

# War after War

*Wilhelm Krelle, 1916-2004*

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**Abstract:** Wilhelm Krelle (1916-2004) had two careers; one before 1945 as an officer in the German Army (*Wehrmacht*), and a second after 1945 as an economist in West Germany. After retirement, he was honored as the economist who brought modern modeling techniques, Lawrence Klein's macro-econometrics in particular, from the U.S. to West Germany. After his engagement in the reform of East German economics, however, his person was discredited as his early career became public. This essay reconstructs Krelle's career in his attempt and struggle to maintain moral integrity in and between the various domains of his troubled life as officer, economist, political adviser, father, and husband.

**Key-Words:** World War II, German economics, existential meaning of science, competition, Wilhelm Krelle, life-writing.

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*“Suffering ceases to be suffering at the moment it finds a meaning, such as the meaning of a sacrifice” (Viktor Frankl).<sup>2</sup>*

## Total War

Germany, October 1944. The National Socialist movement had reached its ultimate delirium. On all fronts, in the East and in the West and in many cities, more and more troops were being called up and summoned to fight for the final victory. As the losses mounted, the pressure to mobilize all remaining resources intensified. Social differences no longer mattered. Civilians and soldiers, lower class and upper class, the old and the young, men in battle and women on the home front—everyone available was drawn into the ultimate battle “until the last man”, an absorption that brought good and evil as close as never before.

And one of the established differences that was erased in these months was that between the *Wehrmacht*, the Defense Force, and the *Schutzstaffel* (SS), the Protection Squadron. The Wehrmacht, though sworn to Hitler’s cause, drew its spirit from the *Reichswehr*, the Imperial Defense that had fought for the German Reich in WWI – the honorable losses of which WWII was to rectify. The SS, instead, initially Hitler’s guards, was the military core of the NS movement, was united by racial doctrines, fought for the unique cause of the Third Reich and

was ready to commit the war crimes for which Nazi Germany became known. But as more and more battles were lost, and as more and more soldiers fell, the thinner the line became that separated these two armies. While at the beginning of the war, SS recruits were voluntary and exclusively Aryan, during the last months of the war, Wehrmacht soldiers as well as ethnic Germans (*Volksdeutsche*) were forcefully recruited into the SS. And this is what happened to the Wehrmacht officer Wilhelm Krelle.

Krelle, born in Magdeburg in 1916, slim, physically fit, and with an energetic appearance, was 27 years old at the time and had just completed the training program for Generals. He could look back at an impressive career.<sup>3</sup> After school and a disappointing period in the Hitler Youth, he joined the Wehrmacht as an ensign in the engineer battalion Riesa in April 1935. He soon became Lieutenant, and shortly before the Invasion of Poland, Higher Lieutenant in April 1939. In Poland, becoming active in battle though only in an engineering troop, he captured a bridge, which won him the Iron Cross Class II. In 1941, as a company commander of the 21<sup>st</sup> tank division in Greece, he was wounded in a bunker attack and received Hitler's deed of honor as well as the Iron Cross Class I. In February 1942, he was promoted to Captain (*Hauptmann*), and became the commander of an engineering and then a tank battalion with Rommel in the African corps. Again, he was seriously wounded. While recuperating in Frankfurt, he took the occasion to attend several lectures at the university on the history of Rome and the ethics of Kant. In January 1944, he was ordered to the General Staff training in Hirschberg. He married in the summer of 1944, after which he got the order to join as 3<sup>rd</sup> General Staff Officer – "Ic", the "scout" officer in charge of information – the newly formed 13<sup>th</sup> SS-Corps under the command of General Hermann Priess. The staff was in charge of tens of thousands of soldiers on the Western Front.

Krelle was proud of his career and appreciated the career opportunities the war provided. On February 25, 1945, he reported to his comrades from the General Staff training who, like him, had been trained to uphold the belief in the final victory. He was not the only one who had been recruited to an SS corp. He expressed concerns about his rank, about the lack of opportunities to prove one's worth, and about the lack of clarity regarding the difference between the SS and the army. Field letters were censored.

“There is not much to say about me ... Early in August 1944, I received the draft order to report to the deputy general command in Breslau, where I learned that I had been assigned to a newly formed SS corps. At first I was Ia [1<sup>st</sup> General Staff Officer], but the chief magistrate apparently felt that an old SS man belonged there and ordered Sturzbrecher ... as Ia, degrading me to Ic. After 1 1/2 months, however, Sturzbrecher was ordered away and I took his place. Since early January, I have been in an SS Panzer Grenadier Division and get along well with my young and fresh Division commander. It is a pity that there will be no more wide-ranging attacks, and thus no more real use of the division. We have a front almost 30 km wide! So we will be glad if we can hold the position against the superior enemy attacks ... The status of our service (whether Army or SS) is still unclear. All officers of the SS corps were ordered to use the SS ranks, but we are still led by the Army Personnel Office. But in this phase of the war, this might not matter” (Memoir I, appendix).

However, it did matter to him. He later recalled and emphasized an inner struggle to be associated with the SS. Krelle was a very conscientious and righteous soldier when being

responsible for so many men under his command: “The war is bitter and hard,” he wrote in October 1945 to his wife); “Hopefully, I will always find the right path. And if not, then please know that I always wanted to do the best” (Memoir II: 89). In fact, he questioned the order to join the SS. For him, the difference between the Wehrmacht and the SS was of a moral kind - the difference between an orderly Prussian institution and a corrupt party system, between German nationalism and Aryan racism, between the reason of military strategy and the mania of political power, and in particular between an institution that draws from Christian values and atheism. In retrospect, in 1993, he recalled a conversation with his wife Alix:

“In consternation, Ali and I sat in our apartment and discussed the situation. Should I ask the Army Office for a different post? (...) After a long discussion, two reasons kept me from doing so. First, I believed that I’m in God’s hands. If he thinks that such a strange task is right for me, I cannot know better. His will must be done. (...) The second reason, however, was probably more decisive - in any case, I recall my arguments with Ali very precisely. During the war, (...) I had to give commands that put soldiers in critical situations that were at least as unpleasant as the command I got (...) Now that I’m in such a situation and have received an unpleasant order, should I then try to evade it?” (Memoir II: 82)

These two reasons are worth comment. First, Krelle was deeply protestant. His maternal grandfather was a Protestant priest, and throughout his life Krelle tried to view himself and his activities in a Christian light. In Prussian culture, faith in God and Emperor, nationalism, militarism, obedience, and sacrifice and hard work for the common good were all closely knit

together. Being duteous was to worship, and to show being worthy of, God. And so did his Protestant belief help him to make sense of the war and, in particular, help him to accept the fear of death when taking cover in trenches under Artillery attack or moving under hostile fire. He had the 15<sup>th</sup> Gospel of John in mind: “Greater love has no one than this: to lay down one’s life for one’s friends” (Ibid: 68). Rather than being driven by hate, war, he believed, was God’s way of showing who, as individuals or nations, had a further task on earth. If he were killed, his life would be fulfilled by dying for his country; if he survived, it would be his duty to meet his further task in the light of all those who had given their lives. Such construed notion of religious faith might explain his letter to his parents on August 29, 1944: “Do not worry that I became a different person by wearing a different uniform. I believe that, also in the SS, I can act for the good in accordance with my religious principles” (Ibid.: 86).

After he accepted the post with the 13<sup>th</sup> SS corps in Bernau, General Priess asked him to resign from the army and become a formal member of the SS. While his Protestant faith made him accept the order to transfer to the SS, the same faith made him refuse to formally become a member. He recalled long discussions with Priess about the existence of God and his role in the war. In particular, he did not share the anti-Semitism of the Party because he thought that “the hate against what is Jewish also affects Christianity” (Memoir II: 93). Having declined in writing on October 29, it might have influenced Priess’s decision not to recruit him for the Battle of the Bulge in December 1944, the last German offensive in France that Krelle would have loved to join - fortunately, because he might have been held responsible for the so-called Malmedy Massacre. One hundred U.S. prisoners of war were executed for which Priess would later be convicted. Instead, on January 4, 1945, Krelle was transferred as 1<sup>st</sup> General Staff Officer – partaking in and translating the strategic decisions of the commanding general – to the 17<sup>th</sup> SS-

Panzer Grenadier Division, nicknamed Götz von Berlichingen, that was engaged in *Operation Nordwind*. At the same time, he was promoted to Major, the equivalent of the SS *Sturmbannführer*. He commanded around 12,000 soldiers, who had to fight “until the last man” in order to hold the last line separating the enemy from German territory, the Siegfried Line. The division included ethnic Germans from Croatia and the Black Sea who would cross the Line in the hope to be “rescued” by the enemy, just as one of his commanders, Hans Lingner, did. Heroic willingness to die in battle and coward suicide became indistinguishable.

Conscientious and righteous, Krelle was not aware of war crimes, even if several people around him – be they higher or lower rank – did commit them. When the Siegfried Line was abandoned in January, and the remaining troops of his division moved southeast into German territory, isolated war crimes are recorded – shootings of lost concentration camp prisoners and of civilians who prepared white flags for the arrival of U.S. forces.<sup>4</sup> Krelle, in charge of more than 10,000 soldiers, was not aware of these events. In contrast, he thought that the courage of his soldiers deserved respect: “The whole world has to respect the German soldiers who in the fifth year of war, outnumbered in weapons, equipment and soldiers, always do their duty and never give up”, he wrote to his wife on October 9, 1944 (Memoir II: 72).

This leads to the second reason for which Krelle accepted wearing an SS uniform. Being an officer requires absolute *obedience* to orders – that is to act without questioning their meaning, without feeling responsible for the overall political goal, and to accept casualties. In Africa, as a commander, he sent eleven soldiers to a meaningless death,<sup>5</sup> and in *Operation Nordwind* thousands of soldiers died under his command – the record reports that only 800 out of the 12,000 soldiers in his division survived.<sup>6</sup> While he would say about the latter losses that he

prevented more casualties from occurring, the former would gnaw at his conscience for years to come as a symbol of the tragedy of war.

“One cannot give a soldier at the front or a lower officer the right to decide case by case if a command is “good”... Otherwise you would risk the cohesion of the troops: no one could rely on one another. However, after all, everyone will be responsible for what he has done, if he had insight into all of the activities or not. And if he is not prosecuted, so remains one’s own conscience as a prosecutor” (Memoir I: 89).

Absolute obedience, the acceptance of casualties, the suppression of one’s doubts, and the irrational fact that others die next to him while he survives, clearly require strategies to deal with feelings of *guilt*. Krelle’s most important strategy is deeply rooted in Prussian culture: *hard work*. It is by means of utmost obligation, utmost effort, utmost strain, that is by means of a sacrifice that he could make up for those who sacrificed their lives. “I am glad, my dearest,” he wrote to his wife on December 6, 1944, “that I can relieve the guilt for all soldiers on the front lines by hard work” (Memoir II: 96). Hard work is both the cure for guilt and the means of keeping on.

Next to work, another important source for psychological stability during war was the intense love that he shared with his wife, Alix Scholz. They met after the war had already started, and married in May 1944, which made that year one of the happiest of his life. Alix came from a fine family, was brash and free-spirited, outspoken, and politically opinionated. Krelle loved her effervescent kind. The wedding was not unproblematic because Ali’s father had committed suicide in 1936, which could have been grounds for the authorities to prohibit the marriage. The

correspondence between Alix in Berlin and Wilhelm at the front is full of references to art and literature, through which they expressed and deepened their intimate and profound connection. Through the ideals of love as described by Plato, Goethe, and Mörike, they created an alternative world that protected them from the horrors of war.

“The war, the omnipresence of death and thus solitude, perhaps despair, surely the breaking down of all hopes for the future, gave our love a depth, related to its concealed suffering, that nobody today living in secure circumstances can feel or understand”  
(Memoir II: 98).

Their love, though built up in absence during the war, would be strong enough to survive the many shared struggles after the war.

But the underlying motivation for accepting the delirium of war was a deep desire that remained present throughout Krelle’s entire life, the desire to achieve something extraordinary and noble. His nationalism was a manifestation of the wish to enter historical memory. When thinking of Germany, he thought of Frederick the Great and compared himself to Carl von Clausewitz as well as to Ernst Jünger. On Christmas Day 1943, he wrote to Alix: “When the New Year begins, we will toast with a full glass of champagne and vow to never be frivolous (*kleinmütig*), never to be frightened, and even if it looks bad to always believe in our fatherland and our future” (Memoir II: 49). Reading, at the front line, Esther Meynell’s *Little Chronicle of Magdalena Bach*, he wrote to on September 29, 1944: “I hope that, like Bach, I can bring about something that goes beyond the mere demands of daily life” (Ibid.: 106). Krelle loved the war because it meant an absolute break with the ordinary and the daily, and it gave meaning even to

what was otherwise so pointless – death. War elevates and intensifies meaning. This was what he enjoyed. In fact, despite the idea of sacrificing oneself, this exceptionalism was a manifestation of an elevated sense of his self, or even of vanity (*Eitelkeit*), as his daughter Heide called it.

