory's workers might be, that factory had no chance of survival outside of a strong, large network.

We explained our core strategy everywhere and at every opportunity, using every channel available to us: Škoda would remain an independent automotive company, a proud Czech brand consistent with its tradition, using the national strengths and the great talents of the people of the country. This was in contrast to Renault, which was not pursuing a multi-brand strategy and ostensibly planned to assemble a small Renault car. Renault thus created a first-class bogeyman in our favor. In contrast, we announced our philosophy of "equal opportunities" for all employees in the Group and federal independence within the global group of companies, as could be seen at Seat. The important thing was the VW passport.

At the same time, the Škoda works councils engaged in a dialog with our work councils during reciprocal visits, so that they could test our ideas and our corporate philosophy from the point of view of employees. Apparently, these talks went well, because we discovered in the final round of negotiations that the Škoda workforce had informed the government in Prague that it would go on strike if VW did not win the contract. In other words, we were welcomed.

By now we had heard that GM was interested in Bratislava. The negotiations were already at an advanced stage. This prompted us to now also take a more concrete stance towards Bratislava. In the medium term and in the most conservative case, we saw Bratislava as offering a strategic reserve capacity during a transitional period, and this capacity should under no circumstances fall into the hands of a competitor. With the given purchase price expectations, a minimum of assembly volume would be sufficient to sustain the investment until capacities could be better utilized. Positioned just sixty kilometers from Vienna, this was an ideal location for future vehicle assembly in this region of Central Europe, and it was no further from Ingolstadt than Ingolstadt was from Wolfsburg.

So now we also started negotiating for Bratislava as well, although we kept stalling somewhat at first because it would have been a disaster for us if we had won the Bratislava bid before the Škoda bid. If that had been the case, the Czech government could hardly have resisted the pressure from Paris and would probably have sold Škoda to Renault.

The rest of the story is known: Škoda joined the three existing brands in the Group - Volkswagen, Audi and Seat as a fourth and equal brand. After the contract was awarded, the French were livid: "Blitzkrieg," "Steamroller" and "The East remains the Germans' hunting ground" went the headlines. That suited us fine. The greater part of the purchase price was raised as an equity increase, so a portion of it flowed back into the company. Specifically, the agreement reached was that Volkswagen AG would initially take a share of thirty one percent in Škoda automobilová but would immediately assume management responsibility. Up until 1995, the VW's ownership stake would be increased to seventy percent by acquiring shares – mainly through capital increases (1.2 billion marks). In addition, we promised significant investments in products, production modernization, capacity increases and the environment, as well as bringing in well-known suppliers. Added to this was a new power plant for Mladá Boleslav.

Gratifyingly, our new subsidiary's profit situation stabilized rapidly, and so the capital increases soon led to an equity ratio of over sixty percent. In 1997, the shareholders decided to repay capital totaling 500 million marks, of which 350 million went to VW AG and 150 million to the Czech state. This decreased the equity ratio to nearly thirty eight percent: still a considerable amount. In 2000, Škoda was finally fully transferred into VW ownership. From today's perspective, it is probably no exaggeration to say that the acquisition of this traditional Czech car manufacturer was an exceptional success for both sides, in every respect.

Acquiring Škoda strengthened our leading position in Europe. At the same time, we became the market leader in Central Europe overnight. In addition, it opened up new options for us in the east. After all, we now had employees in the Group with the right ethnic connections to give us an advantage in opening up the markets of the former USSR at some as yet undetermined point in the future.

Without Škoda and its cost advantages (which have remained relatively unchanged to this day), our multi-brand strategy and our position at the top of the global automotive industry would be unthinkable. On the one hand, our Czech subsidiary enabled volume-related economies of scale and improved earnings at our capital-intensive German locations. But more importantly, if Škoda had fallen into the hands of our French friends, they would now be able to manufacture their products at low cost right in front of our gates, geographically and logistically in the heart of Europe. They would then play the role in Central Europe that we have created for ourselves. At the end of the first decade of the 21st century, we will inevitably have to deal with vehicles produced in Central Europe by our key competitors. The capacities for about one million vehicles that are being built up there – in just one single market segment – will suddenly intensify competition and thus pressure on prices throughout Europe.

Thanks to Škoda, we increased production in the Group by

almost half a million vehicles, which will be expanded to 600,000 vehicles in the medium term. The growing popularity that the Škoda brand currently also enjoys in the Western European market is due in no small part to its high product quality. In the UK, for example, one of its traditional markets, reliable customer satisfaction surveys from J.D. Power already ranked it first among all its competitors in 2002.

It doesn't bear thinking about what would happen if the scale that Škoda brings us belonged instead to the competition. It makes a world of difference to our competitive strength and to our profit and loss statement. Finally, our Škoda package also included one more dealer organization, even if only potentially so to some extent. This gave us another fishhook in the pond. coupled with the chance of targeting specific new market segments and new markets, particularly in Eastern Europe and beyond, not to mention gaining a disproportionate market share of around fifty percent in Škoda's home country. So we weren't only buying new production capacity, we were buying a brand together with its market share and customer base, as we had done with Seat. The option of one day being able to completely cover the market by serving all the different price ranges meant competitive advantages for all of our brands. Our service companies, starting with the finance companies, also opened up new potential for growth and economies of scale.

At the same time, critics who classified the capacities we acquired in Zwickau and Mladá Boleslav (or with Seat) as net additional capacities were wrong. Because this was not true, we presented much less of a disruption to the markets than some had feared. This was also the secret of our organic, rapid growth in the market. In essence, with Seat and Škoda, as with Zwickau, the first phase involved transferring market shares and production capacities to our account, followed by organic growth. This approach is in complete contrast to an approach of purely predatory competition using additional capacity on a blank slate, to achieve which you first need to capture market share.

The ink on the Škoda contract was not yet dry, the modest but cordial signing ceremonies had barely drawn to a close, and already we were setting off for Bratislava. When I announced I now wanted to fly to Bratislava, quite a few people shook their heads in disbelief. Our new friends in Prague were visibly disappointed by my inadequate judgment. Apparently, the Czechs saw the Slovaks in much the same ways as the Germans see the East Frisians: as backwards yokels. Prejudices and generalizations seem to be a worldwide, deep-rooted problem, and one that can cause much misfortune.

We ended up also wining the factory in Slovakia within just a few weeks. The government of Slovakia, at that time still a constituent republic of the ČSFR, took a great leap of faith in us. VW's share was to be increased to ninety four percent by 1994 with payments of 48 million marks in the first year and another 140 million marks thereafter. In return, we received a jewel – albeit an unpolished one: 1,300,000 square meters of space, on 190,000 square meters of which stood modern buildings and excellent transport links. For the Slovak side, it was the most important transaction in their young industrial history. In contrast to the partnership with VW, Bratislava would certainly have had to close soon if it had been taken on by Opel, considering how GM has retrenched its capacities in Europe. After all, under the conditions of the recession and global overcapacity in the early 1990s, it would have been almost impossible to find a buyer for this factory. Sadly, this proved to be the case for the proud Tatra truck factory.

It soon became apparent that we needed the so-called reserve capacity in Bratislava far more urgently than we had assumed in our planning in my day. At Volkswagen, we had underestimated the demand for our core products. Production in Bratislava soon had to be expanded to the record level of twenty shifts a week. Contrary to our original, conservative plans, Bratislava increasingly developed into a center for laborintensive, complicated products, including all-wheel passenger car production in the Group, for example. The young local

team, consisting of engineers and skilled workers in equal parts, very quickly developed an excellent reputation thanks to their motivation, quality and productivity. VW Bratislava is now a high-performance factory and has not stopped expanding. The decision to manufacture the VW Touareg and the body of the Porsche Cayenne there confirms the power of this location. New product segments will open up further market potential. Bratislava also improved the division of labor among the European sites while at the same time bringing us closer geographically to southern Central Europe.

Today, on the Danube, at the gates of the city, there is a modern factory with rail and motorway connections. It is supplied overnight from the German engine plants and suppliers by rail. Meanwhile, a manufacturing facility was set up in the city of Martin to build transmission and chassis components after the first phase, in which gearboxes had only been assembled in Bratislava.

In 2004, 8,300 employees at VW Bratislava produced 223,500 vehicles and almost 360,000 gearboxes, fourteen years after we signed the contract for a "reserve capacity" for the "worst case," as you would say today, which cost us less than 200 million marks. In the spring of 2003, this success story reached its first high point with the production of the millionth vehicle. With a turnover of considerably more than four billion euros, the company is now catching up to Škoda in scale. I am certainly not wrong in assuming that Bratislava ranks at the top today in terms of profitability in a Group-internal comparison.

As Škoda had been in the Czech Republic, VW Bratislava now also became the major economic factor, a magnet for incoming industry as well as the country's biggest exporter, source of foreign currency and taxpayer. Approximately ninety percent of the Slovak subsidiary's production is now exported, accounting for more than a fifth of Slovakia's total exports.

