

EUA 2006 Autumn Conference
Friday 20 October 2006, Plenary Session I, 9.15 – 10.30:
Missions and Strategies of Universities in their regional Contexts

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Impact of Universities on Regional Cultural Development

Today, my brief is to talk about the influence universities have on regional development. I want to discuss this especially with regard to Berlin – and this is where the problems already begin. Berlin is one of the world's most untypical cities. In the period of industrialization in the second half of the 19th century, Berlin boomed, and big industries like the railway manufacturer Borsig and metal and electrical manufacturers like Siemens and Halske settled and remained here until 1945. The end of the Second World War was an especially severe rupture for Berlin. The city's isolation, the blockade, its division into a communist and a free sector – all these unsettling events meant that large swathes of industry left Berlin very quickly. The transformation of 1989 unfortunately did not change that. None of the big companies returned. On the contrary: even more have left the city since.

A situation of this kind raises the question whether there is anything to learn from Berlin's development, because virtually no city in the world faces a comparable situation. But things do appear different when examined in more detail.

Since reunification, it has been the declared policy of Berlin state governments to promote the settlement of industry by exploiting the advantages of the city based as they are on the strong presence of science, research and development in Berlin. The city has four universities, about ten Universities of Applied Sciences and several dozen high-ranking research institutes of the Max-Planck Society, the Leibniz Association and Helmholtz Association, as well as many private research and development companies with payrolls of less than twenty people respectively. At the same time, the city has a wealth of cultural institutions

like theatres, museums, operas and concert halls that could also benefit from close relationships with the sciences. In this regard, Berlin can also be regarded as a city in a kind of laboratory situation: Here science could and should prove that it can make a contribution to regional development both in the private corporate sector and among cultural institutions.

To date, however, this is the case only to a limited extent. We may ask ourselves why it is that science contributes so few impulses that could trigger meaningful growth in the region. The reasons are undoubtedly complex. They are partly to be found in science and among scientists themselves, but partly also among the potential users of the results of scientific research.

Let us look at science and scientists first.

The traditional European and especially German university ideal which emerged in the era of Romanticism and ushered in the swift foundation of many big and subsequently famous universities is now dysfunctional. The ideal of free research and teaching and the image of the „free and lonely“ scholar were quite appropriate in the early 19th century. Science had to free itself of the shackles of religious tutelage. It had to overcome superstition and the widespread fear of knowledge perceived as blasphemy. And since very little was known, but many things were believed, the enlightened approach of the individual scholar, who aimed to arrive at groundbreaking insights, first by mere thought and also by experiments in his small study, was quite adequate. This was the method of the big philosophers and archaeologists who developed a new understanding of history, linguists like the Grimm brothers who set out to amass an encyclopedic documentation of the German language, or the big natural scientists like Robert Koch and Rudolf Virchow, who, indeed, directed small laboratories instead of big research factories. This even still applied in the case of Otto Hahn, who as we know needed little more than a cigar box and two flashlight batteries to discover the foundations of nuclear fission.

So that was the period of the classical ideal of the scientist who followed only the logic of his insight and discipline, but in so doing inadvertently kept delivering results, which others applied in practice, so that they became an essential foundation of the rapid industrialization of the 19th century. It was not compatible with this ideal of independence and seclusion, for example, to conduct contract research for companies.

The situation is fundamentally different today. Useful research results, not only in the natural, but also in the social sciences, for example, can now only be developed by large teams. But the aversion to practical utility remains with us as an attitude conserved from the era of German late Romanticism. It can, of course, be comforting and may well continue to exist because it represents one of the few remaining privileges of the academic profession, where big incomes are rarely earned today, at least in Europe. In other words: on the part of science, there is no natural attitude to feel responsible for promoting regional development or economic growth by suitable scientific exploration. It is a key task for the future to foster this kind of awareness. But to do so, it is also necessary to contend with inevitable disappointments. It may, in fact, be more effective to provide incentives for research and development that support regional development than to bank on some kind of regional philanthropy.

What could such incentives look like? A region has to commission research that benefits its development. National research programmes, too, should aim to provide regional support, and even so called basic research loses none of its dignity if it begins to consider the practical applications of its findings. Incidentally, this applies not only to the natural or social sciences, which already accept more research contracts these days, but also to the classical humanities. In a city like Berlin, the humanities exist in especially close proximity with cultural institutions. Nonetheless, these disciplines rarely view themselves as a source of enrichment for those who work in the cultural sphere. Whether literary science, theatre studies, film studies, or journalism studies – whenever these disciplines look at their subjects, they tend to do so in an analytic, hermeneutic or perhaps explanatory perspective, in

historical description and determination of what is the case. But these disciplines, for example, when they pursue a historical approach, are excellent sources for the discovery of lost cultural practices or forms of theatrical and dramatic presentation and for helping bring them back to life. There is no question that an average city without a university barely has such resources. A university city, on the other hand, can use them to help develop attractive cultural activities. Of course, this applies in particular to museums, collections and archives, which can become real popular magnets, if their holdings are presented well, instead of simply being catalogued.

Such cooperation even pays off for the training of junior researchers. If universities cultivate close relationships with their regions and bring their students into contact with local companies and cultural institutions early on, this improves their chances of employment in the region and hence also the chances of successful regional development, because students thereby already acquire an intimate knowledge of regional facilities and institutions at an early stage. This is why we have set up an internet portal together with the Chamber of Industry and Commerce in Berlin, which provides access to about one thousand internships per year and is used enthusiastically by students.