And this desire for the noble and the exceptional, in turn, was a fear of weakness, a fear of failing at the simple task of daily life. This fear, which he projected on the opprobrium of the Weimar Republic, had its origin in his family - someone he had been ashamed of during his entire childhood: his father. Willy Krelle was a bank clerk. He was bullied by his boss, and had a hard time during the Great Depression to whom to grant or to deny credit. Always in danger of losing his job, he suffered from stomach ulcers and pneumonia. The entire family continuously worried about his health and rank, and little Wilhelm despised him for that. “Imagine that! He failed because he was not able to deny credit during the crisis”, his son-in-law recalled him saying about his father (Georg Schumacher). Krelle’s exceptionalism was the inversion of the contempt of his father.

In early May 1945, his tank division ended up at the Austrian border. Krelle was ordered to hand over the entire Division to the U.S. Army. Just before that, he was promoted to *SS-Obersturmbannführer*, the equivalent of Lieutenant Colonel (*Oberstleutnant*). This must have been related to the fact that his commander, Georg Bochmann, refused to hand over the division and decided to flee. Later, Krelle would question the legal validity of this promotion. That is, at the end of his faithful career, he held the same rank as, for example, Adolf Eichmann – an unjust comparison, as Eichmann held that rank for most of the time of the NS regime and had been strategically passed over for promotions. But would this be known by those who would decide on his further fate? In an adventurous plan, he managed to hand over the division in front of TV cameras to the American army, and yet flee and avoid capture – the nightmare of all officers.

After a three-week harrowing journey from the Bavarian Alps to Saxony – searching civilian clothes, then arrest and flight, sick bay and jaundice, and long marches – he arrived on May 31 in his family’s village Schönebeck, where he saw his two-month-old son, Rainer, for the first time.

The German surrender in May 1945 meant multiple disappointments: that his sacrifices (and those of so many others for which he had to make up) were pointless; that nobody was celebrating his courage; and worst, that the NS regime had not fought for the noble goals for which he had fought – as the full truth of what he knew only from rumors was revealed, the Holocaust. And since the SS would become a symbol, not only of so many war crimes but also of the genocide, Krelle, poised to be a hero before the end of the war, faced to be a pariah after the war. Note, however, that the less he identified with the crimes that became public, the less he had to question his noble motivations described in this chapter. Having survived the war, God must have a further task for him on earth. And he had to take on this task in obligation towards all those whom he sent to death and who died beside him in the trenches. And this task, he would soon understand, would be to *modernize German economics in the image of the United States*. God’s ways are inscrutable.

## **The Post-War Struggle**

Back home, worried to be arrested when registering at the police for new documents, he called himself a “business man” - referring to an internship he took in 1935 at a bank - and thus got a new identity card. When the family understood that they now lived under Soviet occupation, his sister Erika decided to go west to Tübingen, where her husband had family. Krelle, who might

have anticipated more serious controls of his identity when registering with the Soviet forces, decided to follow his sister. His parents joined them, but his second sister, Gisela, stayed. After another odyssey, the young family arrived in Tübingen on August 3, 1945.<sup>7</sup>

How to make a living? Housing, heating, and the health of little Rainer being his first concerns, there was no immediate employment opportunity. In search for a new profession, the university offered itself as the best alternative. He chose, rather than history and philosophy as in 1944, the most promising degrees in terms of future income and study time: physics and economics. However, universities were bound to investigate the histories of any applicants. Would he be accepted? “October 15, the university reopened. We were anxiously awaiting if the admission would be accepted after the questionnaires had been filled out. But initially it went all right” (Chronicle 1945). In addition to physics, mathematics, and public finance, Krelle was introduced to mathematical economics by Hans Möller, Heinrich von Stackelberg’s former assistant. Stackelberg was unique for being both an ardent Nazi until the early 1940s *and* an ardent neoclassical economist. The imprint of Stackelberg’s economics would be visible in Krelle’s work until the end of his career.<sup>8</sup>

But he could not go deeper into these studies, as in the spring term 1946, the questionnaires had to be filled out anew. This time the committee decided *not* to grant admission to Krelle. He knocked on the doors of all committee members, explaining the circumstances of the ending war that led to his high SS rank. He got a verbal acceptance from all of them, including Rector Hermann Schneider. But when Schneider was replaced by Theodor Steinbüchel, his admission was declined. Thus, in early May, he took his bike and cycled one hundred and fifty kilometers southwest in order to try his luck at the University of Freiburg. He took no risks, and changed his military title; he now was no longer *Oberstleutnant*, but merely

*Leutnant*. It worked. In summer term 1946, he enrolled in physics and economics in Freiburg. He learned to be discreet about his past.

Separated from his family, he studied with utmost determination, driven by the pressure of earning an income for his family, by the awareness of having to catch up years of education, by the ambition to become an achieving member of the new society, and by the humiliation from being supported by his father's money. He passed more than ten classes per term. Next to mathematics and physics, public finance and business economics, he also heard lectures by Walter Eucken, Constantin von Dietze, and Clemens Bauer. These were the thinkers of the so-called Beckerath circle that, in the last years of the war, developed ideas for the post-war economy, ideas that pushed West Germany into what came to be known as a social market economy. Though more open to conceptual abstraction than the German historical school in which these economists grew up, they were, in contrast to Hans Möller in Tübingen, fully nontechnical. In his later war memoirs, Krelle would project back into their ordoliberal teachings a eureka moment regarding his nationalist upbringing:

“If at that time (of National Socialism) I had understood something of economic science, the scales would probably have fallen from my eyes: I would have seen the advantages of the division of labor (also internationally), the working of the ‘invisible hand’, and that peaceful trade is better for everyone than conquest and exploitation (...) With some good sense in the economic and political arena, I could have understood the absurdity of nationalism. Thus the officer's profession would have lost the quasi-religious connotation which it had for me” (Memoir II: 135).

Back then in his chronicle, however, he noted no more than the fact of hard work. In November 1946, when he was in the midst of writing his diploma thesis in Freiburg, a telegram arrived announcing his father's death. The notice came too late to attend the funeral in Tübingen.

In March 1947, a year and a half after he entered university, he passed his diploma exams in economics with grade 2 – the equivalent of a B. Nine months later, the day before Christmas when he turned thirty-one, he submitted his PhD thesis to Eucken.<sup>9</sup> It was on Say's law, thus initiating himself into Keynesian economics. Eucken could not help him develop that interest, but he was well connected with Erich Preiser in Heidelberg, next to Erich Schneider one of Germany's leading theoretical minds in Keynesian economics.<sup>10</sup> Through this connection, Krelle's future took shape. By October 1947, he had known that starting May 1948 he would begin as an assistant to Preiser. Before moving to Heidelberg, he graduated in physics, where his grades were not good enough for a career.

Only three years after the war, Krelle had made it. He had a regular income and a new profession as a civil servant at the university, and he could take his place in the generation that carried the hope to build up the institutions of the new state. Christmas 1948, the family was united for the first time in their own home; his second child, Axel, born in January 1949, was on his way, followed by his first daughter, Heide, three years later in January 1952. As secure as his situation seemed, his mind would not calm down. Driven by the duty to seek higher, material security was occasion for renewed ambition, for aiming at higher goals, for becoming a better human being. His resolution for 1951 that he promised to his wife reads like this:

“Again, we have made good progress, internally and externally. But let us take the resolution to live even more “essentially”, not to come to a halt at external matters and to

work on ourselves, so that we become righteous human beings. Both of us could do it if we only put enough effort. That's what we want to promise to ourselves for the New Year, don't we?" (30.12.1950)

For him, the occasion to work on himself was to foster his academic career; for his wife, it was to be a mother and housewife.

### **The Battle of Equations I**

In November 1951, Krelle defended his habilitation with Erich Preiser, and his academic rank changed from *Assistant* to *Privatdozent*. His thesis was published as a book in 1953 and was entitled *Theory of Economic Behavior*.<sup>11</sup> It is a book in standard neoclassical microeconomic theory starting with a theory of choice, applied to consumers and producers, combined in a general equilibrium, as the foundation for further macroeconomic research. Technically, it was on the level of Hicks's *Value and Capital*, and lagged behind the international literature, access to which was difficult in post-war Germany. But Krelle tried to catch up. His first other publications included a review of Paul Samuelson's *Foundations of Economic Analysis* that would be foundational for his further work.<sup>12</sup> It was not only a review, but also a statement in favor of the use of mathematics in economics. He clearly appreciated the engineering approach to economics, which met his preference for simple mechanical reasoning, which in turn resonated well with his Prussian mode of viewing moral and political life as a matter of rules, protocols, and duty rather than sentiments and affections. Thus, the kind of economics he bet on

was clear: U.S. economics of a neo-Keynesian kind. A research trip suggested itself. He applied for and won a Rockefeller fellowship for the 1953-54 academic year.

In order to be allowed to travel to the U.S., Krelle had to report his military career. Apart from denying the legality of the promotion in May 1945 from Major to Lieutenant Colonel (SS-*Obersturmbannführer*), he explained his activities in the SS. He no longer concealed but explained — and apologetically.

“Regarding the last two positions, I note that since the beginning of 1944, when the losses at SS divisions were too great due to military mistakes, General Staff Officers of the Wehrmacht were being sent to SS divisions against their will. None of them was a member of the SS. When I received the command, I wrote to the SS leader that I did not intend to join the SS. But at that time we felt obliged to prevent useless human sacrifices by being responsible officers – for also the soldiers who had been conscripted to the SS were human beings” (Krelle to Combined Travel Board, January 5, 1951).

In addition to his publications in economics, in 1951, he also wrote a non-technical pamphlet concerning the question of the rearmament of West Germany, called *Militarism*.<sup>13</sup> He argued for the importance of the army though limited to defense, the virtue of obedience though limited to “strict” rather than “absolute” obedience, which applies to the military though not to the rest of the society – as if his professional ethos as officer had always fitted better a democratic society! Regarding the contested Oder-Neisse border between Poland and Germany, Krelle, like many, still considered the possibility of WWIII that would correct the injustice of WWII, just as WWII was to correct the injustice of WWI.

In August 1953, Krelle embarked on the *Queen Mary* in Cherbourg. On his way, in Belgium, he visited the battlefields of WWI as well as those he himself knew from 1940. He spent most of the Rockefeller year until April 1954 at Harvard and MIT, then visited for some weeks Michigan and Chicago, followed by a touristic trip with his wife, and a summer in Los Angeles at UCLA and the RAND Corporation. He thus visited the most important of those institutions associated with the transformation of the discipline of U.S. economics during the 1950s, when several branches of technical social science research became channeled into a new “neoclassical” hegemony.<sup>14</sup> Taking part in this arrival of a new economics clearly brought about the impression that it was here that things happened, and that Germany was sorely behind. In particular, ordo-liberal discourse that dominated German economics appeared to be a forlorn form of thought. This impression was reinforced by the presence of those emigrants from Germany who in the 1920s advanced mathematical economics and now made great careers in the U.S. (such as Marschak, Haberler, Morgenstern, and Schumpeter).

Krelle socialized easily in Cambridge. He organized hikes with other German-speaking colleagues, notably the Austrian economist Gottfried Haberler, but also Hans Möller, his teacher back in Tübingen who visited Boston. In his first report to the Rockefeller Foundation (October 7), Krelle noted that facilities were better, that financial pressure on students was lower, that relationships with professors were closer, but also that conformism in American society was greater, that students had less choices over classes, and that the academic quality of undergraduate classes was lower. In graduate classes, however, the quality was incomparably higher than in Germany. He singled out the econometrics classes of Walter Chipman and also Paul Samuelson’s graduate seminar at MIT, where he was introduced to a theory that was about to take shape in those days, optimal growth theory. Yet, there were also seminar debates that

clearly went above his head – as the Patinkin controversy regarding his PhD topic, Say’s Law<sup>15</sup>: “The whole discussion ... is rather sophisticated and I do not feel very satisfied with the outcoming (*sic*)” (Report, November 10). But most importantly for his further career, he got into the approach popularized by Wassily Leontief, input-output analysis. With his interest in neo-Keynesian economics and econometrics, he was right at the front of the most popular branch of technical economics at the time. He tried to “dynamize” input-output analysis in a Keynesian fashion, that is, include monetary questions and business cycles, and then apply it to growth (Report, November 10). He wrote a draft of a paper and presented it in Leontief’s and Haberler’s seminar. The intention to become the missionary of what he learned in the U.S. back in Germany took shape. He anticipated the battle he had to fight:

“It will be my first duty in Germany when I am back to try to put these things further there. But tradition is not very favorable for that. Economics descends from history and political science. Therefore the accent lies more on the philosophical and ideological side of the economic problem and the pure pragmatism as best represented by statistics and econometrics is often regarded with suspicion” (Ibid.).