In this way, our dynamism was also passed on to the respective national economies. Another multiplier effect was

the wave of suppliers who followed us, building up large capacities, bringing know-how and capital into the country and eventually also exporting from Central Europe. For our machine tool industry in particular, we have now become the spearhead in Central Europe and China, as we had been before in South America. The construction of new assembly plants in the Czech Republic and Slovakia by Toyota, Peugeot and Hyundai shows the pull that the improved industrial structures in these countries now have.⁶⁴ Our involvement in Central Europe became a textbook example of how the automotive industry functions as a key industry in creating economic growth and international interdependencies. We experiencing a very similar development in the People's Republic of China. There could hardly be a more convincing demonstration of the advantages of globalization and the resulting increase in employment.

Up until then, Audi had only enjoyed the advantage of foreign locations indirectly through the Volkswagen Group, in particular the deliveries from the engine plant in Mexico. In the early 1990s, Piëch began to reorient strategically and he developed the idea of building an engine factory in Europe to strengthen the company's competitiveness. From a selection of 180 alternative locations, he finally settled at the end of 1992 on Győr in Hungary. Located in the region where Hungary, Slovakia and Austria meet and only a hundred kilometers from Bratislava, this location offered by far the most convincing advantages. Even today, after Hungary joined the EU, these advantages have remained effective and are becoming more and more valuable.

It was not difficult to get the Győr project approved by the supervisory board of Audi under my chairmanship, and subsequently approved by the board of VW – both times with

⁶⁴ The new Toyota, Peugeot and Hyundai factories being built in the Czech Republic and Slovakia together have an annual capacity of around one million cars in the Polo class and below.

virtually identical discussions. There were some initial difficulties convincing the Group executive board because Audi was somewhat economical with the information it provided to Wolfsburg, even though the chair of the Audi board was also on the Group executive board. Ultimately, however, the issue was one that I fully supported. The most difficult thing for me, less in terms of making the argument and more in terms of the emotional strain, was resisting the pressure from Chancellor Kohl, who would understandably have preferred our Audi investments to have been made in the former East Germany.

The new plant in Győr began manufacturing four-cylinder engines in 1994, and over time almost the entire range of engines, including ten and twelve-cylinder engines, ended up being concentrated at Audi Hungaria in Győr. This step was certainly not easy to accept for the employee representatives at Audi in Germany. The cost advantages, however, left no alternative. The degree of success of this project can be seen from the fact that today Győr is also used to assemble automobiles, specifically the Audi TT. In 2004, the Hungarian Audi subsidiary produced 1.5 million engines and 23,500 cars in the TT class, making it not only the country's largest exporter, but also the second largest company in Hungary overall, with sales of almost four billion euros.

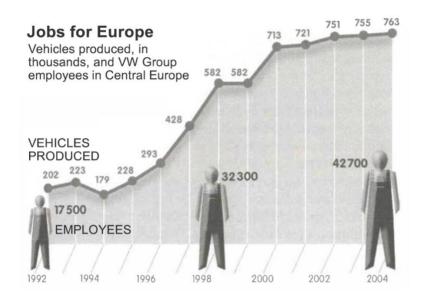
Of all the assembly factories belonging to all the automobile manufacturers in Europe, Győr ranks near the top in terms of quality and productivity, according to an independent study. For us, this is proof that with the right philosophy, qualified management teams, a good choice of personnel and training, and with motivation, top products can be manufactured anywhere in the world. The success of the Győr plant also strengthened our sales position there. And so Győr also became an important location for Porsche Salzburg, the Volkswagen Group's general importer for Austria, which was now also an importer for Hungary, Romania and the Slovak Republic.

At the same time, the management of our Transporter plant

in Hanover had taken initiatives in Poland, which my colleague Goeudevert was largely in charge of. From small beginnings, manufacturing and assembly facilities grew up in Poznań for our light commercial vehicles and also a significant division of labor with Hanover. In addition, passenger cars are assembled for the Škoda brand in Poznań. Encouraged by the positive experience in Poland – which is far more industrialized than we usually realize in Germany – my successors have now created one of the most modern engine plants in the world in Polkowice near Wrocław.

The Volkswagen Group is now established in all of the major Central European countries. We deliberately left out Dacia in Romania, despite the advances made by the Romanian government, because after the fall of the Iron Curtain, the regime that immediately followed the Ceauşescu dictatorship did not instill confidence in us. For us, the trust and stability factor was the first prerequisite when choosing a location, which implied an adequate market economy system and legal order as well as social peace. After the encouraging, albeit belated, political reforms in Romania, Renault eventually took over the fairly small car factory from the time of Ceauşescu, which already had a Renault license anyway.

Originally, Ceauşescu had requested a VW license from my predecessor Rudolf Leiding, but the request did not go down well, and he ended up with the French.



Looking at the Volkswagen Group's statistics today, it has increased its market share in Central Europe from 2.2 per cent in 1989 to around thirty percent at the present time. The proximity we enjoyed to the market thanks to our factories, and also thanks to Škoda in particular, allowed us to take over market leadership in Central Europe, achieve an annual production of roughly 800,000 cars⁶⁵ and provide a living for nearly 43,000 employees in our factories.⁶⁶ Without these capacities, our market dominance throughout Europe would be in trouble these days, as would our competitiveness. For the German sites, we won large, new customers for our platforms. The vital role of the decisions we made back then for the future of the Volkswagen Group could not be demonstrated more clearly. We also played a key part in setting the pace of the German economy.

None of this would have been possible without the great dedication of our managers, employees and suppliers, as well

⁶⁵ Including bodies made for Porsche for the Cayenne.

⁶⁶ The figures are for the 2004 fiscal year.

as the trust that was placed in our corporate philosophy and strategy by the supervisory board, the employee representatives and especially the Central European countries and their governments.

At the end of my service life, a company with a typically national positioning had become a genuinely European company, the market leader in registration statistics in Europe, well ahead of its second placed competitor. Portugal, Spain and Central Europe had a potential for growth that would develop inexorably from the second half of the 1990s.

We had seized the opportunities offered by the changes in Europe's West and East like no other and thus opened up a secure future for many people. At the same time, we were prepared in good time for the introduction of the euro and the enlargement of the European Union. Starting with the Treaty of Rome in 1957, our generation has seen a political evolution that has surpassed our wildest imaginations. For this we should be infinitely grateful. And these historically unique developments have ensured more than a half century of peace in Western Europe.

10 Number 1 for comprehensive financial services

For American companies, financial services play a key role in strengthening their core business. In addition to their role in promoting sales, these services have become an increasingly important source of profit over the years beyond the actual automotive business, ultimately with a one-stop character. In the 2003 financial year, General Motors made fifty percent of its profits from financial services, and half of this fifty percent came from the mortgage business.

Volkswagenwerk GmbH had already founded a finance company in 1949 because banks and savings banks were not prepared at that time to finance car purchases by private customers. The company's activities were initially limited to dealer purchase financing and customer financing. The business became profitable and it only involved minimal risk. Ten years later, it was discovered by the commercial banks.

In parallel to their activities for VW, Christian and Asta Holler had set up an insurance brokerage for VW customers, initially in Germany, later in almost all of Europe and also in some overseas regions. For the use of the name "Volkswagen" in their company logo "Volkswagen-Versicherungs-Dienst" (Volkswagen Insurance Service, VVD) and the access to VW sales organization, Holler paid increasing sales fees. Our dealers made money by brokering policies and carrying out repairs. The Volkswagen Group's leading market position made the VVD a sought-after partner for insurance companies. The VVD has since been taken over by Volkswagen Financial Services AG. By doing this, it has expanded the financial services it offers to become an "all-in-one" provider, with corresponding options for further improving performance and exploiting synergies.

In the USA, a market without fixed prices, I became aware at an early stage during my time as head of Volkswagen of America of how key the financing and insurance brokerage business is to the sales and profitability of our dealers. With sales increasing in the early 1960s, we found that it was becoming increasingly difficult to insure the Beetle. That is why we bravely decided in 1964 to set up our own insurance company. Thanks to our field service, we had a close connection to the almost one thousand VW dealers at the time.

There was no shortage of warnings from Wolfsburg about our plan, and we were forbidden from investing any VW capital in the undertaking. Despite this, we didn't abandon our plan. This led to the establishment of "VICO" (Volkswagen Insurance Company), which we provided with equity capital through a successful IPO of 727,000 shares at twelve US dollars each. "These are speculative securities" was printed in bold on the front of the prospectus from the investment bank EF Hutton & Company Inc. We personally did not subscribe for any shares, and we had not even heard of options, which are so common today.

We soon gained valuable experience from this new business, although some of this experience was bitter for us, especially as far as the crashworthiness of our vehicles was concerned. These new findings often resulted in technical changes. For example, the Beetle everywhere was converted from a swing rear axle to a double-jointed rear axle. This protected us from problems like those that would plague GM later with the beautiful Corvair (with air-cooled six-cylinder rear engine), which would roll over in extreme driving situations. Under pressure from the North American public, GM was forced to take the vehicle off the market.

