This is an Englishman's report on how Germans build their universities. It should be of interest to Filipino educators.

## BUILDING UNIVERSITIES IN GERMANY

I knew of course before I went to Germany that their universities are different from British and American ones. For one thing, students there may take practically any number of years to complete their studies; they largely plan their own courses and timetables, how long they intend to take over certain studies, when they will go out to take a temporary job, and when they will take their examinations. The attitude seems to be that you use the university in the best way you can as a preparation for passing the final examinations.

There is fairly little individual guidance, which would in fact be difficult to get because there is nothing like the number of staff per student that we are used to here. Also many universities are very large: Munich has 24,000 students, Cologne has 18,000, Hamburg 16,000,

frankfurt 13,000 and Bonn 12,000. They continue to grow because normally there is no possibility of limiting student numbers; according to law every young German who has the qualifications must be accepted.

But the different outlook among those responsible for building universities is largely a matter of a different attitude to the spending of money. What struck me was simply a very different attitude to capital investment generally. It seemed obvious to my German hosts that if the job of building is worth doing at all it is worth doing really well.

I was shown over a chemistry building in one place, and as the architect and I crossed the entrance hall I looked at the beautiful greystone floor and said that we would find it difficult on our budgets to use such expensive materials. He just said: "It lasts longer."

Buildings are double glazed against noise and cold, their services and other installations are over-sized to allow for future flexibility, and materials generally are of good quality so as to keep down maintenance costs in the future.

Since German universities are controlled by the Lander (the States) which make up the West German Federal Republic, their layouts are normally prepared by Ministry planners, although many of the individual buildings are done by private architects. Budgets for buildings are not usually rigidly fixed in advance but are approved in each case with the particular requirements of the building in mind, and this normally includes a very high standard of finishes and equipment.

The first place I went to on my trip was the institute of sociology in Mannheim where they have a working party for research into university methods. The university is in the old palace which has been completely reconstructed internally and has been added to. It has high and spacious rooms and

makes the most beautiful place for study. I was specially struck by the library: on opening the door I found myself in a large and tall room, a thick green carpet covering the whole floor and students working at individual tables with white tops. The whole place was spotless, silent, and luxurious. It was air conditioned, with windows double glazed and permanently closed. On going up to the counter one can get any book from the stack in a matter of a minute or two by way of a pneumatic tube of the kind we have in some of the older department stores to despatch cash. There are rooms set apart for typing, for dictaphones, microfilm, and individual study

One of the lecturers at this institute asked me if it was true that the new University of Sussex in England started with an initial grant for building of no more than £1,500,000 (\$4,000,000 U.S.). I said yes, this was roughly true of all our new universities but that this was followed by further yearly grants of possibly similar amounts as the university grew to a viable size of say, 3,000 stu-

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dents. He was amazed; he said that in Germany, when they had that sort of money, they might think about starting a university, or they might even start planning one, but in all probability they would just buy books and wait until they had vastly more before actually building anything. In fact, £1,000,000 (\$3,000,000 U.S.) was the sum that the new University of the Ruhr in Bochum was given for its initial purchase of books for the library.

A few days later I visited Mainz. This university started after the war in barracks of the Luftwaffe. These barracks surprised me: they are very large and handsome and built around three sides of a courtyard. They have pitched roofs, good heating, and are very solidly built. parently barracks too, if they were built, had to be built properly and to last. why not?-since especially in building there is a definite limit to the sense of paring down. You can always use a good building, even if its original purpose had died. Money spent on the permanent parts is never wasted.

At the university in Mainz the Chancellor I visited whose office is in this ex-air force part. He told me that an average new university in Germany would start with a fund of between £50,000,000 and £100,000,000 (\$140,000,-000 and \$280,000,000 U.S.) for building and equipment. These figures vary a lot from place to place because some of the Lander (States) are richer than others and there is a certain competition for cultural prestige between them.