Universities in turn can benefit from the competencies available in the cultural and industrial facilities in their regions. However, this presumes that they are willing to use the respective external experts as visiting lecturers and involve them in their own research projects. Here, we often encounter reluctance among scientists to employ so-called practitioners as real academic teachers. Consequently, external experts are often only drawn upon for optional courses, which students often lack the time to attend. But precisely offers of this kind can be best suited to give students insight into the ways even basic scientific knowledge may find practical application in real life.

These comments and suggestions should, however, not be understood as a criticism of the universities. Precisely the example just mentioned, of using experts outside academia

in university teaching, often encounters scepticism, not only among academics, but even among practitioners themselves. Leaving aside those who may regard it an honor, an ego trip or a status symbol to serve as a visiting lecturer at a university, really excellent practical experts often have no didactic qualifications, or are paid so badly, if at all, that teaching at university is simply not an attractive proposition for them. Targeted exchange programs between extramural organizations and the universities have proved useful here. They have to make sure, first of all, that experts deployed as visiting lecturers do not incur financial disadvantages. Strict quality control must, of course, also be ensured, but didactic capabilities in particular are not rocket science, but can be learned. Well-run companies invest in such qualifications and in seconding their own staff to universities, if only so as to support the recruitment of future top managers who are just being trained in the universities. But this naturally presumes that a region already has important companies, instead of there being a need for them to be founded first.

As regards the founding of new companies, it is often expected of young graduates or scientists that they use their innovative energy to found many spin-offs that should then become big corporations in only a matter of years. This is a naive conception. In Berlin, a lot of money is being invested in promoting business and such spin-offs. The mistake frequently made is either that there is too little money or that it is spread too thinly. At the latest once a spin-off is to start series production, loans of a few hundred thousand euros are not sufficient to achieve marketable products, even in a software company. Venture capital is rare, at least in Germany. The banks are cautious and tend to be risk- and innovation-averse. This quickly dampens the enthusiasm of young student-entrepreneurs. In addition, the founding and operation of companies is subject to extensive regulatory mechanisms and restrictions in Germany, which tend to repel young people, rather than animate them. After all, nobody relishes the thought of finding themselves with one leg in jail half a year after graduation, just because they have overlooked some commercial law, labour law or social insurance law regulation.

But these structural defects could and can be overcome. The main problem among the potential users of research results lies elsewhere: if you ask corporate executives about their need for scientific research, you quickly detect a kind of tunnel vision. They either expect a sort of knowledge tank, where semi-finished products float about, waiting to be released by clever companies. The scientists are naturally then expected to surrender intellectual ownership in exchange for a lump compensation for the half-ready product then to be developed to maturity by the corporate buyer. Or people expect to be able to use a scientific institution like a database they can access any time they feel the need to. This was the view expressed by the director of a mid-sized company in one of those many discussion forums on relations between academia and business: „I need a scientist when a machine breaks down, the software packs in or a process needs optimizing in my company. I want to be able to call up somewhere then, so that someone comes and helps me“. – This is not what science is about. It is a matter for emergency services that come and clean toilet pipes or repair broken TV sets. And it can simply not be the task of science because, if it was, we would get no innovation, but only repairs. Innovations, however, are what regions need to develop, so that new production results in precisely that region, creating new jobs and new impulses for the location concerned.

But is that still realistic in countries like Germany, France or England? Can the big European economies still compete on the wage market with cheap producers in Asia, Africa, Latin America or Eastern Europe? There is legitimate doubt that this is feasible. And that means that the question must be asked whether regional development can still take the form of development in the direction of an industrial location. From the experience of the past twenty years in Berlin, I would regard it more appropriate to pursue a different vision. Science can help promote regional development more successfully in developed industrialized countries if it sees itself as an innovation driver and if it generates new ideas in the form of blueprints that can then be sold at high prices to producers, no matter where they are. This is Europe's only chance of survival. But it also means that Europe must protect

itself against patent theft and research espionage. This, in turn, quite evidently contradicts the principle of free science. Presently, however, we are witnessing the trend towards „open access“, that makes research results accessible to everybody everywhere even more quickly and entirely free of charge on the World Wide Web. It will need to be examined whether it is really advisable to make every research result that is suited to secure the survival of a region or even nation accessible on this medium.

The survival of a nation depends essentially on how well the government and politicians responsible for the nation and its regions act. Today, the requirements of political management are far more complex than any semi-conscious politician may realize. Often, the logic of electoralism also acts to prevent open communication of the full complexity of the situation to voters. This is why some politicians don't even recognize the need to think in a differentiated way, act competently and be open to expertise. But politics will have to be forced to recognize this need.

In this regard, we face a special situation in a capital like Berlin. In this city, we have a concentration not only of science, but also of political power. Regions of this kind can also benefit from academic institutions in the field of academic consulting, unless politicians are averse to advice. On the other hand, it is not much help to politicians, if academics always insist on ifs and buts and so make evidence-based policy impossible. There is not the slightest doubt that science is optimally suited to communicate expertise. However, this also presumes that scientists assume responsibility for the field of politics. Only then can science expect to be taken seriously and supported by politicians. And that way, these unequal actors may arrive at a kind of partnership after all, even if, in contrast to the scene in „Casablanca“, it does not need to be the start of a long friendship.