A further finding for us was that we couldn't manage without a specialized field service. Higher loss ratios and higher-than-calculated costs for sales and loss adjustment had a direct impact on VICO's profit and loss account, and of course on the price of its shares. This put us, or rather me, in a more than delicate situation with Wolfsburg and our VICO shareholders. Thankfully, we had legal counsel from our law firm Herzfeld

and Rubin. Walther Herzfeld, initially a Jewish lawyer in Berlin, then in Paris, later a foreign legionnaire in the Second World War and finally a partner in a law firm on Wall Street, was one of the best consultants I ever had during my career. We became friends. In international negotiations, he played the part of entire teams of lawyers. In 1967 he died, much too young, in Wolfsburg. His tireless partner Herb Rubin has been linked to VW for half a century. We never lost an important trial in the US – and there were many of them, given the legal system there. I also enjoy a close friendship with Herb Rubin.

We managed to keep VICO afloat after the company began also selling life insurance by mail and took on the unlading of incoming vehicle transport ships in some ports, including all the related formalities. Eventually we merged with a larger group in the '60s. Once again, I came away from this with a black eye and a few new experiences under my belt. More importantly, though, the Beetle's handling and driving characteristics were no longer cause for complaint, making it and our customers the real winners of our foray into the US insurance industry. It does not bear thinking about what would have happened if we had kept the swing rear axle.

In the USA, I also got to know the importance of leasing for automobile sales, even though it was not yet anywhere near what it is today. For customers, the main benefit is that their own capital remains disposable and, in some cases, there are tax benefits. Convinced of the benefits of this instrument for both sides, I suggested to my colleagues after joining the VW board that we create a VW leasing company.

Richard Berthold, a young executive from the VW finance division and later Audi Chief Financial Officer, was deployed to VW of America for six months to study the leasing business. As early as October 1966, a VW leasing company was founded with him as managing director. It developed extremely well. Right from the start, we were the largest automobile leasing company in Germany and, very soon, also in Europe. Our

North American business would be inconceivable today without our own leasing company. As by far the leading leasing partner in the market, VW also opened up outstanding sources of sales and profit for its dealers and workshops. In addition to its importance in promoting sales, the leasing business also proved to be an important instrument for customer loyalty.

It would be almost a quarter of a century before our German competitors followed us on this path. Over forty five percent of VW sales to corporate customers in Germany are now carried out through leasing contracts. There is an extensive range of services linked to this, ranging from financing and insurance, through to vehicle servicing. Ideally, the customer only needs to take care of the fuel. In the meantime, our offer has expanded to include a fleet management service that takes into account the specific requirements of large fleet operators.

Towards the end of the 1980s, we became increasingly aware that our various activities in the financial sector needed broader, professional bank management and an integrating holding structure. Because of the connections to customers that our leasing and financing business created, it seemed only logical to take the step into the banking business.

So in 1990 I asked my colleague on the executive board, Dieter Ullsperger, who was responsible for finance, to look around for a suitable banker. Our management team was excellent, but too highly specialized. He quickly found what he was looking for in Norbert M. Massfeller, who had been head of Norisbank up to that time. In a joint conversation in our guest house, we quickly agreed on the strategy to be followed. The objectives were:

- · Entering the direct banking business
- Introducing a Volkswagen/Audi card system (combination of Eurocard/Mastercard and Visa card)
- · Exploiting all conceivable synergies, especially between

Volkswagen Bank and the Volkswagen leasing companies

- Globalization
- Establishing a bank offering comprehensive financial services, in order to gain account deposits "on the side," among other things

Given our growth strategy, this latter aim seemed to me a very plausible and more cost-effective refinancing option than traditional bank loans. Incidentally, Massfeller was proved right in his view that the new "Basel I" rules would lead to the big banks withdrawing somewhat from the lending business. The discussion in the VW supervisory board, which had to approve this business, fully convinced me that I had chosen the right path. The arguments and contributions put forward by the bank representatives on the committee, warning about the risks of such a business, almost managed to ensure that this source of funding remained closed to us. It will probably always remain a secret why they considered private savings to be more risky than bank loans. Until then, I had always assumed that both had to be repaid when they were due.

In the end, my suggestion that an upper limit could be set to limit the risk met with approval. This may have made us the only bank in the world, that limited deposits – not borrowing – but we were able to start and hope that people would see reason later, which they did.

As a result, one of the first German direct banks was established. It became a pioneer of 24-hour telebanking, making it available to customers around the clock. Today, Volkswagen Financial Services AG is a full-service bank, but without the cost of expensive bank branches. Twenty percent of its deposits are used to refinance lending transactions that have increased tenfold in value since 1990. Our German competitors also copied us by entering the banking sector, albeit with a five to twelve year delay. The range of products our subsidiary now offers stretches from financing and leasing

concepts and complete automotive insurance packages, through providing loans for small and medium-sized companies, including those outside the automotive industry, to private mortgage lending, asset investments and pension plans.

Tens of thousands of VW, Audi, Seat and Škoda dealers in Europe, electronically interlinked with one another, now form a close-knit network of connections to local customers. VW Bank is ranked second in Germany among the "24-hour banks." It now operates in twenty four countries, all the way to Russia and China.

Financial services now make up fifty percent of the Volkswagen Group's total assets, and the forty-percent mark was already exceeded during my time (before consolidation). This ratio dramatically illustrates the structural change in an automobile company that has at the same time become an important service/financial institution. The profits from this division are just as impressive as its financing ratios. The ratio of credit to equity was 9:1 in the 2004 financial year. This places the VW financing company in the top ranks of comprehensive financial services institutes. Its operating profit in 2004 of 926 million euros paid an interest of twenty percent on the average equity capital. With more than eight billion euros of deposits, it is also one of Germany's major German savings banks.

We can assume that the financial services sector will grow faster than the overall company in the future and thus become more and more important to the Group's competitive strength. So far there has not been a single year without rising profits. Once again we were decades earlier and faster than our competitors and created another number one position in Europe, while also stretching out towards North and South America, and Asia.

Even if this is not entirely on topic here – although both issues are allocated to the same area in the Group annual report and in the organization structures – it is worth mentioning that

in 1970, after the introduction of the leasing business in the Group, I arranged the purchase of what was then the biggest car rental company in Germany, *Selbstfahrer Union*. The negotiation for this transaction was conducted by Horst Kabisch, the legendary head of domestic sales. The company was later renamed "interRent Autovermietung GmbH."

However, our rental business lacked a European structure; "interRent" was aimed exclusively at Germany. And so we took an interest in Europear, by far the most Europeanized company on the market and owned at that time by Renault. But Europear was only weakly represented in Germany, which made us ideal partners. I figured that Renault, given its unsatisfactory situation at that time, would surely be interested in selling its subsidiary. This proved to be the case, even if they were reluctant to sell to a competitor.

After announcing my visit by telephone, I arrived at the office of Antoine Veil, the head of the Belgian leisure and tourism company Compagnie Internationale des Wagon-Lits et du Tourisme, on Boulevard Haussmann in Paris in 1986. Veil saw entering the rental business as an important strategic step for his company. Our conversation that day was the starting point for a series of complex rounds of negotiations between project teams from both companies, in which, finally, consensus on how to proceed was reached.

In 1988, Europear was initially transferred in full to Wagon-Lits. In the same year, we then purchased half of the shares. At the same time, interRent and Europear were merged to form Europear International. After a short transition period, the French company Accor, one of the world's biggest hotel groups and which acquired Wagon-Lits in 1991, took a fifty percent stake. Hard years of apprenticeship followed, demonstrating how difficult it is to manage a company in joint control, especially as the chairmanship of the supervisory board switched annually between the two partners⁶⁷

⁶⁷ From the VW side, the supervisory board included Norbert Massfeller,

An unexpected and substantial demand for renovation in the Europear subsidiaries, particularly in Italy and the UK, was already absorbing substantial financial and management resources soon after our entry. Problems with the introduction of a new pan-European electronic reservation system, which is an indispensable precondition in this industry for fast customer service, compounded the problem and resulted in a few years of losses. After I left, there was talk of withdrawing completely from the rental business, essentially at any price, but a few years later, Volkswagen acquired the Accor shares in Europear, which gave it the freedom it needed. The car hire business is now officially part of VW's core business, and Europear is number one among European car rental companies.

At VW, there had been long discussions at the beginning about the pros and cons of getting involved in this line of business. On the one hand, it puts you in competition with the rental companies, a significant customer base who buy millions of vehicles every year. On the other hand, you can use this distribution channel to provide test drives to specific prospective customers and better control production flows when models are discontinued.

The way people at VW saw this business changed over the decades; indeed, the same thing happened with our American competitors. The approach that I had taken from the beginning seems to have become popular again. I was and have always been a firm advocate of keeping close ties to companies. Car rental is much more than just a thermometer in the market. It is an important sales channel and, as the VW annual reports show, it is now a source of profit again.