In early April, he left to go to the University of Michigan. He had conversations with Richard Musgrave on public finance and George Katona on consumer psychology, and he was impressed by the “exceptional personality” of Kenneth Boulding. He also became friends with the Austrian-born economist Wolfgang Stolper, a friendship that would lead to a positive review of Krelle’s habilitation.<sup>16</sup> But most importantly for his future, he met Lawrence Klein, several years younger than Krelle but already the leading figure in Keynesian macroeconometrics. As Klein later recalls: “I was impressed by his knowledge of modern economics at the time of his American

visit and by the enthusiasm with which he embraced the subject” (Faculty Archive (FA), “Krelle”).<sup>17</sup> Moving on to Chicago in June, Krelle met Jacob Marschak, Gérard Debreu, Lloyd Metzler, and, as he reports, “the impressive” Tjallingis Koopmans at the Cowles Commission in Chicago, the perhaps most vibrant site of the transformation of economics during these years. He also got to know another young German research fellow, who had been, like him, a PhD student of Eucken in Freiburg, Martin Beckmann, now at the very front line of programming techniques.<sup>18</sup> In late June, Krelle’s wife arrived, and they plunged into a memorable four-week trip into culture and nature between the East and West Coasts. They knew where their home was.

Spending August in Los Angeles, he expanded his network further by meeting Karl Brunner and Tibor Fabian at the Institute of Numerical Analysis. He also visited the RAND Corporation, where he met John von Neumann, George Dantzig, Marvin Hoffenberg, Harry Markowitz, and Lloyd Shapley, *the* mathematicians and economists working on programming techniques far beyond the context of national accounting. Oskar Morgenstern noted in his diary about Krelle’s visit: “Dr. W. Krelle (and his wife) showed up (at RAND). He stays for four weeks and wants to see me often. He studies the Games and understands that his habilitation is totally outdated. But his knowledge of the literature, etc. is rather patchy”.<sup>19</sup>

Lagging behind the front line of research in the U.S., the opposite was true in Germany. Some days after returning to Heidelberg in September 1954, fueled with new ideas, he reconnected with what would become his new intellectual home base: the theoretical section of the *Verein für Socialpolitik* (VfS). After its intermission during the NS period, the section was relaunched in 1949 by Erich Schneider. Krelle already had given a talk at its first official meeting in January 1953.<sup>20</sup> It was there that he would find an audience, allies, followers, recognition, and a place to move things ahead. Krelle was younger than those who remained of

the pre-war generation (such as Andreas Predöhl, Erich Gutenberg, Erich Schneider, and Walter Adolf Jöhr), and older than those who began studying, like him, in the post-war years (such as Rudolf Richter, Alfred Eugen Ott, Karl Brandt, Rudolf Henn, Gottfried Bombach, Carl Christian von Weizsäcker, and Jürgen Kromphardt). Now, at the second official meeting, his German-speaking contacts from the U.S. were also present, such as Haberler, Gerschenkron, and Beckmann. Krelle knew personally those economists whose works others struggled to barely understand. Compared to the older generation of German theoreticians, he was technically far ahead; and for the younger generation, he became an example of rigor and discipline (Rudolf Richter, e-mail to author, December 2016). Even if his profile was to represent U.S. standards, the region where he applied data and intervened in political debates, and specifically his preferred language of publication, was German. Throughout his career, he published mostly in the three leading German journals: the *Schriften des Vereins für Socialpolitik*, the *Zeitschrift für die gesamte Staatswissenschaft*, and the *Jahrbücher für Nationalökonomie und Statistik*. He thus published in the same journals as other economists critical of both Keynesianism and its technical level. Confrontation was unavoidable. The president of the VfS asked Krelle to remove from one of his first manuscript submissions several graphs and the formulas.<sup>21</sup> Thus, early on, Krelle wrote methodological pamphlets for mathematical economics; next to the physics-like exactness, he argued for ideological neutrality in contrast to literary economics, against the legitimacy of those who do not understand mathematics, and for a peaceful co-existence of several approaches.<sup>22</sup>

Economists were not the only group interested in Krelle's U.S. experiences. In October 1954, he was invited to talk at the *Gesellschaft für Wehrkunde* (today the *Gesellschaft für Sicherheitspolitik*), founded by the American military forces and connected to the U.S. military

complex. In May 1955, he spoke about his experiences at the local group of the German Africa Corps, whose board he was a member of. In this group, memories were shared, facts gathered, orders re-evaluated. The past continued working within him, and he sought preservation and understanding, if not recognition, for what he did. In 1959, he wrote an anonymous novel about the tragic bunker attack at *Hir el Ksiba*, using fictional names (Memoir II: 26 ff.). He sought a literary form, describing the unreal world of the desert, the morale of his troops, the conflicts of leadership, and the moral tragedy of that, once successful, turned out strategically irrelevant. Questions of the responsibility of leadership and obedience to orders, but also bravery and honor in combat, continued occupying him, all the more since these issues became absent from the public mind. He did not publish the novel, not even anonymously.

In Heidelberg, he became the driving force of the Institute for Econometric Research (*Institut für ökonometrische Forschung*), founded in October 1954. Its formal head was Helmut Meinhold, but Krelle practically ran the institute. He now put to work what he had learned in the US: he created the first effective input-output national account for Germany. The institute provided results for the *Wirtschaftswissenschaftlichen Beirat über Volkswirtschaftliche Gesamtrechnung*, and its tools were used by the statistics office for their national accounts.<sup>23</sup> This was the beginning of a research program that Krelle pursued until retirement. Data analysis, in those days, was a matter of diligence, routine, and discipline that fitted well his work spirit and, among his younger collaborators, evoked comparison with his known military background. He was called the *iron* Wilhelm, and also the *jet fighter*, working 14 hours a day at a minimum and doing head stands to fight tiredness.<sup>24</sup>

His efforts paid off. In 1956, he received a “call” as extraordinary professor for econometrics and theoretical economics to the University of Commerce (*Handelshochschule*) in

St. Gallen, Switzerland. The decision was not easy, as the family had to leave Germany: “Don’t we lose the connection to our country, which we do not want to leave and to which we intimately belong?” (Chronicle 1956). He accepted the call. There, he introduced operations research not only as a field of study, but also applied it to airport optimization at Swiss Air.<sup>25</sup> His engineering approach to questions of economic organization and policy took material shape when he built a mechanical simulator of the economy, not unlike the Phillips machine, for the World Exhibition in Brussels in 1958.<sup>26</sup>

Switzerland was a memorable time for the family. In December 1955, their fourth and final child, Gabriele, was born. Everyone was in good health, the children were promising, and the Alpstein Mountain was close. Krelle was a glowing alpinist, a passion that his children would inherit. The family was very active to the point that they could appear quirky to outsiders. Being stingy regarding housekeeping allowances or dispenses for the children’s clothes, Krelle loved extraordinary leisure activities. No destination was too far, no church or museum would be missed on one’s way, and no rain could stop the hikers from arriving just in time for the opera in the evening. Later, on Christmas Eves, the family would go again and again through the photos taken during the years in St. Gallen.

A first fright came from Axel, his second son. While the parents were traveling, baby Axel became sick, and the sitter brought him to a doctor who diagnosed an ear inflammation. It turned out to be a brain fever. Without penicillin and with the late diagnosis, the fever had long-term effects. That happened in 1950, and in Switzerland it was clear that Axel would not develop as other children did. He was plagued by severe headaches and epileptic seizures, and he had difficulties focusing. Conscious of his disability but still aspiring to the values of his father, Axel

was tormented from knowing that he would never become an achiever. He would require help for the rest of his life.

## Science War I

After three years in Switzerland, in 1958, Krelle received a call from the University of Bonn. This time the decision was not difficult. In Bonn, the family would no longer be strangers, and he would have a “chance to have greater influence” (Chronicle 1958). He saw the opportunity to turn Bonn into a modern, U.S.-oriented economics department. When he signed into the Army Supply Office in Bonn, he registered with actual his last rank of *Oberstleutnant a.D.* There was nothing to hide any more, as no one was interested any more.

Bonn’s economics department was a stronghold of ordoliberalism. Krelle replaced the prominent Erwin von Beckerath, a central visionary of West Germany’s social market economy. Beckerath’s chair was the chair for economic theory, the meaning of which was wide open in the early 1960s – descriptive theory in the sense of the historical school, conceptual theory in the sense of ordoliberalism, and technical theory in the sense of Keynesian economics. Indeed, among other candidates who refused offers for the position Krelle accepted were Alfred Müller-Armack and Heinz Müller, both from the Beckerath circle. Beckerath being retired, Fritz W. Meyer and M. Ernst Kamp remained as the representatives of ordoliberal thought. In two decades, however, Bonn would become a stronghold of technical economics and the first department in Germany from which literary, non-model-based economics would disappear completely. The increasing number of students in the 1960s certainly gave occasion to more

specialization, but without Krelle's active hiring strategy in an increasingly competitive market for academic economists and specifically personal network – he became president of the theoretical section of the VfS in 1962 – the change would not have happened the same way. His network was a significant factor all the more given that only since 1972 had formal hiring procedures with application documents and job talks been required.<sup>27</sup> The battle took place on two fronts: he had to convince the established literary economists that the new hires he proposed could pass as economists, and he had to convince the hires who came mostly from mathematics departments that they fit into an economics department. His overall argument was to favor “research quality,” as if there was only one standard that could be applied to both literary and technical economists. He played down the conflict between standards of quality to the point that what in fact was an imperial mission appeared as a competition between equals.

The first three hires were decisive: a new chair in statistics and in sociology, and a new hire in business economics. As a young dean, age 42, Krelle orchestrated all three hires. After consulting Erich Gutenberg in Cologne, an old member of the theoretical section, Krelle could place Gutenberg's promising pupil and son-in-law Horst Albach in the chair for business economics. Albach quickly became familiar with the methods of operations research, as well as friends with Krelle (they served as godfathers of one another's children). The close connection between business economics and general economics, excluding traditional business studies, has contributed significantly to the economics brand in Bonn.

For the chair of statistics, Krelle tried to persuade a German-speaking econometrician from the US to return to Germany. Gerhard Tintner, a student of Oskar Morgenstern since 1938 at the Cowles Commission, was listed first; Martin Beckmann, by now at Brown University, was listed second; and Krelle's colleague from St. Gallen, Hans Paul Künzi, was listed third. After

Tintner declined, Krelle tried to convince Beckmann, who expressed concerns that he was not enough of a statistician: “My main concern is that I am not a statistician and do not even have formal training in it. That is why I do not feel at home in the statistical branches of econometrics” (FA, “Sociology”, August 9, 1960). But when Krelle promised a separate institute for operations research and allowed him to continue his post at Brown, Beckmann accepted. Beckmann’s research on optimization problems in transportation fitted well with what Albach did in business economics, as well as with what Krelle had done in Switzerland.<sup>28</sup> Linear (and non-linear) programming brought together the new triumvirate of Krelle, Albach, and Beckmann, a critical partnership of young, like-minded, research-oriented economists. Jointly, they founded the German Society for Operations Research in order to draw other departments into their new economics.<sup>29</sup>

Importing new expertise into economics, at the same time a spin-off of traditional elements of economics took place: notably, a chair for political science and another for social and economic history were created in the philosophy faculty. In a strategic fashion, Krelle argued that the same should *not* happen to the chair of sociology. The segregation of sociology, he wrote, would

“promote the tendency of a division of economics and social science disciplines at the University of Bonn (...) Such a division can only be a detriment to sociology and to political science, which attains the character of a historical science, and is likewise a detriment to economics, which would be deprived of its sociological and political elements” (FA, “Sociology”).

This commitment to sociology, rather than an expression of genuine pluralism, was an effective valve for his claim to freedom of choice in other positions. After a systematic search, they hired Gottfried Eisermann, a specialist in Pareto's sociology. Eisermann, however, would play no role whatsoever in the department. "He was a foreign body, isolated and frustrated" (Schönfeld). He could not alter the further separation of sociology and political science, which founded their own institutes at the faculty of philosophy in the course of the seventies. The segregation of economics in the social sciences became an irreversible reality.

In 1962, the Ministry approved of a second chair for economic theory, which opened up the divisions between the old literary and the new technical style of economics. After lengthy discussion, the committee put Beckerath's former assistant and Eucken's successor in Freiburg, Heinz Müller, and Krelle's successor as an assistant to Preiser in Heidelberg, Alfred Eugen Ott, both on the first place of the hiring list. This caused the literary league – Meyer, Kamp, Eisermann, and the retired Beckerath – to submit a "special vote" (*Sondervotum*) against the decision (FA "New Chairs 1963"). They opposed the "institutional-legal approach" to the "mathematical-quantitative approach" in economic theory and asked for a balance between the two. The latter, they argued, lacks policy relevance, which requires "a close and, to date, not yet smooth cooperation of economists with scholars in law, sociology and other humanities" (Ibid.). They asked for a candidate who covered "those fields of applied economic theory, which are not covered by the modern approach of mathematical research". They added:

"The (mathematical-quantitative) approach is much based on very specific research methods developed in non-biological natural sciences, in military research and in business administration, which have led to successes in solving operational problems.

Whether these methods turn out useful when being transferred to the economy as a whole is still controversial in spite of the optimism of their representatives” (Ibid.).