Mainz University, the Chancellor told me, is economical by German standards. It is a university of 8,000 students and has 180 professors. It spends some £13,000,000 (\$34,000,000 U.S.) a year, of which about £5,000,000 (\$14,000,000 U.S.) are spent on building: this inspite of having inherited the barracks. And that is considered economical!

The Chancellor told me that the new University of the Ruhr at Bochum, which intends to grow to a size of 12,000 to 15,000 students plans to spend some £230,000,000 (\$600,000,000 U.S.) on buildings and equipment,

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which is about £17,000 (\$50,000 U.S.) per student. This is not only more than we would spend, it is three to four times as much. Last year this university spent £10,000,000 U.S.) on buildings alone, which makes it one of the two or three largest building sites in Europe.

The Ruhr area of Germany is a rich one and this no doubt accounts for their particularly high expenditure new university. this There are many who regard it as extravagant but this could be said of a number of German university pro-I often asked myself if they might not spend a little less on various refinements and instead build more area so as to relieve the overcrowding they from, and yet maintain good quality. Because it does seem strange that they should afford such high quality, even luxurious, buildings and that yet, nationally speaking, their student numbers are smaller in relation to the total population than in Britain or, for that matter, in France, Sweden, or Holland.

In the most popular fa-

culties — economics, medicine, law, German studies, and mechanical engineering — students hardly ever have a chance to meet their professors face to face. I was told that many who used to finish their studies in about four years now tend to take six or more, and one-third of them leave university without finishing at all; and I wondered to what extent this overcrowding was to blame for that.

Apart from overcrowding. direct contact between students and staff is also made difficult because there are no colleges (buildings where classrooms, libraries, and dormitories are within each, as in Oxford or Cambridge in England) and only a few balls of residence. Only 12 per cent of the students live in students' homes, while in most other European countries the percentage is much higher and the aim is normally for half the students to be in residence. **Various** German universities planned to build colleges on the English model but as far as I know none of them have been built.

I was struck by the qua-

lity of the research being done into university organization and teaching methods on the one hand, and physical planning and construction on the other. The impression I had was that research in the field of planning and building was most active in the Land of Baden-Wurttemberg. The capital is Stuttgart and I had been invited by the technical university there to lecture on university planning. A special institute for university planning is attached to the faculty of architecture, the only such institute in the world so far as I know.

In my lecture at this institute I talked about the new universities in Britain and the three different planning principles on which they are based: first, the type of plan represented by the University of Sussex, which has its centre, with its library, administration building, main dining hall in the middle of the plan, and various faculty buildings and halls of residence surrounding that centre and extending outwards. Then the second type of plan - York is a good example - which has not got

one centre but is based on a number of colleges which form clusters, and extension could take place by adding further clusters. And the third type of plan, like that of the University of Lancaster, which has a linear centre in the form of a pedestrian street with buildings on both sides, with extension coming at either end—in other words the university becomes longer.

My feeling is that in general planning, many of the British universities sh o w more cohesion and better provision for growth than the German ones. There is one aspect of planning, though at which the Germans are particularly good, and that is the very first phase, namely the choice of location of a new university.

While on this subject of organization, I want to describe a building which was typical of much else; the new central dining hall of the technical university in Braunschweig. In the old German universities of some fifty years ago, in places like Gottingen students would have lunch with the families with whom they had lodg-

ings. Here in Braunschweig half a century later they have it in the new large refectory— a simply looking building, one storey high, with walls of glass and surrounded by lawns and trees. The kitchen is cool and spotless and without the slightest smell: from the enclosed stainless-steel automatic cooking machines are filled the specially designed standard dishes with portions for each student.

You can sit outside on the

paved terrace to have coffee, and the whole building, despite its size, is friendly and not at all noisy. You buy your ticket at the barrier for about 2s. 3d., and even at the busiest time there are hardly any queues. The menu is displayed in large letters, as well as tomorrow's menu in case you want to give it a miss. — By Gabriel Epstein in The Listener, November 3, 1966, abridged.

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