That said, the business requires great skill and steadfastness in a highly competitive market with extreme purchasing conditions. Your own company can only exist in this

Rutbert Reisch, Detlev Wittig and Paul-Josef Weber, who also assumed the role of chairman for the VW side.

competitive environment if it is not already at a disadvantage – but also not given preferential treatment – in terms of purchase prices. It is equally important to have the right mix in the range of offers, which need to reflect the competitive situation in the respective market in each country. For this reason, Europear is also an important customer for other automotive companies in Europe – which is a very instructive role in many respects.

By engaging in this sector, we didn't do any harm to our business with the other rental companies. Importantly, VW did not plan to dump surplus vehicles through this distribution channel, unlike the "Big Three" in the USA, which are forced to do just this practically all the time. It is thanks to my friend Jochen Mackenrodt, chief representative of Siemens up until his retirement and one of the pioneers of the venture capital business in Germany, that I heard about a piece of legislation in Belgium that is attractive to international financial companies. According to this law, important foreign companies can apply for a finance company license and, if they fulfill certain conditions – among other things, they must have more than ten employees – they are tax-exempt. Profits flowing into Germany are also exempt from German corporation tax.

In 1985, after hearing about this, I arranged for my fellow board member Selowsky to found the relevant company in Brussels to handle the Group finances from then on. Our new subsidiary, which went by the name "Coordination Center Volkswagen," gave us completely new ways of financing our global business activities, and over time it became a major savings bank for the Group. Its profits would only have appeared on Volkswagen AG's balance sheet if they had been distributed to Germany, which, to my knowledge, was never the case in my time.

In the course of legal harmonization within the EU, national tax havens like these will probably become a thing of the past

in the foreseeable future. I estimate that this will gradually become the case after 2010. But, of course, we also took advantage of tax incentives in other countries, especially in Ireland, in order to strengthen our company for the benefit of all stakeholders. Even the German finance minister cannot object to this, as the German-Belgian double taxation agreement shows.

Given the magnitude of the damage we suffered by the loss of almost a half a billion marks, I have no wish to pass over the VW foreign exchange case in the second half of the '80s. The collapse of the Herstatt bank, among other events, had already shown that currency speculation could quite easily have very destructive effects.

When I returned to VW in 1982, the foreign exchange department operated a foreign exchange trading business that was separate from the export business and which, in its dimensions, had even called the Bundesbank into action. However, our CFO Friedrich Thomée managed to reassure the Bundesbank, the supervisory board and colleagues.

After taking up office, I took a closer look at our foreign exchange department and the profits it was earning. After an extensive conversation with its head, I saw no reason to dry up one of the few sources of profit at that time, because too many parts of the company were ablaze.

The trading regulations and controls we issued almost eliminated significant risks by means of the stop-loss order requirement and the requirement to close out foreign exchange positions overnight, which enabled us to make the kind of profits that banks also do in this business. From my work on bank supervisory boards, I know that we were just as well organized and protected as the banks at that time with both front and back offices. The VW internal audit under my colleague Frerk did its work here.

But contrary to all rules and bypassing all controls, a bad speculation on a dollar boom had been rolled over again and again. It was only discovered after the dollar reversed direction, leaving a deficit of 95 million marks. At the same time, however, there was also a ring system with the Hungarian National Bank, which was allowing excessive dollar transactions (also based on poor speculation) to circulate among some – or rather many, at first – well-known European, American and Kuwaiti banks. Our traders had also broken all the regulations here with a fair amount of criminal energy, and had been taken in by one Frankfurt foreign exchange trader, in particular. The final bill for VW added up to a total of 470 million marks.

In early 1987, the then CFO Rolf Selowsky came to me and confessed to the foreign exchange disaster. We immediately informed the prosecutor and the supervisory board, but also the public. It is a testimony to our extremely conservative accounting that this incident did not change the dividend or any important key figures in our financial statement for 1986.

You could fill books describing the criminal practices of our employees in the foreign exchange department, some of which had begun even before my time. They were later sentenced to imprisonment. We also received compensation payments, especially from a well-known Geneva bank, but this did nothing to change the magnitude of the embarrassment and damage to our reputation.

Understandably, the foreign exchange scandal brought us a wave of negative publicity. The banks in particular, including Deutsche Bank, saw that their hour had come. They wanted to demonstratively show how independently and confidently they represented the voting rights and thus the interests of small shareholders. It was therefore their intention not to grant discharge to the board of directors at the 1987 general meeting for the 1986 financial year. F. Wilhelm Christians, then spokesman of Deutsche Bank and member of our supervisory board, tried to smooth things over. Nevertheless, during the annual general meeting, Deutche Bank abstained from the

agenda item "Discharge of the board of directors," and it was not the only one to do so. It was not until after the annual general meeting of 1987 that people gradually began to see us as victims of criminal machinations, not accomplices.

A few months later I vacated my position in the central advisory group of Deutsche Bank. Of course, I had also asked myself if I should withdraw from by position as CEO of VW. However, the chairman of the supervisory board, Ratjen, refused to even discuss it. The supervisory board – both the shareholder representatives and the employee representatives – was still very much on my side. There was a good reason for this, one which went back a long way.

Immediately before I took office, the VW supervisory board retired the respected CFO Thomée and replaced him with Rolf Selowsky. Selowsky had earned an excellent reputation at Klöckner Humboldt Deutz. After a one-on-one conversation with him at the Sheraton Airport Hotel in Frankfurt at the end of 1981, I nevertheless reported serious concerns to the chairman of the VW supervisory board. Selowsky seemed burned out to me and lacking in drive. Besides, I had a candidate in mind who I thought would be ideal for the financial department. But I didn't have any choice. Selowsky was already committed.

Over time, my unease grew. More than one year before the foreign exchange debacle, I asked my colleague Selowsky to visit me at home on a Sunday morning to discuss the matter. I informed him that his performance was completely inadequate and that the chairman of the supervisory board shared my view that, with all due respect and while honoring his existing contract, he should offer his resignation. Today, in situations like this, the colleague in question is generally attacked in the media by way of preparation. This has never been by way of doing things. I also considered it my duty to take this step on my own, without consulting my colleagues on the board, even though they must also have been aware of Selowsky's

shortcomings. It was not until a year later that I found out he was seriously ill. Because of his condition, Selowsky mostly reported through his colleagues, while his brave wife papered over the situation with great skill, and not only in social settings.

Our conversation that Sunday was short and businesslike. Selowsky immediately accepted my proposal. Our general secretary and legal advisor Hans-Viggo von Hülsen, one of my closest confidants and advisors, who still had his greatest deeds ahead of him in the López affair, formulated a corresponding draft contract for the chairman of the supervisory board, which we went through together with Selowsky in our guest house on the following Monday evening. Without making any corrections, he accepted our proposition. Of course I understood that he wanted to sleep on it before signing the document.

After our board meeting ended on the following Tuesday, the board asked me to come back in again. Labor Director Briam informed me that everyone was horrified by my inhumane brutality towards Selowsky. They had united in solidarity and were demanding that I withdraw my intention and guarantee their contracts. As a sign of their unity, each colleague presented their view on this issue, which they had evidently prepared together as a group, even if each of them issued it in a very different tenor. In a subsequent conversation with Briam and my deputy Horst Münzner in my office, both of them tried to influence me with rhetoric and threats. Their goals were obvious. They were concerned with the question of my successor and a "job guarantee" for the board members. But I remained just as uncompromising as I had been in the preceding board meeting. Today, I know that both men were aware of Selowsky's illness and that they were using him against me.

The evening before the next supervisory board meeting, where I was planning to present my candidate to be

Selowsky's successor – a Harvard-educated German, highly qualified controller, experienced in every respect, from one of the "Big Three" – the members of the executive committee, except for the works council chairman Walter Hiller, were sitting at my house, ready and waiting: the supervisory board chairman Karl Gustav Ratjen, his deputy, the IG Metall boss Hans Mayr, Minister Birgit Breuel and Minister Walther L. Kiep.

In an employee meeting that ran parallel to this, as was routine prior to supervisory board meetings, my colleague Briam got the employee side, with the exception of Albert Schunk from IG Metall in Frankfurt, unanimously on board for Selowsky. Schunk was subsequently harassed for many years because of his lack of "solidarity." In a later dramatic meeting in the Wolfsburg town hall to elect the supervisory board members for the employee side, he would no doubt have failed to win re-election had the IG Metall leader Mayr not advocated for him.

Schunk – a very close advisor to Eugen Loderer, Hans Mayr and Franz Steinkühler during their active time – was not only the longest serving VW supervisory board member, he was also one of the most constructive members of this body I ever knew. As head of the international department of the IG Metall union, he was responsible for realistic and successful policies on the part of his organization. The shareholder side on our supervisory board also listened to his contributions.

Special meetings of the executive committee were called, one in the Schlosshotel Kronberg with Ratjen, Ms. Breuel, Mayr, Kiep, Hiller, and Münzner and me. Some of my friends thought I was being irresponsibly stubborn, that is how far removed from reality the controversy had become. I found myself unable to change my mind about Selowsky. Ratjen and Ms. Breuel tried to find a way back to reason, but Hiller and Münzner ("Mr. Hahn, I revoke my confidence in you!") wouldn't give an inch. We read about the course of the

meeting, with seating arrangements and quotations, in the next issue of a Hamburg magazine. There's no need to speculate on how the information made its way to Hamburg.