Krelle’s reply contains almost every aspect of his hiring strategy, including the reference to the ideological motivation of the opponents:

“(The opponents) basically say that Müller, in contrast to Ott, represents neoliberal economic policy ... The fact that one’s theoretical work serves one or the other political position, however, is as irrelevant, to quote Stackelberg, as the question to print one’s books in *Antiqua* or in *Fraktur*. In economic theory, the normative aspects are largely absent. It’s only a matter of right or wrong ... In this respect, German theoretical economics lost its connection with the international development. I cannot notice any “directions” and “tensions” mentioned by the special vote. The mentioned “directions” are ... normal problems between generations, as they always occur everywhere” (Ibid.).

Again, in a highly conflictual situation, Krelle played on the difference between political mania and scientific reason, downplaying the existing conflict between epistemic standards. Since the rector of the university felt unable to decide whom to hire, the committee was changed, followed by three years of repeatedly failed hiring attempts. In the face of a difficult market for economists, the faculty agreed on an in-house hire, Krelle’s assistant in Heidelberg and in Bonn, Ernst Helmstädter.

The further hires in the 1960s were more peaceful, showing pragmatic respect between the two powers of the department. At the end of the sixties, two important replacements of

Helmstädter and Beckmann were smoothly made. Krelle's strategy was again to favor "quality" over predetermined fields of speciality, allowing him to hire scholars who had no degree in economics (FA, "Chairs 1969-1971"). Since 1966, there has been a center for economics in Belgium, which has housed European economists with a U.S. orientation, thus guaranteeing "quality" in Krelle's sense: the Center for Operations Research and Econometrics (CORE).<sup>30</sup> Two important appointments, Werner Hildenbrand and Peter Schönfeld, were previously associated with this center. At their arrival, about a decade after Krelle's appointment, they no longer felt anything of the science war of the sixties. The ordoliberal economists passively "lived towards their retirement" (Schönfeld).

"I stood in the shadow of Krelle, and had nothing to do with those [old economists]. There were no more fights ... Albach, Krelle and Beckmann had prepared the terrain. The others had no more say; they did not dare to utter anything at faculty meetings" (Hildenbrand).

## **Battles for Rationality**

Apart from shaping department policy, Krelle took over the task of adding his share to Germany's national cause. The public image that he established in the 1960s and 1970s was that of a Christian economist representing the values of justice and rationality. What we now know as hydraulic Keynesianism became popular in Germany during the 1960s, leading up to the politics of the social democrats' minister of economic affairs, Karl Schiller. In Krelle's research, during

this period, Keynesianism was the driving factor.<sup>31</sup> Out of his work in national accounting sprung an interest in the field of growth theory.<sup>32</sup> But for the general public, he became specifically known for his contributions on wealth and income distribution, motivated not only by Keynes but also the bible.<sup>33</sup> It was this policy-oriented research that brought him the reputation of a left-wing economist and opened the door to political and also to business consulting. Since 1973, he had been a member of the *wissenschaftliche Beirat beim Bundesministerium für Wirtschaft*, the leading dozen economists consulting the government in economic policy. There he was known for arguing for reducing the non-wage labor costs that were relatively high in Germany. He also became active in questions of the so-called co-determination of workers in entrepreneurial decisions of big companies, on which he advised the government (1968-1970). His 1968 report on the ‘corporate rent shareholding of employees’, known as the Krelle-report, caused public debate.<sup>34</sup> In the same vein, he was active as a consulting member of the board of directors of the Krupp consortium (1972-1990). There he argued against the labor unions and their autonomy in wage bargaining. He took part in the decision to close down plants - the *Hüttenwerke Rheinhausen*. “As bitter as it was, it (the decision) was not difficult for me. It was clear that this had to be done in order to save the whole (enterprise). (...) If you can only survive by the amputation of one limb, one has to decide for the surgery, as deplorable the loss might be” (family letter 1988).<sup>35</sup> When Krelle was in a field hospital in April 1941 after the attack in Greece, he refused to have his leg amputated, as he did not trust the medical doctor. He simply ran away, and, luckily, the leg healed over the next several months (Memoir I: 127).

Krelle viewed the economic policy of Germany as a locus of competition between nations, in which one can gain advantages by a heightened sense of rationality and evidence-based fine-tuning. He represented the same rationality in two other contexts: in the military and

in the Protestant church. While he refused to take part in military consulting in the immediate post-war period, between 1970 and 1972 he advised the government in a reform of the structure of the army (*Wehrstrukturkommission*). The engagement with the church was steadier. He was a member of the chamber for social order (1963-1985) and of the *Synod* (1973-1985), both of the Protestant church. Regarding peace and disarmament, he argued for the possibility of a defensive war. Regarding income distribution, he disputed the irrationality of Christian charity. He read the bible as ‘an economic guide’, as he called it in a later publication, arguing for rational measures for redistribution in the sense of Christian social ethics.<sup>36</sup> Personally, though stingy in family expenses, he donated regularly.

Like all neoclassical economists, Krelle stood for the idea of introducing rationality into policy, be it economic policy, military policy, or the social policy of the church. He wished to establish equality of opportunities, such that competition was fair, the best would win, and the weak would lose - as people without ambition did not deserve to profit from the common good. He argued, for example, for higher inheritance taxes such that “a Krupp-inheritor could no longer lead the sweet life of a slacker and playboy”.<sup>37</sup> The rationality he represented as a neo-Keynesian economist was less nourished by the sentiments one could observe in the U.S. – Cold War fear –, but was a rationality that echoed Prussian virtues of discipline and the rule-based structure of the military.<sup>38</sup>

While in his professional life he had considerable success in following his sense of rationality, at home in his family, during the 1960s, he faced the limits of rational life. His wife was diagnosed with an “endogenous depression”, as it was called in those days.

“The two years of 1960 and 1961 put a strain on us: Ali often became sick; the depressions returned again and again after short breaks - fortunately interrupted by periods in which she was well and we could all breathe again. Hopefully we can now hope for a real recovery, so as to have back again the old, joyful Alix!” (Chronicle 1961)

But this recovery did not happen. Doctors thought that the cause was hyperthyroidism, and the medication that was prescribed at the time, Lithium, helped little and had strong side effects. It was a life of ups and downs. When she was in a depressive phase, Krelle would invite guests to cheer up his wife, though the social burden to represent the professor's wife might have worsened the situation. In one of her manic phases, she sold the furniture and art pieces, which, at Krelle's return, had to be bought back again. Notwithstanding, he remained supportive and was never ashamed of his wife. Their love was deeper than the circumstances of life. Difficulties only reinforced his will to accomplish, also as a husband.

His children did not all inherit his will to accomplish. While Gabriele was an ambitious gymnast taking part in national competitions, his oldest son Rainer was rather rebellious against his Über-father. Smoking, wearing his hair long, drinking with friends in his basement room, he performed poorly at school. Lacking the ambition of his father and having open conflicts at home, however, they were best comrades when hiking in the Alps. After school and two years of military service, to the surprise of all, Rainer decided to study economics in Bonn. Before doing so, in April 1968, he went on a hike with two friends to climb the *Ortler*, the highest mountain in the eastern Alps. He and his father had interrupted the same hike already twice. Arriving late at a cabin - a snowstorm was predicted - the three friends went out against the warning of the host. None of them returned. Three days later, skimming the newspapers during breakfast, Krelle read

of three German Alpinists missing at the Ortler. He went straight there to organize search troops, Italian military units included. The bodies of the two friends were found, but not Rainer's. His remains are still in the ice of the Chevedale glacier. Two years later, Krelle declared Rainer dead.

The shock left no words. For about five years, his daughter recalled, Krelle was “emotionally invisible” to anyone around him. He shut down. During the war, when he was lying in the trenches under artillery attack, there was a rule that nobody was supposed to say more than what was practically necessary; psychologically, everyone had to deal with the situation on his own. Still five years after, people would tell him that it was time to take off his black tie. What could he do? As before, so again now, work was the only therapy to live through his grief. He became a workaholic. Neglecting himself, he “whipped himself further” (Heide Krelle). Just as hard work was a way to cope with the millions of deaths during the war, so was now his work an escape from the terrible situation at home. “My father has fled ... Professor Krelle has lived a very tragic life. He had to endure a lot. Work helped, but the balance between private life and professional life was gone” (Heide Krelle). Krelle's discipline at work had its roots not only in the nationalist motive of getting Germany back on track - after the opprobrium of 1945 - but also was an escape from an intolerable family loss. Professionally, therefore, the 1970s would thus be a great success.

## **Battle of Equations II**

Krelle's national accounting model grew and grew. It entailed 35 definitional equations, 27 behavioral equations, and 7 extrapolation equations, which were handled with the use of an IBM

7090, the best computer one could get at the time. The “colossal painting” of the economy, as he called it, became known as the “Bonn model” and was in competition with the Tübingen Model of the Institute for applied economic research.<sup>39</sup> They produced midterm predictions of four to five years, considering also structural shifts in the economy. His model was successful for being used as a basis for decisions made by the German Council of Economic Experts.<sup>40</sup> In 1975 Krelle became president of the VfS.

His work on the Bonn model paid off also on an international level. Starting in 1968, Krelle began to collaborate with Lawrence Klein on the so-called Project LINK. The project aimed at nothing less than a model of the global economy.<sup>41</sup> It was based on several compatible macro-econometric models in seventeen OECD countries, eight socialist states and four developing countries with the aim of making global economic forecasts. It was the largest econometric data system in the history of national accounting – neo-Keynesian social physics at its best. “Krelle was a founding member and inspirational factor in the development of this project (LINK),” Klein would later witness in a recommendation letter (FA, “Krelle”).

The prominence of Project LINK attracted substantial funding from the German Science Foundation (DFG), the so-called Collaborative Research Center 21 (*Sonderforschungsbereich, SFB*), *Econometrics and Operations Research*, which was the first of its kind in German economics. It was a clear manifestation of the success of Krelle’s research orientation at the department. All technical economists, and none of the literary economists, were involved. Thanks to the increased resources, Bonn’s economics department soon became known as the hub of high-end research. Notably with the research areas of Werner Hildenbrand and Carl Christian von Weizsäcker, Krelle had brought colleagues to Bonn who soon took over his scientific leadership. Hildenbrand was the German representative of axiomatic general equilibrium theory

à la Gérard Debreu (who received an honorary doctorate from Bonn in 1974). One of the characteristics of this Neo-Walrasian research program, however, was to be highly skeptical of econometric analysis à la Lawrence Klein. Hildenbrand's group was purely theoretical preferring questions of mathematical structure to those of empirical applicability. Next to Hildenbrand, Weizsäcker, who for some time had held a double post in Heidelberg and at MIT, increased Bonn's reputation beyond Krelle's name. After the unsuccessful hire attempt in 1965, he accepted a call in 1973. Son of the physicist-philosopher Carl Friedrich von Weizsäcker, he was internationally known for his work on optimal growth theory, and then turned to questions of regulation and competition policy.

One would expect that shared resources and the technical integration of the department resulted in intellectual cooperation. Krelle certainly hoped that project LINK might become a joint effort of the entire department, as he considered forecasts the shared goal among all branches of economics. However, his model hardly inspired his younger colleagues who were mostly skeptical of macro-econometric modeling because of its lacking theoretical depth and overstated optimism regarding forecasts. Also, rational expectations models developed in the U.S., as well as fixed-price models developed at CORE, were attracting the minds of his young colleagues. Krelle soon had to recognize how highly specialized and little unified technical economics was. Economic theory and econometrics developed their own intellectual cultures – just like at the CORE, the big brother of Bonn's economics department. Passed were the years when linear programming combined econometrics, operations research and economic theory. Thus, Krelle had to change the title of the SFB 21 to “economic forecasts, decision-making and equilibrium models”, referring to the juxtaposition of Krelle's Project Link, of Hildenbrand's chair in axiomatic equilibrium theory, and of Albach's and Korte's chairs examining business

decisions. SFB 21 was fully neoclassical, but it was a collection of research groups without dialogue, as if they received orders from above without questioning them. One activity that could have brought them closer were the multi-day hikes of more than ninety kilometers organized by Krelle. But apart from those at Albach's chair, hardly anyone joined in this kind of challenge.

Even if hardly anyone took up Krelle's research, he was respected as the father figure of the department. His Prussian virtues of service to a higher cause, fairness, patriotism, selflessness, and full commitment to one's task were appreciated. "He was a real father, and he was able to bind the people personally" (Hildenbrand). His students, and those of his colleagues, would populate German economics departments, initiating structural changes in the discipline from which his entire network profited. Thus he received honorary doctorates, among others, from St. Gallen (1970), Vienna (1971), Karlsruhe (1976), Münster (1981) and Mannheim (1987). All of his colleagues knew of his past in the military, but nobody asked him about it. At the time, such questions were simply not broached.

"It was known that he was a soldier, since he had studied rather late. He was with Rommel in Africa, he never concealed that ... Only someone like him could show such a self-discipline. But what he had exactly done, I did not know. One would never have dared to ask. This was so in Germany. One did not talk about it. Today, I can't understand why. I even did not ask my own father" (Hildenbrand).

