

OBERWOLFACH - 1945

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"Oberwolfach" is a place now well known to mathematicians, the site of a (National) Research Institute founded by Wilhelm Süss in 1944; the present director is Professor Martin Barner. There are several articles and various reports describing some of the activities at Oberwolfach (see, e.g., [1] and [4]). "1945" was the time of the end of the war in Europe.

I want to tell you briefly about my contacts with Oberwolfach in 1945. At that time, after various misassignments, I had organized, in the Department of Scientific Research and Experiment (SRE) of the British Admiralty (later known as the Royal Naval Scientific Service), a group called the Admiralty Computing Service (ACS) which was to help with mathematical and computational problems arising within the Admiralty. The Director of SRE was Sir Charles E. Wright, who had been on the Scott expedition to the South Pole and who died recently in Canada. I was responsible to (the late) Sir John Carroll, an Assistant Director, who was an astronomer and physicist.

The ACS in London included

G.E.H. Reuter (currently Professor at Imperial College, London)

Alan Baxter (killed in an air crash in 1947)

and the main computations were carried out in Bath under the direction of

D.H. Sadler, Superintendent, H.M. Nautical Almanac Office.

Among the consultants were N. Aronszajn, W.G. Bickley, E.T. Copson, J. Cossar, A. Erdelyi, H. Kober, and J.C.P. Miller. Our secretary rejoined in the name Bee Quick. Accounts of the work of ACS by Erdelyi, Sadler, and myself were published in MTAC [6] and Nature [3], [5], and by B.W. Conolly in JRNSS [2].

As the European war was drawing to an end, plans were made to collect information and scientists, e.g., in rocketry and atomic weapons. Among the targets was a Dr. Hellmuth Walther, an expert on rocket engines. It came to pass that Dr. Alwyn Walther was brought to London by mistake. Mrs. Todd (who was then working in aerodynamics for the Ministry of Aircraft Production) and I, among others, were asked to interrogate him. We found that he carried with him, as a safe conduct, a photograph of himself and Courant, walking arm in arm. We learned of the existence of Oberwolfach from him.

Business was not as brisk at the Admiralty then as it had been earlier, so Baxter, Reuter, Sadler, and I conceived an intelligence

mission to investigate mathematics in Germany, and in particular, at Oberwolfach. Our scientific findings were duly reported through the proper channels. What I am now reporting is in the nature of informal social history; and, after over 30 years, many incidents have become rather vague.

We knew our way around Whitehall, and before the week was out we were officers in the Royal Navy Volunteer Reserve, with open orders and maps of all Germany. To deal with radar matters, we added Fred Hoyle to our team. We got all our shots in one day, rather than over several months, and flew to Brussels. We were rather curiously attired: khaki battle dress with navy epaulettes and hats -- the uniform of the Royal Marine Commandos (= Rangers).

Our orders got us a staff car at Brussels, and our first business was to call on the (first) wife of Professor Aronszajn, who was sheltering in a convent there. (Aronszajn had been in the Polish army and had ended up in Scotland.) After leaving gifts with her, we made our way to Wiesbaden, then the British Headquarters. Here we had our first complication: Hoyle had violent reactions to his shots and had to return to England. He was ultimately replaced on our team by F.G. Friedlander.

Next day we started northeast and were stopped at Magdeburg by the Russians. However, we saw Reuter's birthplace. (His father had been Mayor of Magdeburg, was in Turkey, and later became Mayor of Berlin.)

We carried out our mission, which included such "targets of opportunity" as we could manage, following leads from Magdeburg to Göttingen and then to Darmstadt. By this time, Alwyn Walther had been returned to Darmstadt, having grown in importance because of his having been brought to England for interrogation! As a result, he brought us to drink wine with the "King of Hessen," as the newly-appointed governor of the province of Hesse was called.

We were led through Munich to Kempten, where we encountered Professor Collatz about whose work in numerical analysis we had heard. We decided to bring him back to his home in Karlsruhe -- a complicated process, as it involved traversing the American, French, and British zones -- since it would be more convenient to interrogate him where his papers were. However, our car broke down in the Bavarian hills somewhere between Kempten and Tübingen.