In this dispute, Briam and the Wolfsburg works council would prove stronger than even the IG Metall chairman Hans Mayr, our deputy chairman of the supervisory board. My plan to divest ourselves of our only partially fit-for-purpose CFO Selowsky failed to materialize. He stayed. Volkswagen lost another year. Then the foreign exchange scandal blew up. Now the sick Selowsky resigned immediately, which he was honorably willing to do before the twelve-month period of notice was up.

Most of my fellow board members had long since apologized to me, a few of them directly after the stagemanaged board meeting at which the confrontation first arose. In the meantime, all the other actors had probably also realized what they had done.

Employee participation can be seductive, especially when labor directors have too much time and too little understanding of the global context of our world. You can read about this in the books Briam wrote during his time in office. He was also awarded a professorship in far-off Mexico. After Briam retired in 1988, the situation normalized. Münzner retired at the end of 1989.

With Martin Posth as Briam's successor, we once again had, for the first time since the days of "Papa" Goransch and Kurt Haaf, a head of human resources and a labor director with a professional background and independence from the union, which is arguably imperative when you have to conclude collective agreements with IG Metall in this position, for example.

After the foreign exchange scandal, we found a new head of the foreign exchange department in Rutbert Reisch, a man the banking world envied us, especially thanks to his New York experience, if the number of board positions offered to him at banks is any indicator. The supervisory board, and especially the executive committee, received regular and detailed reports from now on and referred us to very narrow limits, which were gradually "normalized."

Klaus Kemper wrote about the Selowsky affair in the *Frankfurter Allgemeine Zeitung* on March 16, 1987:

"There's a chief financial officer who is struggling with serious health problems but is in denial about it. He still keeps silent about it even when tongues start wagging about the CEO who is looking for a reasonable way out, in his own interests and in the company's. On the contrary, he even finds support from people who never miss an opportunity to strengthen their own position, and weaken that of the chairman of the executive board, and who for that reason alone take up arms with all their might to prevent an additional Controlling board department. Now an embarrassing affair has forced Selowsky to ask the supervisory board to release him from his office with immediate effect."

Epilogue

To mark my farewell as VW boss, Gerhard Schröder, then Minister President of Lower Saxony, organized a big changing of the guard at the imperial palace in Goslar in January 1993. Sadly, the festive setting was not enough to mask a certain discord—and Umberto Agnelli, one of the many guests of honor, was not the only one to be unsettled by it.

Before I reached the age limit, the executive committee of the supervisory board had asked me to stay in office two years longer – partly to gain time to sort out the final succession, and partly to give me the opportunity to round off my business strategy.

My proposal to appoint Ferdinand Piëch as my successor had already been accepted by the chairman of the supervisory board, Klaus Liesen, back in the spring of 1992, and a little later – after a dramatic vote by the employees' wing – it was also approved by the plenary session of the supervisory board.

Shortly thereafter – less than twenty four hours after the board meetings – extracts from the meetings were printed in the *Frankfurter Allgemeine Zeitung* and other media. This marked the start of a targeted PR onslaught.

In retrospect, it was a mistake, given the situation, not to leave the company immediately after the succession plan was finalized, as I had originally intended, but instead to stay on until my contract expired at the end of 1992. It was also a mistake to then take on a VW supervisory board role until the summer of 1997. I was a lame duck on this committee: incapable, in the interests of the company, of defending myself against accusations, and thus the ideal target for allegations of various kinds. Germany was suffering from an economic downturn – but the blame for declining business was laid exclusively on my corporate policies. Minister President Gerhard Schröder was one of the few to publicly defend my

policies even after my retirement. Today, they are bearing their fruit. Our early commitments, designed for the long term, have paid off in every respect, not only in the Iberian Peninsula, in Central Europe, East Germany and China, but also in the financial services sector. These have become important sources of revenue for the company. Incidentally, the same applies to Audi after its tough rise to become a globally established premium manufacturer.

And so my first years as a so-called retiree were not exactly pleasant. Luckily, I had the good fortune of finding a variety of new tasks in Europe, Central Asia (Kyrgyzstan) and in the USA.

I consider it a privilege now, after half a century, to be able to look back on the fruits of my labor with the necessary distance. We were able to build global structures, create a record number of jobs all over the world, and establish lasting values for the 21st century with the Europeanization and globalization of Volkswagen. We owe the fact that this was even possible to a political system which, since the Treaty of Rome, has created the prerequisites for peace and continuity through change, an opportunity not granted to any previous generation in Europe and all the more remarkable after the first half of the 20th century, the bloodiest period in its history.

That said, the situation we are faced today is not without its worries. In a global world full of opportunities and exploding tasks, Germany opted for less and less work, ever longer vacations and higher demands on the community. Even some in the ranks of business consider technological leadership to be a guaranteed, God-given inheritance. At the same time, we are dismantling the values of our Western culture and minimizing our future opportunities through the collapse of the family. Customs and morals have been relegated to entertainment

issues, which will not open up prospects for nations or companies in the world of tomorrow. This is undermining the very foundations of the country. But we stay on course.

All the way back in 1982, I concluded my speech at the VW general meeting with the following words:

"It is time for all stakeholders who bear any social or political responsibility to finally and courageously take note of the industrial and governmental realities and be willing to make sacrifices. The healing process our economy needs demands this. It's no use appealing to anyone else here, it is down to us ourselves, to each and every one of us...

Ultimately, the expenses of the state, which are reflected in our costs and thus in our competitiveness, must be vigorously cut back. Our economic policymakers must finally act and take decisions that help improve the underlying conditions and thus the competitiveness of German industry on the world markets.

All of our employees need to be aware that more jobs can only be the result of more output aimed at gaining a larger share of the constantly growing world markets."

More than two decades have passed since then without my words losing their relevance. What could better illustrate the degree of paralysis and resistance to reform, along with the resultant dangers for our country? It is as if time had stood still here while the world changes at breakneck speed. As a result of our refusal to confront reality, we are entering the world of the 21st century with a debt-ridden community that is less and less capable of taking action, an outmoded educational system, an army of the unemployed and a decline in competitiveness.

We are voting out a government because it introduced the right reforms, not because the reforms were inadequate. Nobody in our country seriously questions the need for reform in principle, but whatever happens, they don't want to sacrifice anything themselves. Kurt Biedenkopf aptly characterized our situation with the following words: "We suppress anything that might disturb our peace and punish those who disturb it. And

in doing so, we become incapable of innovation and renewal."68 In Germany, hardly anyone talks about the fact that we are under-represented or, in some cases, no longer really represented at all in key future industries such as electronics, information technology and biotechnology. pharmaceuticals industry, and genetic engineering, scientific foundations of which were often laid by German researchers. Gone are the days when we set the tone in the photography, radio or television industries. Whether in modern growth sectors, such as carbon fiber processing and nanotechnology, or even in many traditional economic sectors - you will search in vain for German companies heading the ranks of top international firms. There are no leading petroleum or mining companies based in Germany, to name just two examples of strategic importance in today's battle for resources.

Nuclear research and the civil use of nuclear energy are politically discredited in Germany, regardless of the associated burdens on the economy or the environment. With the number of nuclear technology graduates tending towards zero today, we will soon lack the German specialists needed to operate and maintain our nuclear power plants. By doing this, we are foregoing the opportunity of even taking part in the emerging global upswing in the nuclear industry.

The international ranking of German banks and the lack of globally operating German investment companies is equally lamentable. There is no strong German bank operating at the European level. Corporate mergers and acquisitions are predominantly carried out by Anglo-Saxon investment houses or by investment subsidiaries of German banks that are headquartered in London, for good reasons.

Just thirty years ago, we were global leaders in ten economic

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⁶⁸ Kurt Biedenkopf interview in *Frankfurter Allgemeinen Zeitung*, No. 189, August 16, 2005.

sectors. Today, it's three at best.⁶⁹ It is worth mentioning, however, that many of the medium-sized companies, which continue to form the backbone of the German economy, have been able to develop respectable global market positions, and some even become world market leaders.

In the first third of the 20th century, twenty five Germans won Nobel Prizes for chemistry and physics.⁷⁰ They provided the fuel for our success and established Germany's position in the world. Today, top young academics are leaving the country because they are being offered significantly better prospects elsewhere in the world.

The Americans, who are leaders in many fields of knowledge, do not have a ministry of science, but they have become home to the emigrating European elites. According to a survey by the European Commission, they now number around 400,000 scientists. For the president of Texas A&M University, Robert Gates, they play a key role in the pace of America's progress.⁷¹

The fact that Germany, despite all these shortcomings, has remained the world's top exporter often leads to wrong and dangerous conclusions. We only achieved this success in conjunction with growing supplies from low-cost locations. These now make up almost forty percent of the total. This international network increasingly ensures the competitiveness of our companies, but at the same time, it also reduces the share of value added domestically, with corresponding negative consequences for employment.