At one point in the 1970s, Krelle considered becoming the rector of the university, but hesitated. He thought that university officials might inquire into his past, which could be damaging to the university.

„*Semper aliquid haeret*. For this reason I have never assumed public offices, such as the rectorate of the University of Bonn. I would have had to explain beforehand to all persons all the details, and ask for forbearance. On the one hand, on my part, I do not need to do this - because given the information I had, I have done nothing wrong during this time -, but on the other hand, I would have harmed the institution that I felt connected to. So I preferred to stay in the second rank” (Memoir II: 130).

## **Science War II**

Half-and-half was the score in the early 1970s of Bonn’s economics department: half literary economists, half technical economists. The breakthrough came with the retirement of the ordoliberal Hans Meyer and the replacement of his chair in economic policy. Initially, another new chair for economic policy with a “social-political” orientation was planned that prefigured a renaissance of the old literary school. But after a process of nearly eight years, Krelle succeeded in that technical economists held both chairs, and the department was fully taken over.

In May 1972, the two positions were announced for the first time. No less than five years of four rounds of repeatedly failed hire attempts of German-based political economists would follow. Apparently no literary economist wished to join the stronghold of scientific rigor in Bonn. In order to put an end to this search, Krelle brought up the idea to move Weizsäcker from his former chair in theory to Meyer’s policy chair, making the search into one for a replacement for Weizsäcker’s theory chair who could have been found quite easily. The sign of the changing

identity of the discipline could not have been more apparent. Ten years before, Weizsäcker's research would have been considered pure theory, but now it could be regarded as 'theoretical foundations of economic policy'. Krelle clearly changed the rules of the game to the extent that economic policy was no longer equated with literary economics, and economic theory no longer with technical economics; all economics would be technical.

This time the difficulty was not to convince the faculty but the students. After collecting signatures for a petition, the students wrote an open letter to the Senate of the university, and then, directly to the minister. It was a matter, the students wrote, of "balance" between economic policy and economic theory, whereby the "overcrowding" of economic theory would be "cemented" as a normal state (FA, "Economic Policy", "9.1.1977"). They succeeded. In August 1977, the minister of education rejected Weizsäcker's move. He invited three student representatives together with two faculty representatives to talk it over in his minister's office. After that conversation, the faculty's decision was approved and the students were asked to make concrete proposals for the future to improve the situation. Thus, Weizsäcker became a professor of economic policy. As a theoretician to replace Weizsäcker, Martin Hellwig, professor on the associate level, was asked to resign from the hiring committee and apply for the position. Despite the controversial question of whether Hellwig was an in-house placement, he was ranked first. After another student protest, the minister approved, and Hellwig succeeded to Weizsäcker's chair in economic theory.

At the end of the seventies the influence of those who did not support the new line was lost. The department had been taken over. On the occasion of his 70<sup>th</sup> birthday, Kamp declined the usual honors of the faculty explaining to the dean:

“To tell the full truth, my personal absence corresponds to my overall mood these days. This is so because, in Bonn, the development of quantitative methods, which is so important for economics, was so influential and the qualitative methods, which are indispensable to economics, have been so visibly marked down that a personal celebration becomes intolerable to me ... We all know that disagreement, also in science, can be fruitful. In order to work and live with them, tolerance and respect for the other is required” (FA “Kamp,” 14.6.1979).

Such voices being marginalized, Krelle came to be known as the modernizer of German economics. He was called the “Nestor”, that is, the guard of the warriors, of economic theory in Germany. As he would repeatedly note about his work: “I tried to align German economics with international standards after World War II. I believe that this has been successful, at least in Bonn” (FA “Krelle”, letter to dean, 29.11.1991). However, even today, it is not the case that German economists feel that they indeed have caught up. Krelle’s national motive, instead, was generalized as a structural character of a whole discipline. Still today the same feeling of lacking behind the U.S. characterizes the careers of economists and the structural decisions in research and teaching.<sup>42</sup>

Krelle’s efforts and successes might have helped him deal with the sad situation at home, but they did not improve it. He lived side by side with his wife, whose mental health did not stabilize. Hyperactive as he was, neighbors could observe how he alternated between reading in the sun lounger, swimming in the neighbor’s pool, and doing pull-ups at the tree, while his wife was sitting catatonically in her chair next to him. “If mommy had not been so sick, I would not have written the one or the other book”, he would say later to his children (Gabriele

Schumacher). But they remained loving partners. Despite her disease, “we in the family, we always saw her as she really was” (family letter 1997).

Her first attempt to commit suicide was in 1972 and it would not be the last. Several times she was found by her daughter Gabriele, who took care of the situation at home. Being in the hospital, she would ask her daughter to smuggle in the pills for another attempt. In 1981, the eighth attempt at suicide was deadly. Having spent seven weeks in the hospital, doctors thought she was no longer in danger; three days later, November 7, she was dead. Rose-Alix Krelle died “after long, and serious suffering”, one could read in the newspaper. Her death was redemption. “Every soul has the right to calm down at one point” (Gabriele Schumacher). But in spite of his understanding attitude regarding her disease, Krelle kept the fact of the suicide secret.

## **The Final Battle**

At the same time as Krelle lost his wife, he was struggling to keep the second anchor of his life, his work. A new law passed that forced him into retirement at age 65, thus in spring 1982. With the support of the department, he sued the province (his employer) against the law, arguing that he still was the head of SFB 21. He did not win, but he could stay until a replacement was found. Retirement thus did not come until the end of 1984, at age 68. In the final report of the SFB 21, he wrote: “Closing a long and, as this report shows, successful activity is, of course, also sad ... But as the death of individuals has its good sense within the overall development of a species, so is also the death of institutions ... in which science unfolds”.<sup>43</sup> Krelle was replaced by Reinhard Selten, later the first German Nobel laureate in economics.

The department celebrated his farewell and the end of SFB 21 with a two-day colloquium in December 1984. Gérard Debreu, Nobel laureate in economics the same year, gave a speech calling him the founder of “a major center of research in mathematical economics ... His authority, his judgment and his enthusiasm have been key elements in the success of the undertaking”.<sup>44</sup> Lawrence Klein added: “A research generation has run its course, and the entire professional world is the better for it”.<sup>45</sup> His student Helmstädter and colleague Albach praised his discipline and fairness, and enthused over the long hikes. Military comparisons abounded. Dean Knütel spoke about a changing of the guards (FA, “Krelle”). Krelle himself thought of a moment in the war, as he commented on the festivities in the family letter for Christmas 1984:

“I felt a bit like in 1941, when I had to give up my company in Africa to become a battalion commander, and my soldiers passed me waving on their vehicles on their way to a new mission, while I sat alone on the officers’ chest looking back into the desert and waiting for the pick-up truck” (family letter 1984).

After the celebrations, in response to all the encomiums, however, Krelle did not express the deep, heroic meaning that he assigned to his work. He merely quoted Luke 17, verse 10: “So you also, when you have done everything you were told to do, should say, ‘We are unworthy servants; we have only done our duty’” (FA, “Krelle”). Having done “only his duty”, Krelle was basking in the success of being regarded as the modernizer of German economics. His younger students, Korte among others, were so grateful for the structural change he initiated, and the career opportunities this change offered, that they nominated him for a national medal. He got it.

After all the sacrifices he endured during his life, he finally received a *national* honor: the Federal Cross of Merit in 1987.

After retirement, Krelle continued working normal hours - "I do not want to steal time from God" (family letter 1993). Until 1989, he ran a project similar to project LINK on structural change of the world economy, including Eastern European countries, in collaboration with the International Institute for Applied Systems Analysis, IIASA, in Vienna.<sup>46</sup> Critical of the communist regime throughout his life, 1989 was a happy moment for him. Soviet scientists could now visit Bonn, but also the family of his sister Gabriele could freely visit. After the reunification in 1990, known for having set up a leading department in West Germany, Krelle was thought of when it was decided that the economics faculty at Humboldt University in Berlin should transition from a faculty ingrained in the socialist state to a competitive research faculty. Beginning in April 1991, Krelle led the committee that decided who would succeed in the new state. The old contracts, so was the political decision from above, were turned into temporary contracts, such that the local professors had to reapply and compete with western economists to regain their old posts.<sup>47</sup> Though it was not Krelle who was responsible for the political goal that the faculty had to adopt western standards, it was his duty to see that the goal was met. And he did so assiduously and thoroughly.

The work of the committee was impeded by unstable political decisions regarding the number of posts and legal cases on the individual level regarding work law, but also because the university sued the senate against the procedure and even won.<sup>48</sup> Despite these impediments, his decisions were firm and determined. He was sensitive to the social issues, but did not obsess over them. In his family letter for 1991, he compared the situation in Eastern Germany with the Silesian hand weaving of the 19<sup>th</sup> century that had to give way to machine weaving, a difficult

but necessary social change. Again, the same justice he saw in war and in economic competition applies to science. If the scientific quality of the GDR professors did not meet that of those who received their PhDs from Bonn or Boston, it was just to decide against them – ignoring the fact that Western publications, for example, were censored in the GDR. Again, what was an imperial mission appeared as competition between equals. Hardly anyone out of thirty professors of the old regime made it to the new one. One spoke of a ‘clearcutting’ (*Kahlschlag*), a ‘human drama’. Hans Schmidt, one of those who held one of the many mid-rank positions, after a long humiliating legal fight, even committed suicide.<sup>49</sup>

The new faculty earned a respectable reputation as a new center of economic research and granted Krelle an honorary doctorate in December 1994. He was praised as someone who “as a human being is an example for all becoming scientists”.<sup>50</sup> Not everyone agreed. It is unclear who began the search into Krelle’s past, but soon one could read in the press: Krelle was an SS soldier and thus a “Nazi”. Military archives proved it. He suspected a planned smear campaign against the former GDR professors, though the hunt might have been launched by a former student of the faculty, who asked a private detective to look closer, who in turn found a left-wing journalist from the *Berliner Zeitung* to report about it.<sup>51</sup> Students at Humboldt were sensitive to the issue, continued the search, and asked the university to withdraw the honorary doctorate. The university, in turn, set up a committee that commissioned a military report, which was adopted by the university Senate in June 1996: yes, Krelle was an officer in an SS corps, but most likely was never a member of the SS, and refused requests to leave the Wehrmacht. This is what mattered for Krelle, but in public his name was now associated with the SS officer who kicked out the Bolshevik economists from Humboldt University. Had West Germany done as

thorough a job of denazification as did the GDR (or as he did with the socialist economists at Humboldt), Krelle could not have had an academic career at all. Not just, many thought.

After all the struggles and sacrifices, his professional achievements seemed to be forgotten. He fought a losing battle to recover his reputation, also legally. The trial against the journalist Andreas Förster from the *Berliner Zeitung* went on for years without success, as did the student's hunt for more evidence and the bad press. All the details of the confusing moments of the end of the war returned in the public press: the transferral to the SS corps, be it willingly or under protest, the war crimes that occurred in his division consisting of thousands of soldiers, and also the orders he signed, though not formulated, were cited: "The principle: fanatic fight for every meter homeland, which will cost the enemy streams of blood ... must be our sacred duty" (February 2, 1945).<sup>52</sup> That was not the Krelle whom his students in Bonn knew from classes on distribution theory or the history of economic thought. His response that he helped save lives was difficult to digest for young students. They wrote:

"It is part of a shoddy normality in the Federal Republic that even those call themselves part of the resistance who, together with their SS units, committed war crimes until the end of the war. This mocks the victims and those who actually took part in antifascist resistance" (18<sup>th</sup> Bonner student parliament, in personal archives, Heide Krelle).

Trying to remain firm in public, in private Krelle suffered the pangs of guilt from such and similar statements. In 1996, he commented in his letter to the family:

“And now to the unpleasant ... smear campaign in the SED press in Berlin against me (in vengeance for the reform at Humboldt University). I was confronted with SS membership, though I was never in the SS ... Well, I have to accept the insults. We fought badly enough for the wrong cause - in ignorance, in self-inflicted ignorance. We must bear that. Only someone who was in this situation can understand the tragedy”.

The tragedy comprises both, as the reader might understand a little more after the preceding pages, the misunderstandings of today's generation regarding the attempts at integrity in the delirium of the end of the war, and Krelle's own misunderstanding of the nature of the regime he fought for. There was no understanding of, let alone recognition for, what had happened at the end of the war. The belief in the honor of his soldiers separated him from anyone without memories of having fought in battle.

## **Battle Lost**

Despite the resentment over his public image, Krelle, in the last years of his life, did not lower his ambition. He remained active in research as a member of the follow-up SFB, and taught classes on business cycles and the history of economic thought. Until 2002 he attended the theoretical section of the VfS, and until 2003, he went to meetings of the *wissenschaftliche Beirat beim Bundeswirtschaftsministerium*, the meetings of the *wissenschaftliche Kränzchen*, and those of the Rotary Club. Also, he kept organizing classical house concerts, read Shakespeare and Thomas Mann, and went hiking in the Eifel. He took care of his son Axel until 2003, when

his daughter convinced him to give up this duty to an assisted-living facility. Once a year, on Easter Monday at Rainer's birthday, he went to the Chevedale glacier at the Ortler. "Up there, I am at home, as it were, and if I could once be there with Rainer, that would be beautiful. But for now, I still have tasks on earth" (family letter 1998).