When we were trying to repair our car, we were joined by a group of Russian POW's who were going east. They tried to help but failed and went on. We spent the night there partly in our car and later in a local flour mill. Next morning I decided to go to Tübingen for help. I got a bicycle and rode in my heavy uniform to Tübingen. On that day the new Governor of the French zone -- I think he was General de Lattres de Tassigny -- was inspecting Tübingen. There was no hope for help until he was lunched and wined. My mysterious uniform led me to be seated at lunch on one side of the local commander, with the General at the other. I enjoyed and endured a long lunch, having to respond to, "And what do you think, mon commandant?" after "mon général" had given his views. In due course I got my bicycle on a French jeep, and with a mechanic got back to Reuter at dusk -- Reuter thinking that I had been captured by the "werewolves." We got the car fixed (the trouble was a broken fuel pump)

and ultimately got to Tübingen, where we saw Kamke and H. Kneser; and we got Collatz back to Karlsruhe.

Then, at last, we started for Oberwolfach. At this stage only Reuter and I were left. On the way we passed a Moroccan regiment about to occupy the area. I recall that at the head of the column was their mascot, a small deer.

We reached "Lorenzenhof," in the Black Forest above Wolfach, in the first week of July 1945. "Lorenzenhof" was built originally as a hunting lodge in the early 1900's and was used for various purposes until it became a Mathematics Research Institute in the fall of 1944 -- the first Colloquium took place on 28 April 1945. The old mansion was replaced by a modern building in 1972. Neither Reuter nor I knew personally any of the mathematicians then in residence, but we knew of the work of Süß and of Seifert and Threlfall (actually still a British citizen). We were exhausted after being on the road for over a month and asked if we could rest there for the weekend. For safety, we posted notices on the main entrance to the effect that the building was under the protection of the British Navy. The next day Reuter went off to Heidelberg to fill our gas tank and get rations, and I was left alone. [Incidentally, we gave Mrs. Süß some of our rations, in particular C-rations, which some of you remember included chocolate and cigarets in a wax-covered package, and we later found the cook boiling the whole package!]

We were having a discussion on the patio when there arose a commotion among the servants. It was caused by a foraging party of Moroccan troops who wanted to occupy the building. I quickly got into proper dress with hat and in my best French persuaded them to leave the mathematicians and "même les poules" undisturbed. The very distinguished sergeant asked if it would be permitted to shake the hand of a British naval officer. Of course I said, "Yes," and they left to try their luck elsewhere. However, they later appropriated Threlfall's Mercedes-Benz.

This incident kept "Lorenzenhof" intact until the local government was set up. Before I left, I had dinner with the local military governor -- it is the only time that I have eaten wild boar, which he had shot in the hills.

Shortly after that, Reuter and I separated and I made my way home. I remember flying back in a DC-3, taking off from a corn field. At this stage I was weighing about 300 pounds, having in the various pockets of my uniform most of the mathematical books published in Germany during the war, which were given to me by their authors. Arriving in England late on a Sunday, I showed my papers to the WREN (= WAVE) on duty at the airfield. She became suspicious since my medical record showed all my shots given on one day. It took a long time to convince her and her superiors not to arrest me as a spy -- it was difficult to get hold of any of my superiors late on a summer Sunday. However, I ultimately got to London and to Hampton Court, where we then lived -- and I even had trouble getting Mrs. Todd to let a strange soldier in late at night!

If I restrict myself to my title "Oberwolfach - 1945," I have only one further incident to report. We were in close contact with the Free French Scientific Mission in London, especially Hadamard and Mandelbrojt. When I returned to London, they had returned to Paris. I flew to Paris

to brief them about Oberwolfach, since it was in the French Zone. I recall being in an office of the Centre Nationale de Recherches Scientifiques (CNRS) when Mandelbrojt was being outfitted for a visit of inspection of Oberwolfach. He insisted on trying the revolver which had been issued to him -- and there are presumably still two bullets in the floor of a CNRS office! Mandelbrojt was able to legitimize the unofficial protection Reuter and I had been able to give Oberwolfach; and since then, despite the usual ups and downs of Mathematical Institutes, it has flourished and continues to make a notable contribution to the development of our subject.

Whenever we saw German mathematicians trying to help in the reconstruction, we did try to put in a good word on their behalf, with the local authorities. In particular, one distinguished mathematician was doing dangerous work interpreting for the British in a Displaced Persons Camp -- when we first saw him he was covered with blood, having tried to stop a fight. We asked him what we could do for him, and he said, "Send me Math. Reviews." We found it easier to ask for him to be brought to England for interrogation. He was there for several weeks at a VIP camp for such people at Wimbledon. Since my home was nearer Wimbledon than my office, we arranged for him to be brought to our home on several occasions. I signed a receipt for him, and he was collected three hours later, after he had spent most of the time reading our personal copies of Math. Reviews.

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