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⁶⁹ See Prof. Meinhard Miegel, "Archive im gesellschaftlichen Reformprozess" (Archives in the Social Reform Process), in *Der Archivar*, supplementary volume 9, p. 40.

⁷⁰ As early as 1839, the two German researchers Schleiden and Schwann laid the foundations for today's stem cell research, the foundation of modern biology.

⁷¹ Robert Gates, former Director of the US Central Intelligence Agency. We both sat on the board of TRW.

Another area that has lost its competitiveness is the German corporate governance system, which consists of both sides of a coin: stock corporation law on the one side and the right of co-determination, including its core, the Works Constitution Act, on the other. The consequence of this development is that corporate headquarters are moving away from Germany and German companies are being disadvantaged in European mergers.⁷² Our model of codetermination at the company and operational level is unique internationally and isolates us. The extensive determination rights deter foreign investors just as much as our tax legislation does. This neutralizes the unique location advantages that we still have. It is time we adjusted our behavior and our legislation, still stuck in the 1970s, to reality if we don't want to continue to slow down and marginalize ourselves. Otherwise, co-determination in our company will result even more than before in the destruction of jobs, but will rarely result in progress for those that the trade union headquarters seek to protect and to support. Reforms to our industrial relations have so far not led to modernization in the sense of increased efficiency, but only to increased red tape.

Unlike the equal co-determination on the supervisory boards of large corporations, co-determination within companies as regulated in the Works Constitution Act is rarely discussed, despite the fundamental impact it has on German corporate governance, indeed in any operation with five employees or more. No machine may be moved, no employee hired or relocated, no overtime worked, no cycle time set, no manager

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⁷² Since October 2004, EU companies can be set up as "European stock corporations" (Societas Europaea [SE]). Co-determined German companies tend to lose out as SE partners.

appointed or promoted without the countersignature of the works council – a first-class veto position.

Under these circumstances, managers very quickly realize how the balance of power is distributed in the company. No manager can afford to be considered unable to handle the "labor relations bodies." You draw the corresponding conclusions from this in order not to be blocked the next time you make an overtime request or even seek your own promotion. It is therefore not always possible to avoid a certain amount of horse-trading, because works council members also want careers. This mutual dependency all the way up to the boardroom increases the risk of abuse.

VW is a great example of how the Works Constitution Act allows the IG Metall union almost total access to employees. Before a hiring decision can be made, applicants have to go through the works council office, which explains the workforce's high rate of unionization: ninety seven percent. According to IG Metall, seventy five percent of the VW management – all the way up to the board of directors – is unionized. To be members, employees have to pay one percent of their gross income. At Volkswagen AG, this must add up to more than 45 million euros annually – and in return, members receive no information about how these funds are used.

This situation must, of course, have an impact on how people think and act. When a kitchen assistant was to be transferred from our plant in Salzgitter to Braunschweig, it turned out that she was not a member of IG Metall, and so the transfer was stopped at the last moment. After the employee then contacted me, the head of personnel at the plant made it clear to me in writing that membership was essential in the interests of peace in the company. The transfer only took place after I intervened.

A small incident shows that the opinion of the grassroots is obviously more differentiated – and more realistic – than officials convey. After I took a stand against the 35-hour week in a works meeting, employees told me during the break,

accompanied by the sounds of the works orchestra: "You really told them."

Despite all my criticism, I don't want to give the impression that strong, assertive councils or shop stewards are redundant or that we don't work well together within the boundaries set by legislators. Employee representatives are distinguished by the fact that they are very familiar with the realities of the rank and file. They also have to be above average in many areas, provide information to many and advise and mediate in all directions. This often makes it possible to nip conflicts in the bud. In large companies, they also make the situation less anonymous for individuals. However, the interests of IG Metall must not take priority over the interests of the company. As at Toyota, the work of the works council should always be aimed at ensuring the long-term success of the company, not the demands of the union headquarters.

For many talented workers, the route through shop stewardship and the works council is often the only way up from the rank and file. This does not exclude management positions in the company. For deserving works council members of IG Metall or officials from other unions who find themselves unable to advance along their chosen career path, this option represents a safety net. This need not be a bad thing, per se. However, it would seem to be taking things too far if this procedure becomes routine and even Social Democratic Party officials or, in extreme cases, former heads of government are provided for.

Despite their joint influence on all company affairs from their seats on the supervisory board, the fundamental philosophy of IG Metall remains fixated on a theory of confrontation. Based on a 150-year-old socialist tradition in Germany, they take on the role of protecting workers against exploitative capital and boast that they and they alone fought for and cemented every achievement ever made. Unity in the face of capital is the slogan of the members, although the IG

Metall representatives on the supervisory board also co-appoint and oversee the executive board, set its pay, approve its strategies and plans and are just as familiar as the board of directors with the company's cost situation.

In a German-style supervisory board with co-determination, a homogeneous, centrally controlled and well-trained employee side generally meets a heterogeneously composed capital side. At VW, this committee meets four or five times a year in Wolfsburg for an average of six hours each meeting. The work of the supervisory body is decisively steered by its executive committee, 73 to which the chairman of the board is usually invited.

In view of the growing complexity of the issues to be decided upon, I believe it is imperative to increase the frequency of supervisory board meetings. This would do a lot to aid the individual members of the shareholder side in their work and help them become more familiar with the company and its markets. On boards in the US, strategy meetings sometimes last several days, while normal meetings more and more frequently last two or three. Furthermore, a downsized supervisory body would achieve the efficiency of today's executive committee of the supervisory board.

In the case of the VW supervisory board, the representatives of the shareholders remain as unfamiliar with the executive employees below the board level as they do with personnel development plans for executives, for the duration of their mandate. As a rule, none of them has ever seen the inside of a factory either, including the one in Wolfsburg. In my opinion, however, one of the core tasks of the supervisory board should be to oversee the training of future executives and thus also

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⁷³ The executive committee of the VW supervisory board has four members: two employee representatives, usually the IG Metall chairman and the chairman of the group works council, as well as two representatives from the shareholder side, one of whom is a representative from the state of Lower Saxony. The shareholder side also provides the chairman of the executive committee.

board members. This would avoid the need to bring outsiders into the top levels of the company who are then expected to get to know and understand, in passing, a Group of companies with almost 350,000 employees spread out over the entire globe.

A long-term personnel policy to identify and promote executives with global experience and regularly consult with the supervisory board would eliminate the risk of overlooking our own employees' potential. By the same token, the dealers and suppliers, who depend so directly on the company's success, should not be strangers on their own home turf. The priceless human structures, some of which have grown up over generations, must under no circumstances dissolve into anonymity. After all, precisely now, in this information revolution, human networks have become an irreplaceable resource that can move mountains in difficult times.

Of course, this doesn't mean that it can sometimes be very fruitful to attract career changers with first-class qualifications to the company. José Ignacio López, responsible for production optimization and procurement under Piëch, is an excellent example of this. During his years of employment, he not only provided new impulses for VW like no other, he did the same for Europe's industry. Today, he is mainly used as a seemingly plausible scapegoat for failure. Wolfgang Bernhard, the new head of the VW brand since mid-2005, is certainly one of the important exceptions.

The German model of co-determination based on consensus is proving to be out of date under the prevailing global competitive conditions. The bill for this is paid by eight million fellow citizens and their families. Objective, apolitical – that is, even-handed – and highly professional personnel policies are an essential prerequisite for securing the future of companies and thus maintaining jobs. This is the only way to successfully mobilize global intellectual resources. For this reason, the personnel director plays a key role, decisively determining and monitoring the guiding principles for these policies, shaping

the company through selection decisions. At VW, this position is usually filled by an IG Metall functionary, as is the custom in co-determined companies in the mining industry. Known as the Labor Director, this board member with equal rights is automatically placed in a conflict situation created by the legislature at one of the most critical interfaces of co-determination. It is very difficult to reconcile this function with the duties of a board member under stock corporation law, so legislation is urgently needed to correct the situation.

As experience shows, labor directors – as the exponents of co-determination – not infrequently also lack the necessary skills and global experience to exercise the central management function of a personnel director. In the global competition for knowledge and ideas, this is an existential handicap. Does it not scare off highly qualified applicants from a career in human resources knowing that their careers are going to be determined by a representative of IG Metall's policies throughout their working lives, and what's more, they are blocked from the top job from the outset, completely undemocratically?

To make our country more attractive as an investment location again, we urgently need a redesign of our corporate governance in addition to more competitive tax legislation. It is therefore to be hoped that the co-determination commission set up by the government, headed by Kurt Biedenkopf, will succeed in making long overdue adjustments to make the German system in an expanded European market better able to withstand the storms of increasingly fierce global competition.