He also remained a faithful visitor of the *Hirschberg circle*, the meetings of his comrades of the military academy in 1944. There, war deeds were still analyzed in the terms in which they were carried out at the time. There, he was understood. When in 1993 he was diagnosed with cancer, not having seen a doctor regularly, he wrote an autobiographical account until the end of the war, a manuscript on which much of the first chapter of this article is based. While his memories of the Weimar Republic describing his nationalism in response to the social misrule and the opprobrium of the lost war were indeed published, he gave copies of his war memoirs only to his children.<sup>53</sup> Yet, he wrote to his nephew that the "manuscript should be as illustrative as possible, such that someone will also read it" (Krelle to Christof Huth, 30.5.1993).

His last task that he set for himself was to write a book on economics and ethics that underlined his moral ambitions as an economist. He packed his ethical concerns into a neoclassical model that he knew from the 1960s – modeling preferences of justice and of norms to be included in a general equilibrium model. In 2001, he wrote to his family, "If there is something good (in the book), our dear God will give me the time to work it out. If not, he will call me soon" (family letter 2001). The first part was published in 2003.<sup>54</sup> It did not find a large readership, but he continued working on the second part.

His health increasingly worsened. After suffering an embolism, he wrote at the end of 2003: "In the middle of this year, I thought that I would not survive this year - which was not a message of fright to me, but on the contrary, a recognition that I had done enough in this world

and can now leave the work to others” (family letter 2003). In May 2004, new orders that he signed were found in Czech military archives, and the press once more confronted him. “Why can’t you stop bothering me with this?”, he asked the journalist from the *Berliner Zeitung*. “I had 16,000 men in my division. Do you think that I knew everything that happened there? I was never a member of the SS. And that is what counts ... Why don’t you let me die in peace?”<sup>55</sup> Bedridden, he spoke of exercises to stay in shape, and continued drafting the second part of his *Economics and Ethics*, which was never finished. When the doctor told him that he had only days to live, he did not show the heroic, accepting attitude that he always had towards death. Being ready to die was a principle of his entire life; it allowed him to take risks and to be courageous in the face of abundant suffering. But ultimately, he did not want to die. He reacted viciously to the doctor.

His funeral was large, and a sense of tragedy lingered over the celebration, as the SS issue was still on everyone’s mind, making the occasion even sadder. After his funeral, his daughter Gabriele was left in charge of her father’s estate; she packed away the documents from World War II, afraid that they would reach the public. It turned out that there was no money left for the funeral, and she had to take out a mortgage. Krelle had donated much of his money, and had lost track of his finances. Adopted Godchildren from all over the world claimed to be heirs, too. This was what was left at the end his life, misunderstandings – misunderstandings that overshadowed his entire, complex life between the military, science, and family.

Every once in a while his daughters still call the alpine guards at the Ortler. The glacier is melting, and their mother had left a small case made of ivory, filled with personal wishes and a flower of Edelweiss. It shall be put into Rainer’s grave, once he is found.

## Personal conversations

Martin Hellwig, June 2015, Bonn.

Peter Schönfeld, June 2015, Bonn.

Werner Hildenbrand, June 2015, Bonn.

Heide Krelle, November, 2015, Villingen.

Gabriele Schumacher (born Krelle), and Hans Georg Schumacher, June, 2016, Nördlingen.

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<sup>2</sup> Frankl, Viktor E. (2006[1945]). *Man's Search for Meaning*. Beacon Press, p. 113.

<sup>3</sup> Krelle, Wilhelm (1993). *Erinnerungen*, Teil I 1916-1941 (Memoir I), Teil II 1941-1945 (Memoir II). Personal archive Heide Krelle.

<sup>4</sup> See Rüter, Christiaan F., Dick W. de Mildt (2010). *Justiz und NS-Verbrechen*, Bd.I-XXI. Amsterdam University Press. Krelle often reported that the response to so-called *Freischärler*, irregular civilian attacks against the military, had been an issue discussed among officers since the invasion of Poland. Should they be treated as civilians or as military? (Memoir II: 48)

<sup>5</sup> This took place in *Hir el Ksiba*. The deaths were related to a lack of coordination with the artillery. The casualties, 11 killed and 34 wounded, were meaningless because the British gave up the emplacement anyway.

<sup>6</sup> Stöber, Hans (1966). *Die eiserne Faust. Bildband und Chronik der 17. SS-Panzer Grenadierdivision Götz von Berlichingen*. Kurt Vowinkel.

<sup>7</sup> For every year since 1945, Krelle wrote a family chronicle, an important source for this chapter (personal archive Heide Krelle). It documents shared events of the family (like travels, hikes, and cultural visits, illustrated with small drawings of landscapes, buildings, and people) as much as it is a tool for seeing things in a positive way.

<sup>8</sup> For Stackelberg's influence see Krelle, Wilhelm et al. (1993). *Heinrich von Stackelbergs Marktform und Gleichgewicht: Vademecum zu einem Klassiker der unvollkommenen Konkurrenz*. Wirtschaft und Finanzen.

<sup>9</sup> Krelle, Wilhelm (1947). *Das Say'sche Theorem der Nationalökonomie*. Dissertation, Albert-Ludwigs-Universität Freiburg im Breisgau.

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- <sup>13</sup> Krelle, Wilhelm. „Militarismus,“ *Zeitschrift für die gesamte Staatswissenschaft*, 107: 698-722.
- <sup>14</sup> See Döppe, Till, E. Roy Weintraub (2014). *Finding Equilibrium: Arrow, Debreu, McKenzie and the Problem of Scientific Credit*. Princeton University Press.
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- <sup>44</sup> Debreu, in Krelle (1986): v.
- <sup>45</sup> Klein, in Krelle (1986): vi.
- <sup>46</sup> Krelle, Wilhelm (1989). “Main Results of the Bonn—IIASA Research Project”. In: *The Future of the World Economy*. Springer: 39-82.
- <sup>47</sup> This procedure was called “phasing out” (*Abwicklung*) and required a formal closing and reopening of those faculties that were “ideologically biased” – philosophy, law, history, pedagogy, and economics. Next to internal members, the external members of the commission came from his personal network: Martin Hellwig and Jaakko Honko from Helsinki, a regular visitor in Bonn.
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<sup>49</sup> Feldbauer, Gerhard (2006). „Die ‚Wende‘ trieb Zehntausende in den Tod: Opfer der ‚friedlichen Revolution‘“, *Icarus*, 24.11.

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<sup>51</sup> *Berliner Zeitung*, 6.2.1996.

<sup>52</sup> Quoted in *Junge Welt*, 17.02.2007: 8. His last promotion in May 1945, though, was not unknown to the reporter.

<sup>53</sup> Krelle, Wilhelm (1993). „Als ich den Youngplan erläutern musste“, in Rudolf Pörtner (ed.), *Alltag in der Weimarer Republik: Kindheit und Jugend in unruhiger Zeit*, DTV.

<sup>54</sup> Krelle, Wilhelm (2003). *Economics and Ethics I: The Microeconomic Basis*. Springer.

<sup>55</sup> In Förster, Andreas (2004). „Grenzen der Erinnerung“, *Berliner Zeitung*, 15. Mai, p.3.

# Embracing the Personal

*And Tackling the Contemporary in the History of Economics*

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August 2017

**Abstract:** This essay reflects on historiographical questions that are related to the fact that we write history of that which is still remembered by some among us. At a theoretical level, I propose a framework that is necessary for fully embracing the presence of the personal in science: the scientific self, a concept at the center of what I discuss as *lived epistemology*. Trying to write histories of the economist's self, in practical terms, poses questions of harmony and conflict of interests. I argue that the question of bias that overshadows the historiography of the contemporary is a *Scheinproblem* that appears if one avoids the underlying ethical questions when assuming the personal.

**Key-Words:** scientific self, *Zeitgeschichte*, lived epistemology, interest conflicts, existential meaning of science, oral history.

**Word count:** ca. 8000

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# Embracing the Personal

## *And Tackling the Contemporary in the History of Economics*

### Introduction

Contemporary history, as a field, emerged in the post-War period in response to the experience of the 20<sup>th</sup> century as one of ‘extremes’ (Rothfels 1953, Catterall 1997). It is that branch of history that deals with the past that is still remembered by living persons. Contemporary history, *Zeitgeschichte* in German, is history that is still time - that is, lived memory that is not yet and may never be settled in clean facts and hard documents. It is marked by open wounds, distorted by manipulations, haunted by unsettled conflicts, anxieties to fall into oblivion, oppressed memories, disappointment, melancholy, grief, and other feelings attached to the personal past of our parents’ and grandparents’ generation. It is history that concerns us. While historiographical issues of preceding periods mainly involve how and in what terms we can bring back a past that is foreign to us today, contemporary history has to deal with these sentiments and negotiate them between generations.

And so does the history of contemporary science. As difficult as the relationship might be between modern masters of knowledge and the ephemeral stream of time, scientists must also rely on being remembered. And as elsewhere, emotions run high when negotiating what will be forgotten and what will endure. In fact, the very struggle over the validity of truth, in practice, comes down to a struggle over what is remembered in science. It is in the midst of this struggle that the historian of contemporary science adds his contribution to the production of collective

memory. The presence of those relevant to contemporary science can be as virtual as an imagined reader – such as Robert Lucas, who will never read historians’ accounts of the representative agent – or as intimate as E. Roy Weintraub writing about his father (2002). In any event, it is unavoidable. All practical questions at each point of one’s research – the choice of sources, the way texts are read, the style of writing, the kinds of arguments, the choice of contexts, but also the way to respond to referees and to communicate results – are not only scholarly, but also personal and, furthermore, moral choices. The history of economics becomes a matter of you and me, of them and us. Whose interests will my history serve? How do I relate to eyewitnesses, to those directly involved, to those who still have an axe to grind? Shall I ignore them, confirm them, or shall I blame or even provoke? While historical distance leads historians often to simply translate ideas for today’s readers, the presence of those who remember force us to think about our *ethos* and self-consciously demarcate our voice. In the following, I will reflect on the historiographical questions related to the fact that we write the history of that which is still remembered by persons living among us.

Contemporary history is historically specific. In classical historiography, say that of the 19<sup>th</sup> century historical school of the Rankean kind, historical vicinity was perceived as threatening to the professional codes of proper documents, reinforced by the doubt that eyewitnesses are not reliable historical sources as they are as tainted by interests (Vierhaus 1957). Historiographical debates since this period have been overshadowed by the question of whether the presence of particular interests in the writing of history causes a *bias*, and if the historian becomes an accomplice or in any sense instrumental to current power struggles. The experience that forced western historians to nevertheless enter contemporary history was the 20<sup>th</sup> century as a time of extremes – referring initially to the disaster of the two World Wars that

resulted in a renewed sense of historical responsibility when thinking about the present. The field thus emerged from a *sense of urgency*, an immediate “need of self-articulation” (Rothfels 1953: 5) caused by the lack of understanding between cultures, people, and generations that are separated by their extreme experiences. And the sciences, economics in particular, having gone fairly blindly through major transformations in the 20<sup>th</sup> century, have added their share to the lack of comprehension of how we ended up in the world we live today. The sciences are a *symptom* of the 20<sup>th</sup> century.

Responding to this sense of urgency, the following essay provides a historiography of the contemporary that fully embraces the presence of the personal in science. I begin by presenting a theoretical framework for writing histories of the scientific self - a concept at the center of what I call *lived epistemology* (1).<sup>2</sup> Writing such histories, in practical terms, raises questions of harmony and conflicts of interest in the history of science (2). I argue that the question of bias that overshadows the historiography of the contemporary is a *Scheinproblem* that appears if one avoids underlying ethical questions when assuming the personal.

## **(1) Lived epistemology**

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<sup>2</sup> History and theory being exclusive of each other in 19<sup>th</sup> century discussions, the meaning of the term “historical theory” is not obvious. The notion of “historiography” might indeed be considered a placeholder for topics regarding the conceptual framework (theory) and the methodology (practical tools) in historical research. Among historians of economics, only certain highlights in historical theory are known (Popper, Kuhn or Foucault). In the following, ‘theory’ in the history of science refers to the question of what is the historical nature of knowledge, what are the historical *sujets* that follow from it, and what is its intended result. Together with the discussion of the practical questions related to applying this theory, one might speak of a historiographical approach, if not a research program.

If contemporary science requires a discussion different from ancient science, knowledge seems to have a historical nature. This in itself is a contentious claim. In the history of philosophy, reflections on the historical nature of knowledge grew out of dissatisfaction with the conceived, specifically Kantian, contrast between that which is known and that which is ephemeral. For Kant, time is merely a form of apperception (*Anschauung*) but not one of cognition (*Verstand*). He also placed time awkwardly as the “scheme” or pattern of imagination (*Einbildungskraft*): that which renders intuitive categories of cognition (such as causality, unity, or necessity) when being applied to what is presented to our senses. It was only at the beginning of the 20<sup>th</sup> century that our sense of before and after became a central concern in the context of neo-Kantian epistemology when scholars like Wilhelm Dilthey, Ernst Cassirer, and Edmund Husserl tried to spell out how cognition is enacted in concrete and how knowledge, and science in particular, results from historical life (see Rheinberger 2010). Time and history, for them, were central to what it means to be an understanding being. This same post-Kantian desire is at work when, for example, Lorraine Daston describes her work as a “history that would pose transcendental questions in a highly particularistic mode” (2000: ix).

Consider, for example, Edmund Husserl. The starting point of his historicized epistemology was the “subjectivity that accomplishes science” (1970: 295, see also Hyder and Rheinberger 2010). To speak of the subjective accomplishment of science is to focus on the necessity of someone to carry out knowledge: Someone needs to keep track of, has to be with, and has to go through the reasoning, the evidence, the judgment, the research material, etc. Even the most general or abstract theory is the result of a unique and concrete course of *efforts* required to accomplish it. This is not only a matter of “practices” that can be described in a behavioral fashion (Stapleford 2017), but requires a distinct attitude (*wissenschaftliche*

*Einstellung*) that brings about a different way of experiencing oneself. Knowledge is not only a set of justified beliefs representing something, but, first of all, an experience for the subject carrying out this knowledge. Science can be viewed as a way of feeling, viewing, and relating to oneself, others, and our surroundings. In this way, science can be described as any other experience through which we come to understand the seat of science in life, as Husserl said. Or, to quote a more recent historian of science: “Just as we have social histories of eating, dying, breeding, and getting and spending, so too we can have a social history of truth making” (Shapin 1994: xxiii).

Husserl spoke of such analysis as a ‘regression to the life-world’, as the ‘digging out of buried sense-accomplishments’ (*Ausgraben verschütteter Sinnesleitungen*). What must have already been accomplished in our life for an epistemic interest to settle within us? What is the ‘act of meaning formative for the experience of scientific thinking’? (Dodd 2004: 7) The history of these buried accomplishments is what he calls, in contrast to the history of facts, the history of sense, the writing of which is the “tremendous task of a true and genuine philosophy of science” (Hua VI: 398\*). In the context of the mathematization of the natural sciences, he asks:

Where is that huge piece of method (...) that leads from the intuitively given surrounding world to the idealization of mathematics and to the interpretation of these idealizations as objective being? (...) How formulae in general, how mathematical objectification in general, receive meaning on the foundation of life and the intuitively given surrounding world — of this we learn nothing. (Husserl 1970: 296)

This huge piece of method is particularly daunting when considering 20<sup>th</sup> century economics. What remains as its ‘residual’, its body of knowledge, are some vague intuitions – ‘doing the best’, ‘scarcity’, ‘waste’, ‘tastes’, ‘markets’ – treated with formally defined theoretical concepts – equilibrium, aggregation, mechanisms, sunspots – that are treated by a set of techniques – graphs, functional analysis, axioms, regressions, calibrations, simulations – which are some of the ingredients of what are called models. Now think of the 20<sup>th</sup> century: two wars that exceeded what the world had seen before, atomic destruction, genocide, growing inequality, the space race, the rapid development of communication technologies, and what not. How did it come that *this* 20<sup>th</sup> century created the conditions of *that* kind of knowledge to prevail over other forms of economic knowledge? The last century was a time of historical ruptures that made many silence, paper over, and oppress memories that us with incomprehension between people, cultures, and generations. 20<sup>th</sup>-century science has contributed to this great incomprehension, insofar as it tells us little about its origins. 20<sup>th</sup>-century man is a struggled being, and so are 20<sup>th</sup>-century economists; the halls of economics offered one place in this harassed world, but nobody tells us what place that is. This is how I came to understand Husserl’s notion that science ‘lacks the knowledge of what gives meaning to it’.

Heidegger also had something similar in mind when he mentioned, without elaborating, an existential in contrast to a logical concept of science (1962 [1927]: §69b). According to the logical concept, science is viewed in terms of its results; that is, “something established on the interconnection of true propositions.” According to the existential concept of science, instead, he asked what were the “existentially necessary [conditions] for the possibility of Dasein’s existing in the way of scientific research” (Ibid: 408). Science is, in his words, a “mode of Being-in-the-world,” a “way of existence”. The distinction between the personal and the scientific is, in this

case, a “privative mode”, as Heidegger would have said, of a more intimate connection between the two. Modes of reasoning, modeling techniques, can be understood as attitudes we adopt toward our experiences and concerns, thus a kind of “self”. The scientific self tells us about the tone and posture with which one speaks to others and allows to raise our voice with weight and thus to demand others to listen. Scientific claims not only result in anonymous truths that may or may not be the case; the question of truth, rather, refers back to the state of being able to make a truth claim, which is, first of all, a “claim on me.” Science in this sense, as Söderqvist boldly claimed about the case of Niels Jern, is like writing a diary (2003). In the words of one of the commentators of Husserl:

Thus to reflect on the possibility of making the claim myself, in my own voice, not only brings the truth of a proposition into question, but it also brings myself into question as well — for the question here takes the form: what would it mean, to be the one who would make such a claim. (Dodd 2004: 9)

With this in view, the questions to be answered are thus: What kind of person do I need to be to lend my voice to this or that scientific truth? What moral identity is induced by doing so? From which existential project is economic knowledge the result of? How is it to speak as an economist? Which attitude must one to adopt to form an interest in economic science? How does one get to see oneself as an economist, and how do others come to support this self-perception? One might call this theory of knowledge, in resemblance with the notion of lived experience, *lived epistemology*. In lived epistemology, we view knowledge not as a cognitive activity but as an experience that happens to someone.

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Clearly, this understanding of science is *critical* to the extent that science itself tells us little about its experience. Science is a representation of what is, such that speaking about oneself is limited to being subject to the rules of conduct of methods. Science is ‘selfless’ insofar as its truth is independent of whether someone is interested in it. It requires, in Galison’s words, the ‘right way of self-abnegation’ (2015). It is as if the scientist, watching a mirror, believes they are behind the mirror. Or, in Husserl’s words: “Merely fact-minded sciences make merely fact-minded people” (1970: 6). Instead, in lived epistemology, science is not considered a representation of the world, but a *response* to it; it tells us from attempts and failures to find one’s place in a historical situation; from an existential struggle of which it is a symptom or a therapeutic means. It is this critical element that renders lived epistemology a non-trivial task. The impersonality of scientific expression, reinforced by the degree of technicality, creates a *complex*, or better, a historically contingent relationship between ‘life’ and ‘work’. It is not obvious from Debreu’s work that he preferred mathematical rigor to economic chit-chat because he inherited a basic *Angst* from his broken family (Düppe 2012); it is not obvious from Krelle’s publications that he wished to modernize German economics out of feelings of guilt that he, rather than his comrades in the trenches next to him, survived the war (Düppe 2018b).

There are several *sujets* that can be tackled when writing histories of the scientific self. One of them is what has been called the *scientific personae*; that is, the character the scientific community or society associates with the scientist and which an individual aspires to (Daston and Sibum 2003). In contrast to a mere activity, science implies a social role, a calling, an ethos,

or in any event an aspiration to identify with. Scientific personae are historically specific, as one might sketch with a big brush: the ancient scholar, the medieval learned, the Renaissance instrument maker, the early modern traveler, the natural philosopher of the enlightenment, the 20<sup>th</sup> century intellectual, today's experts, etc. (for an overview, see Part in Lightman 2016). In all these cases, being a scientist requires committing to specific epistemic virtues - such as precision, patience, moderation, but also radicalism, purism, and perseverance - that not only discipline thought but offer a moral identity – such as seriousness, honesty, dedication, selflessness, or responsibility. As Steven Shapin took as a precept of his *Social History of Truth*:

What we know of comets, icebergs, and neutrons irreducibly contains what we know of those people who speak for and about these things, just as what we know about the virtues of people is informed by their speech about things. (1994: xxvi)

Note that we do not require that these epistemic virtues ever be fully realized. They do, however, provide the scientific experience with a teleological frame. The scientific personae is, as Daston argued, located between the individual biography and the social institutions of science. It is a 'mask' providing a social identity. While social epistemology can categorize them, and historical epistemology can describe their transformation, in lived epistemology we spell out the life path that is subject to these virtues. Why is it that a certain scientific personae is attractive as a choice of life for this or that person in this or that time? Which historical situations bring about the conditions under which these virtues become attractive models of life?

Aspiration is one source of the scientific self; another is the *psychological need* these aspirations respond to. What are the psychological conditions of the possibility of feeling and

acting like a scientist? Due to an age-old *intrinsic value* of knowledge as if a basic instinct of mankind, stylized by epistemic virtues such as selflessness, we have a very poor understanding of this need. However, considering that a large part of mankind lives without scientific ambitions, and considering the costs of a scientific career – long periods of education, higher mobility, lower social bonds, small markets due to high specialization – it is not at all obvious why someone develops such a degree of commitment. We might look in vain for a general theory of these needs as they are, like the scientific personae, historically contingent.<sup>3</sup> But we can observe individual cases: insofar as it allows for solitude, it might attract those who react against attachment (as Shapin (1990) has shown for 17<sup>th</sup>-century scholars); insofar as emotions are left out of discourse, it might attract those with emotional disorders (John Nash being a well-known example); insofar as scientific principles promise to anchor what is otherwise felt as being uncontrollable, it might attract those needing to deal with anxiety (as Leonard (1998) has shown for Carl Menger in the tumults of Vienna of the interwar period); insofar as science is only hypothetically related to reality, it can provide consolidation for suffering as for the Russian mathematician Sofja W. Kowalewskaja after witnessing the death of her sister: “At such moments mathematics are a relief. It is such a comfort to feel that there is another world outside one’s self” (in Koblitz 1993: 202); or, to go yet further, insofar as scientific objects promise immutability, its aesthetics might attract a death instinct as the daughter of the mathematician Claude Chevalley said about her father:

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<sup>3</sup> There are surprisingly few attempts that ventured a psychology of science. A small field journal in the *Psychology of Science and Technology* has been launched by Gregory Feist. It is limited to statistical surveys of pre-defined measures, such as personality tests (Feist 2008). Another, epistemologically more profound attempt, is still the classic study of Gaston Bachelard published in 1938, *The Formation of the Scientific Mind* (2002), which, in a modernist spirit, tries to explain scientific progress.

The way my father worked - it seems that this was what counted most – was the production of an object which then became inert; dead, really. It was no longer to be altered or transformed. Not that there was any negative connotation to this. (...) [My father] thought of mathematics as a way to put objects to death for esthetic reasons (in Senechal 1998: 26).

In all these cases, it is the experience of knowledge and not its representational content that explains its meaning for the scientist.

Epistemic virtues as well as epistemic needs usually do not come in isolation but are manifold and can be in conflict or in harmony with other virtues. Selves, in contrast to academic compartments, are not neatly limited. How is science integrated in the rest of one's life? The precision, dedication, and patience that is needed for building up a large-scale macro-econometric model, for example, can be in surprising harmony with nationalist sentiments and Protestant virtues of hard labor (Düppe 2018b); the virtue of communitarianism, to mention one of Merton's classic norms of science, can come into conflict with other virtues of the reward system of science (Düppe and Weintraub 2013); the very desire for individual happiness can be compromised by the devotion and "monomania" needed for achieving a certain degree of intellectual depth (Daston 2008); and the need for feeling relevant is consistently frustrated by various limits of scientificity, a repeatedly lamented source of scientific pessimism and cynicism in the heterodox critique of economics (Colander and Klammer 1987). The same question can be posed on a more global level: Do the values of science match those of the rest of society? Such was the big question of Mertonian norms in the face of WWII, a question that was formative of

the very field of science and technology studies (1942). While in social epistemology one can observe and state these conflicts, it is in lived epistemology that their experience is described.

To be sure, the scientific self can be a topic of individual life writing, but it can also be the subject of a larger, *cultural history of science*. What kind of science is brought about by witnessing the French Revolution, the October Revolution, the Holocaust, the atomic bomb? Two examples: The general mistrust in economic affairs, during mercantilism, for example, can explain why visions of social structures at which this mistrust is neutralized, are attractive to those who are subject to this mistrust, merchants (Düppe 2011); the general feeling of anxiety during the first years of the Cold War can explain the rise of the protocol-based notion of scientific rationality (Erickson et al. 2013). Such more speculative histories allow us to understand the culture of science in a twofold sense of our culture being determined by science *and* by science constituting its own culture – two facts that surprisingly often do *not* form a contradiction. As hard as 20<sup>th</sup>-century scientists tried to express themselves differently from other forms of cultural expression (literature, art, and even religion), as little they understood how much they were caught by them.