Even if the single-tier Anglo-Saxon board system is by no means perfect, it is more realistic and more efficient. The fact that six of the ten largest US companies were only founded after 1968 underscores this. They all emerged in industries of the future. While we in Germany meticulously deal with the dangers of new technologies – IG Metall warned against the

⁷⁴ In accordance with new legislation, US trust companies have become an important, disciplinary element for the American board system.

loss of over three million jobs at the beginning of the electronics age – information technology alone has created more jobs in the USA than the automotive and steel industries combined. There is hardly a more convincing example of the inherent dynamism of Anglo-Saxon corporate governance.

The supervisory board and co-determination issue, essentially an owner issue, is closely intertwined with our economic and political mortgages and ways of thinking. However, it will remain difficult to make fundamental corrections for as long as the majority of our fellow citizens have not internalized the laws of market economy and globalization. We need to be looking all the way back to schools if we want to find majorities for realistic reforms and economic policy.

The Volkswagen Act is unique in German corporate governance in its supposed protection of people and manufacturing sites. Paragraph 2 of the "Law on the transfer of shares in Volkswagenwerk Limited Liability Company into private hands," now simply called the Volkswagen Act, limits the voting rights of shareholders to twenty percent, even if a shareholder has more shares with voting rights. As a result, the state of Lower Saxony has a dominant position with its almost twenty percent share of the voting capital of Volkswagen. Since the Volkswagen Act requires a majority of more than eighty percent of the represented share capital for resolutions of the general meeting that require a three-quarters majority according to the Stock Corporation Act, the state cannot de facto be outvoted. The Volkswagen Act also grants the state of Lower Saxony two supervisory board seats, even if it only owned a single share.

However, the size ratio of Lower Saxony to the Volkswagen Group shows that in an emergency, there is not a tractor in Germany, and certainly not in Lower Saxony, that could pull VW out of the ditch. But the Volkswagen Act serves as live political ammunition after the people of Lower Saxony were convinced of its absolute protective function. So far, none of the state-level parties has dared to express the slightest doubt about it. The supposed protection law thus feeds a dangerous idea that all risks are ensured even though there is no cover.

If there were no such VW legislation, a realistic personnel policy that secures jobs would be possible. At the same time, it would probably spark a fairly dramatic upward revaluation of VW shares, which would represent better protection against hostile takeover bids. But in the end, neither the share price nor the Volkswagen Act can guarantee absolute protection against hostile takeovers. The best conceivable safeguard is superior competitive strength to provide the fuel for an expansive corporate policy.

At VW, the 28.8-hour week celebrated its tenth anniversary during a period of global economic evolution and chronic German stagnation. Because it allegedly prevented the dismissal of 30,000 employees, its introduction in 1994 was welcomed on all sides. To enact it, the workforce had to make sacrifices in the form of a loss of income, which led to significant savings for the company, but not to a reduction in hourly wage costs, on the contrary. Doing away with this VW-specific working time regulation in the near future will be a question of survival for the workforce. Given the growing pressure on prices, the increasing interchangeability of production sites and the self-confidence of customers around the world, VW can afford the 28.8-hour week even less than Germany can afford the 35-hour week.

The union still relies on the direct and indirect subsidization of German labor costs by successful companies or suppliers in other European countries and China and, in a globalized world, justifies this as the God-given privileges that are Germany's due. Furthermore, none of our politicians seems to be concerned about the strategic consequences implied by the appearance on the European market of the first mid-range passenger car produced in China. Designed by Giugiaro and offered for the price of a small car, the vehicle celebrated its international debut at the Automobil International (Ami) in Leipzig.

While today the countries of the Middle East still serve Chinese manufacturers as a test market for exports to the West, the most ambitious among them, Chery, recently announced its intention of selling 250,000 vehicles a year on the US market starting from 2007. This plan does not involved bargain offers in the small car segment, but vehicles for the premium market, at prices that will be around a third less than those of competitors. If these ambitious plans work out, it would result in price erosion in the car industry, comparable to that experienced in the electronic consumer goods sector in recent years, also triggered by Chinese suppliers.

Twenty years ago, the arrival of the first Korean vehicles was still a source of ridicule due to their supposedly insufficient quality. It was no different with Japanese vehicles twenty years before that. Today, Korean automotive manufacturers have become the fastest growing providers on the world markets. There are many indications that Chinese manufacturers will follow suit, albeit at a very rapid pace. This will be the start of a selection process that we need to prepare ourselves for in all seriousness. The time to react has long since past, anticipatory action is needed. The task couldn't be clearer.

The prestigious Geneva business consultant Frank-Jurgen Richter warned of the writing on the wall in the *Frankfurter Allgemeine Zeitung* in June 2005, putting the seriousness of the situation in no uncertain terms:

"The Chinese are buying technology and brands in Germany, but they are certainly not buying workers ...

Wolfsburg will disappear as an industrial location in the next decade. There is no way of manufacturing automobiles like the Golf in a high-wage country like Germany in competition with China, for example."

As a citizen of Wolfsburg, I am convinced that we will not simply acquiesce to this fate, but proactively take the matter into our own hands in order to refute this gloomy prophecy. In plain language, this means facing up to reality without reservation.

USA	International working hours Annual regular working hours* in the metal and electrical industries in 2003, in hours	1904
Switzerland		1808
United Kingdom		1778
Spain		1776
Italy		1752
Austria		1731
Eastern Germany		1674
Denmark	16	521
France	157	5
Western Germany	1542	

The high rate of unemployment in Germany is due to jobs that are no longer competitive. The underlying reason for this is social, financial and economic policies written primarily with reelection in mind. For more than thirty years we have been fighting the scourge of unemployment with completely the wrong medicine, and so we have not been successful. So far, however, this has not caused us to change course. As a result, more and more overheads for the company and the community, including social security, have to be earned and added to prices in fewer and fewer hours worked. German gross incomes are at

the top of international rankings, but individuals are left with less and less net income. A lot of time and effort has been spent in recent years trying to scientifically substantiate the idea that technological progress will inexorably mean a loss of jobs. In reality, however, there has been a demand for more and more jobs — and of an unprecedented scale and quality — albeit at competitive prices.

While Germany is significantly reducing working hours, they have been increased in the United States by the same amount. This has resulted in corresponding losses to our economic power, the main engine of which is and will remain the work factor. In relation to the USA, we have fallen behind by almost twenty percent in terms of working hours. The US economy managed to overcome a period of decline by extending working hours and, aided by restructuring of companies, and thanks to the flexibility of the workforce, it has developed an unprecedented dynamism, providing a strong boost to the global economy and their own labor market.

So what should we do? My suggestion is: as nobody wants to earn less net, nor should they, but, according to the government's own financial advisor and former VW HR executive Peter Hartz, VW needs to reduce labor costs by thirty percent, we have to work longer and harder for the same money as before. The VW project "5000 x 5000" for the production of the VW Touran and new hires under special conditions are generally the first steps in the right direction, but they only affect a minority. The world will not wait for us. A larger surplus of labor will be unavoidable during a transition period. However, if we do not act, a lot more jobs will be lost, without any chance of future growth.

Fundamentally, the country needs to experience a thorough jolt, and not just a rhetorical one, in order to mobilize buoyancy and confidence, to enable new price and supply policies, and to clear away the detritus of our accumulated disadvantages. The additional hours worked without wage compensation

would significantly reduce the German level of ancillary wage costs per hour worked, throughout the process chain and for all products and services, which is by no means achievable with the fractions of percentages discussed in politics. At the same time, this could also help reduce outsourcing.

Switzerland seems to me to set a good example here: for the fourth time in twenty years, in March 2002 Swiss voters approved with a majority of seventy five percent the statutory standard working hours of 42 hours per week, with three weeks vacation and a level of income roughly comparable to that in Germany.⁷⁵ Another guarantor of Switzerland's economic success seems to be largely unknown to us: the previously mentioned Swiss "Peace Agreement" of 1937, with its renunciation of strikes and lockouts.⁷⁶

Would we be destroying the welfare state if we worked and earned as much as our Swiss neighbors, or are we destroying it through our current accumulation of debt and lack of competitiveness? Compare to us, Switzerland has become a low-cost country, with orderly finances and full employment and, unlike in Germany, extremely satisfied citizens.

If, instead of dividing the costs of our social system and communal welfare as well as company overhead costs and income by 35 hours a week, you divided them, like the Swiss, by 42, i.e. twenty percent more (measured against the 28.8hour week in Wolfsburg, it would be almost forty five percent more), we would once again have competitive wage costs and a consistently lower price level for German products and their legendary reputation. The longer working hours would also increase the speed of development of products. Apart from

⁷⁵ Swiss legislation allows a maximum weekly working time 60 hours,

whereas the European Union allows a maximum of 48 hours. In Switzerland, the unemployment rate is about four per cent, while at the same time, the employment rate among 15 to 64-year-olds is more than ten percent higher than the rate in Germany.

⁷⁶ See Chapter 1, "Roots, education, ..." p. 9.

extending weekly working hours, demographic trends in Germany are also forcing an extension of our working lifetimes, which must be accompanied by a targeted, selective immigration policy. In view of the significantly increased life expectancy of our fellow citizens, a slight extension of our working lives should not mean too much of a sacrifice.