If we cannot expect a general theory resulting from lived epistemology, then what is its purpose? While it presumes a shared sensibility for life stories, it is not a form of voyeurism. Scientists, though very reflective when it comes to justifying their practices, have little means to think about themselves in other than the terms provided by their methodologies. If one has not independently acquired a language from art or literature, one has no means for thinking about the meaning of one's profession. Lived epistemology can provide such language through examples. Just as art can intensify the visual experience of forms and objects, so can lived epistemology intensify the intellectual experience of knowledge. Lived epistemology aims at intriguing and

intimidating the scientist to evoke a sense of self and thus of responsibility. This might be best compared with what *parables* do - describing moral dilemmas, questionable decisions, and the suffering of the consequences of these decisions. Παραβολή means to “walk aside”; histories of scientists’ selves can be apologues that transmit a moral question in an indirect, but nevertheless concrete way. In this sense, life-writing in science can then indeed be called an “edifying genre”, as Söderqvist has called it (1996).

Coming back to the contemporary, these *sujets* of the history of the scientific self are, in principle, not limited to a specific period. Lived epistemology can rely on sources that are not limited to the contemporary such as diaries, letters, and personal notes – all what helps in getting to know someone. But for two reasons the contemporary leans itself to lived epistemology. First, historical vicinity makes it easier to get to know someone as we can actually meet him or her. In other words, there are more “sources” of personal memories. Second, today’s specific regime of knowledge of economics favors abstraction over description, which increases the urgency of drawing back this form of knowledge into the life-world of economists’ selves.

## **(2) Interest conflicts**

When applied to contemporary history, this research program pushes the limits of that which is considered ‘the private sphere’ – that has its own history and cultures. If archives impose a 30-year limit for legal reasons – a criminal record would otherwise not be a historical but a legal document – and the encounter of someone in person gets around this limit, contemporary history runs the risk of violating privacy laws. When the lines between the personal and the

representational in science, questions of interests thus impose themselves. In this section, I reflect on these questions.

The root of the problem is that historical work is only one minor source of the production of collective memory. Economists themselves fondly remember, and express their feelings through review articles, science prizes, honorary doctors, theorem tagging, journalism, and blogging, but also in person when one meets and talks to them. History is a strategic realm in which several interests are negotiated among those who have access to it. And if one does not want to be a popularizer of their ideas, a caricature of their self-display, or imprisoned in one's reactionary feelings against them, questions of conflict and harmony of interests must be negotiated, as well as reflected in historical work. Before publication, one is often asked to assure that there are no potential conflicts of interests, and one might push doubts aside because of the pressure of publication. But the lack of self-interrogation in this respect is a serious problem in the field of contemporary history of economics. So what are the sources of harmony and conflicts of interests?

Consider the following correspondence I received in response to a commissioned work on the history of the economics department in Bonn at the occasion of a university anniversary. The circumstances are telling: while all other faculties had internal authors, some retired professor who is considered as having sufficient knowledge of the department's past, there was no past economist who was deemed to have had enough expertise about their own history - one example of the cultural ruptures typical of the 20<sup>th</sup> century, in this case the rupture between generations of literary economists such as Arthur Spiethoff, Beckerath, and Schumpeter, and a younger generation of technical economists such as Wilhelm Krelle, Werner Hildenbrand, and

Reinhard Selten. After the work was done and the internal refereeing process finalized, the higher faculty positions changed, and I received the following message:

“As a (high faculty member) of the Faculty of Law and Economics at the University of Bonn, I would like to thank you very much for your beautiful draft of the history of our department. (...) May I make a cordial request? There are two passages that I beg you to consider critically. (...) (One) concerns Mister Krelle: The description of his family situation seems to me ... not that which readers expect from a department history published by the university ... I would be very pleased if you could consider my concerns when preparing the final version” (March 30, 2017).

What happened? And how to respond?

There is harmony of interest insofar as the field of history is considered a source of scientific *credit*. As the gatekeeper of the archive, at its best, the history of economics is perceived as a selection process of that which is worth preserving. Whether one is supposed to add to already given credit, or, like a lender of last resort, grant credit that had been refused, the hope is that we *feed their ego* (or that of their deceased mentor and their community). Often incapable of distinguishing personal admiration from gratitude for career opportunities, economists think of history as a form of worship. Clearly, as the main source of cooperation, this power to grant credit makes contemporary history also vulnerable to *censorship* (Cantor 2006). Economists cooperate because they wish to *influence* the first sediments of history. Writing about those who have been already credited, one is not supposed to deviate from the official terms; writing about those who have *not* been credited, one is equally supposed to undo past

injustice. The role of the historian as a *scholar* in explaining scientific performance that is nevertheless *instrumental* for the reward system constitutive of this performance is thus deeply precarious. You might have received similar messages as this:

“You proclaim the message that the development of the department was essentially the result of a game of power of different networks, in which nationalism, if not Nazism, and the desire to find the connection to the USA were the driving forces. You are free to hold this opinion, but I consider it to be wrong and not well-founded. (...) You do not see that the very great success of the Bonn Department was essentially due to the scientific quality brought about here” (famous German economist to author, January 28, 2016).

One way out is to appeal to the shared scholarly ethos by claiming the right to ‘set the historical record right’, thus hiding behind facts. I used this rhetorical move when responding to the attempt at censorship cited above.

“The background of the family was well-known in the department, and is therefore a historical fact of the faculty. (...) To ignore this fact would mean to be caught by history of the department instead of reporting about it” (author to high ranked faculty, April 3, 2017).

Clearly, the issue was not the fact of there being a fact, but to undermine his feeling that family information is inappropriate as presentism. Reference to facts in contemporary history easily begs the moral issues looming behind the noble motive of setting the record right. It is to play

down conflicts without facing them – as if there was only one way of writing history, which is the very denial of the historicity of human life. Note also that it is only once one reduces the writing of history to the reporting of facts that the question of bias can be posed. It is thus a derivative of an attitude that tries to avoid questions on how to relate, as a person, to those who are concerned by the stories one tells.<sup>4</sup>

Another source of cooperation, next to the power to grant credit, is the anonymity that the halls of modern knowledge provide. Whatever the historian writes, a model or a proof stands. Because nobody would see the value of a great theorem diminished by what kind of person the discoverer is, technical economists speak more easily about their lives, about the existential dimensions of their work, the sacrifices their career required, and the disappointments their career evoked. Mathematicians often lead a light life which is reflected in a rather liberal attitude, flirting with the scientific personae of an eccentric non-conformist. Having asked Monique Florenzano if she wondered why Gérard Debreu stuck out as a person, she replied: “No I did not. In this profession, people are crazy anyway, and he was not weirder than others” (personal conversation).

However, the person matters in economics more than in other sciences insofar as the discipline always travels under a cloud of ad hominem arguments and ideological suspicion. This was a specific challenge to my work with *socialist economists* in East Germany (2017). Being trained to utmost professional dedication, and to personally represent their work, they had a strong work ethos to defend and to communicate. However, their professional dedication was a

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<sup>4</sup> The issue of bias is put forward in many forms. One of them, a cognitive bias, is related to memory hubs and memory loss put forth in cognitive theories of biographical memory. Adopting the perspective of the encounter of the historian and historical actors does not lend itself to this discussion. One does not need a commitment to historical positivism in order to balance out what someone says and who says it – we do this all the time in our daily lives.

political duty, controlled ultimately by the secret police, such that they learned to hide or control the display of personal matters. Also, they clearly suspected that I, born in West Germany, embrace the winner's version of history and treat them as mere dogmatists. General respect for historical truthfulness was largely burdened under the tenets of dialectical materialism, where historical memory is but a symptom of power relations. Cooperation stood and fell ultimately with their own coordination. They acted as a "collective", though the interviews were conducted individually. They might have coordinated what to reveal and what to hide, which made their memories no less interesting. Even if their commitment to the party-line was of varying degrees of dogmatism, the order of the interviews was of increasing dogmatism, according to their own judgment. However, it turned out that all of them were similarly critical about the political limits imposed on them, and that they shared very similar biographical memories. After all, the solution was to write on a "generation", which allowed me to distance from claims about individuals.

Another group that can be an important source for contemporary historians are those who suffered from the intellectual obsession of economists and from their elevated ego brought about by the academic reward system: family members and friends. Bringing in their voices meets the genuine purpose of oral history to give voice to minorities otherwise unheard. Some might be protective of the self-display of their close fellow, but others are also willing to correct it and to share what happened behind the stages of representational ideas and referential truth. Talking to them is to learn about the lived struggle for ideas without knowing these ideas. Mindful of the difficulty of confronting family past, I never push, and let the participant decide how far to engage. While I try to find a way around censorship from those who wish to maintain the given credit status, it is from them that I accept censorship. So far, changes have always been minor. It is also their applause that I seek, because it is for them that our work can make a difference in

their personal lives. Regarding the same content that the high faculty member wished to omit, the daughter responded:

Thank you for sending us the first draft, which my husband and I have read several times carefully. Many tears run. (...) I think you did very well in doing justice to the character of my father. I am very happy for him. I thank you cordially (daughter to author, April 2017).

A troubled private life, unknown to the public and difficult to be reminded of - and yet, when exposed in an academic journal, she is grateful *for him*. What more could we expect from our work than helping individuals to live through grief and sorrow.

When facing open wounds and conflicts among those concerned, *balance* is certainly an epistemic virtue of historical work. What else is historical memory good for if it does not provide inclusion, agreement, and some form of reconciliation, even if this too often means revealing conflicts that are withdrawn from the public. Debreu's daughter repeatedly referred to her father as manic depressive, though he was never diagnosed. Since this judgment hardly played a role in Debreu's life (he saw a psychologist only a few times) I did not use the word. The reader might draw such judgment from my narrative but it should not be its presupposition. One sign of having found balanced language is that those who disagree about their past, those who still live through ongoing conflicts, can agree on the way the narrative is presented. Another, equally important, sign is that, as author, one has no wish to blame or to accuse, which is, to no longer reproduce the feelings of our parents and grandparents, to no longer continue their struggle with their past. In contemporary debates, we argue about actions and beliefs. In contemporary history, we come to understand them.

Potential conflicts can be, and should be, prevented by being as transparent as is necessary and by securing prior agreement. Practices in our community differ widely, which one might take as a sign of pluralism but also of a lack of professionalism (reference Jullien). Some historians of economics of an older generation, when conversing with economists, use no form of agreement, do not record, and do not ask for approval when (indirectly) quoting the conversation, such that readers are left with good faith in the author's memory and truthfulness. The trade-off is clear: When being more formal one gains agreement but one puts potential conflicts on the table, which might be a reason for withholding information or even withdrawing from participation. Considering the precariousness of our field discussed above, however, presenting myself as one of them who, presumably, shares the same interest would be a straight lie. Full transparency is certainly impossible and also not necessary, but I learned to ask for ethics approval from my university, and use agreement forms to sign, record, and grant the possibility but avoid ex post approval of direct citations. There is no recipe for best practice, and I experienced several failures: I had interviews interrupted, statements changed ex post, and imposed self-censorship in anticipation of future approval. Fortunately, it never happened that disagreements took a legal form, the ultimate failure of having dealt badly with conflicts of interest. After all, it comes down to the person's trust, which is an entirely personal question.

Another source of conflicts of interest that needs to be mentioned is unrelated to trespassing the private sphere and the credit system in science, but is related to commercial or political interests. Historians who inquire into the strictures of economists with business and political lobby groups indeed might have no other possibility than to keep economists at a safe arm's length. When Mirowski writes about the Mont-Pellerin Society or the Nobel Prize, we would not expect him to agree with the condition that members of the Mont-Pellerin Society or

the Swedish Academy agree on his account. The nature of such works, on the contrary, is to evoke disagreement in those one writes about. But it is also for this reason that this historical work is so enmeshed in the negotiations of interests that the reader tends to learn more of Mirowski's interests than the story he tells. Getting involved with commercial and political actors – which might touch on state or business secrets – does not necessarily result in the historian becoming an accomplice of their interests. For next to balance, *subtlety* should be considered an epistemic virtue in the historiography of contemporary economics. It is the subtlety of narratives that lend to them an exposing flavour that does not threaten the professional integrity of actors.

But the most important strategy in dealing with potential conflicts of interest for my work is the appeal to the human. The contemporary history of economics can provide the inclusion of economics into human memory – which knows no taboos but understanding between generations. The instinct of the older generation to share with the younger generation is very basic. Without it, memories would be no more than melancholy of an irrevocable past. In response to the dean cited above, I wrote:

“The interest in the person of Krelle is so great that an essay like this must react to it. There will be readers who will read the essay only to see how the military past is represented. And the family background shows that as a scientist Krelle did not only remain an officer, but also a human being. Also a reader of a department history is a human being, and therefore will not be offended by the human aspects of such a story. I do that in all my works” (author to Daniel Zimmer, dean, March 2017).

I received no response. Clearly, arguing would not help.

There is no general recipe for dealing with potential conflicts between economists and contemporary historians. If you do not reflect on them, however, you might end up being caught by them. The contemporary history of economics requires from each author to find his or her own balance between conflicting and harmonious interests. The quality of our work depends on how we deal individually with the precariousness of our field. And the more we know the personal implications of our work, the better we can deal with them.

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