All things considered, a bundle of measures like this – complemented by a gradual transition from pay-as-you-go pensions to fully funded pensions – would noticeably increase the purchasing power of our fellow citizens. This would not only relieve public budgets, it would at the same time also give new momentum to domestic demand, with a corresponding boost to the labor market. Under normal circumstances, economic growth of just one percent in Germany results in 400,000 additional jobs.

As a prerequisite for correcting our decades of misguided thinking and acting, we need new forms of dialog. On the employee side, there is no shortage of will or ability, there is only an unwillingness to face up to unvarnished reality. In many ways, East Germany has showed us the way.⁷⁷

There could be no better time for a change of direction. After all, China and India, with a combined population of approximately 2.4 billion people, are at the threshold of an unprecedented expansion, which will increasingly also include Russia and its intellectual and material riches. This opens up enormous potential for us, especially in the branches of industry in which we are traditionally strong.

But Asia will also usher in an unprecedented pace of scientific and technical progress, accelerated by the

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⁷⁷ In a comparison of living standards in East and West Germany for the IWG Institute for Economics and Society in Bonn, Professor Miegel demonstrates that nominally lower incomes – which are about a sixth lower in East Germany than in West Germany – do not necessarily entail a corresponding loss of prosperity. The reason for this is that the simultaneously lower living costs in eastern Germany result in an extensive leveling of purchasing power and standards of living in East and West.

information industry. This means a corresponding intensification of competition, for which we must prepare in good time if we want to avoid increasingly experiencing the development in growth regions of the world as a spectator on the sidelines.⁷⁸

Germany has announced its intention of conjuring up ten elite universities at once out of thin air, by decree and without having explored the route to this goal. Our leading universities, such as the Technical University of Munich or the Humboldt University of Berlin, are ranked in the "also ran" category in international rankings. The American phalanx of the ten top universities worldwide is only interrupted by Oxford and Cambridge. Also, among the forty leading European business schools, there is only one German institution, ranked somewhere in the middle.⁷⁹

An emerging country like India shows us how elite universities can be created or elite management universities emerge, soon even with branches in Singapore and elsewhere. Is it any wonder that ten percent of Harvard professors are Indians? As the world's largest English-speaking nation, the subcontinent of India is networked with the whole of the globe and is setting the pace in the information industry in many areas ⁸⁰

Wouldn't it be more realistic for us in Germany, now that the PISA study has highlighted the weaknesses of our primary and secondary education, to deal with the foundations of our

⁷⁸ Around 456 million people live in the "EU 25" today, about seven percent of the global population. It can be assumed that this proportion will decrease further in the future.

⁷⁹ *Financial Times*, September 6, 2004; the list is headed by the Spanish Instituto de Impresa, on the international board of which I sit.

⁸⁰ The IIT (India Institute of Technology), New Delhi, is one of six elite universities. The IIM (India Institute of Management), Bangalore, will shortly open an offshoot in Singapore.

education system first before considering the roof? At no point in their lifetimes are humans more receptive and capable of learning than from around the age of three, which we ignore in our education system. Learning to read and write or speak foreign languages in a playful way not only gives children joy and quenches their thirst for knowledge and ambition, but it also trains, i.e. develops their brains. As we all know, no adult can keep up with a child's pace of learning. So let's stop wasting our children's most precious developmental years. It only be a small step to start primary school earlier, at five years of age, at the parents' request, and end schooling at sixteen or seventeen, as is the case in England, for example. This would make it possible to complete training a few years earlier, which in turn would help to defuse our demographic disadvantages and provide decisive relief to our pension funds.

Let us also train our educators accordingly in order to the create the foundations for a society of the 21st century that can justifiably step out into the world with vigor and confidence. Germany and Austria are still the only two countries in Europe that do not require higher education for preschool educators.⁸¹

The Free State of Saxony is a notable exception. There, they recognized the urgent need for reform in early childhood education and the Ministry of Education, working closely together with the Ministries of Science and Social Affairs, is planning to introduce a degree for nursery educators. After a transitional period of five years in Saxony, all principals of day-care centers must have completed studies in educational science, an example that should be replicated throughout Germany.

A first-class education represents the best social achievement and security for our people, for our values and for our democracy. It is also about ensuring everyone can take the final secondary school examinations and thus go to

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⁸¹ See Jürgen Kluge, Schluss mit der Bildungsmisere - Ein Sanierungskonzept, page 16.

university. Despite university being free of charge — i.e. students are given virtually automatic scholarships that will never be paid back to the state — we have a disproportionately low rate of high school graduates and college graduates. If we also privatized our universities and organized them in accordance with the principles of competition, flanked by adequate scholarship programs, we wouldn't need to worry about the development of elite universities in Germany. German faculties that already rank at the top of international comparisons point the way.

The best minds in the world today go to Anglo-Saxon elite colleges, just as back in the early '30s they would go to Germany. These Anglo-Saxon colleges have grown up over centuries. They are not the result of cabinet decisions, but of an awareness and recognition of elites. We need both, even if this is something that is only reluctantly recognized. After all, a country's elites determine its international ranking.

We must not waste any more time in the education sector on commissions that are stuck in the past and consume vast amounts of spending. It is more than depressing that it took outsiders to point out our educational weaknesses to us, even though there is no shortage of ideologically tinged and ultimately failed educational reforms in Germany. However, a lack of self-criticism and an unwillingness to learn from others seem to be particular weaknesses of a nation that has been a model for the world for more than a century.

We should therefore take greater care to register and analyze what is going on in the world and draw the necessary conclusions for our education system, because in competition, especially with the young, up-and-coming economies of the world, we will only be able to assert ourselves if we have creative, better answers.⁸²

⁸² Chinese middle school students, for example, attend school every day from 7:30 a.m. to midday, from 2 p.m. to 5 p.m. and then again from 7:30 p.m. to

But let's be realistic: forward-looking strategic decisions take years to take effect. As long as one quarter of our young people and thus a full twenty five percent of potential voters only receive the lowest school leaving certificate, our democracy is in trouble.

Globalization has a disciplinary and selective effect. Inefficiency, indolence and a lack of flexibility are punished mercilessly, regardless of where they are. Our "Rhenish Model" for the social market economy, a role model for the world for decades, has experienced this painfully, as a glance at the unemployment statistics shows, among other symptoms. Without uncompromising adjustments to the laws and realities of the market, the route to economic growth and prosperity will remain blocked to us. The accelerating pace of global change, both political and economic, is also dramatically shortening the time left to us to act. The longer we wait, the more difficult it will be to make up for lost time or even just slow our descent. In the end, the world will only reward us as a nation according to our performance, not according to our claims. Empty slogans and exaggerated demands are leading our fellow citizens astray. The social component is an integral part our market economic order. But social justice has its limits if it needs to be paid for with unemployment and it obstructs our future.

In addition to all the pressure to reform, a fundamental reorientation is needed for us to rediscover the idealism that once made us strong as an economic nation. Otherwise we will drift into a post-religious era of spiritual emptiness, in which some of our citizens seem resigned to have arrived. Only with a spirit of contemplation can we find our way back after too many decades on the wrong path. If we as a nation wish to play the role in Europe that is expected of us, we need the power of our traditional values, which have included the Ten

Commandments since time immemorial.

In May 2004, when Pope Benedict XVI was still Cardinal Ratzinger, he wrote the following in *Die Weltbühne* under the heading "Europe is sick":

"The children, who are our future after all, are seen as a threat to the present, as a restriction on our quality of life. They are not seen as the bearers of hope, but as a burden for the present. The comparison with the decaying Roman Empire is evident: the historical framework continued to function even as it was being kept alive by those who would bring about its destruction, because it had lost its vitality ... The current clash of civilizations holds up an unpleasant mirror to Europe because its exposes its lack of spiritualism."

In 1989, we believed that the fall of the Iron Curtain had brought us to the end of history. Today, however, we have to realize that in the midst of historical upheavals we are facing even greater scales of change and risk, and that Asia is emerging as the new center of gravity. In the 19th and 20th centuries, changes to world supremacy never took place without wars, for which we are better and better armed and now in global dimensions. So let us accelerate the realization of the dream of a united Europe that is capable of acting, instead of jeopardizing it further. Otherwise, it is not only Germany that will lose its role on the world's political stage, a fragmented Europe will too.

We must find our way back to our strengths and act according to the maxims that don't change with the zeitgeist. Only then can the era of Europe and the dreams of our fathers be fulfilled, the dreams that Victor Hugo proclaimed at the Paris Peace Congress in 1849:

"A day will come when you France, you Germany, you England and all of the nations of the continent, without losing your distinct qualities and your glorious individuality, will be merged closely within a superior unit and you will form the

⁸³ From Cicero – Magazin für politische Kultur, May 2005, page 58 ff.

European brotherhood ... A day will come when the only fields of battle will be markets opening up to trade and minds opening up to ideas."⁸⁴

⁸⁴ Victor Hugo's opening speech at the Second International Peace Congress in Paris, 1849; from *Victor Hugo, Douze discours*, 1850. 296

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