

# Linkages to the civil society as ‘leisure time activities’? Experiences at a German university

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The paper focuses on the role academic organizations and their members play within their socio-economic and socio-political contexts. It presents findings of the case study of a German university. Based on qualitative interviews, written documents and bibliometric analyses, we can see that, first, most of the university’s links to the economy, political actors, and broader civil society emerge in a bottom-up and decentralized way, and they thrive on individual motivation and commitment. Therefore, there are clear limits to the formal institutionalization of such activities at the organizational level. Second, while ties to industry pay off at least indirectly through research funding, links to regional policy-making and broader civil society remain largely unrewarded in academia. For the future, we expect a growing tension between the organizational goal to embrace additional goals and the individual goals, especially of younger researchers who increasingly tend to focus on those activities that are rewarded in academia.

**T**HIS PAPER FOCUSES on the role universities play within their socio-economic and socio-political contexts and how these interactions are related to the internal structures and dynamics of academic institutions. It presents findings of the case study of a German university.<sup>1</sup> By third mission activities we relate to the university’s direct contributions to economic development through technology transfer to industry, which many observers (see, for example, Etzkowitz *et al.*, 1998) see on a par with the traditional two missions of universities: teaching and research. Extension activities are defined more broadly. They include very heterogeneous ties to civil society and political bodies, typically with a strong local and regional focus.

Our analysis is based on a mix of methodological approaches. First, we conducted a series of 12 semi-structured interviews with a variety of individual university professors, the university president and representatives of agencies and projects engaged in

third mission and extension activities. Second, we analyzed written documents (reports, self-descriptions, mission statements and the like) of the university and its relevant agencies and projects. Third, we analyzed bibliometric data, focusing on co-publications, which provide valuable insights into the extent and patterns of the interaction between academic scientists, industry, civil society and policy-makers.

The university is a medium-sized public institution with about 20,000 enrolled students and a total of about 750 scientific employees (including about 250 professors). It was founded in 1969, during a period where German higher education was characterized by massive expansion and manifold attempts to reform university structures. The spectrum of disciplines includes natural sciences, humanities and social sciences. Interdisciplinary research is strongly fostered. The university was founded with a strong emphasis on the humanities and the social sciences, while the last decade has seen considerable expansion in information sciences and biotechnology.

Below, after having explored the characteristics of technology transfer between university researchers and industry, and broader extension activities, we will conclude with some broader analytical considerations. It becomes evident that we can bear witness

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to neither the emergence of a third academic mission nor strong institutional incentives to pursue extension activities. While ties to industry pay off indirectly through research funding, links to civil society and political bodies mostly remain unrewarded. This unfavorable incentive structure is captured by one of our interview partners who called such activities aptly and ironically ‘leisure time activities’.

### Technology transfer

When asked about the relevance of technology transfer for the university, the university president answered:

In principle it is high. In any case it is higher than 10, 15, or 20 years ago. I myself started my presidency with the goal to improve and to intensify the interaction between the university and the economy, particularly here in this region.

This quotation illustrates that particularly strong interactions between the university and the economy are not part of the university’s heritage, but rather a new goal and a new development. This is especially true with regard to the regional economy:

I would approve it and it would be important ... if the university was well positioned and deeply rooted in the region. But this has not been the case for a long time. It has evolved step by step ... In my discussions with people from the economic sector I consistently observe that this is a relatively new development — for both sides.

This distance from the regional economy has two aspects. On the one hand, the region simply lacks the industry that would match the university’s scientific supply. This holds true, with the considerable exception of the health sector, where strong links exist between the Department of Public Health and its surrounding environment (see below). On the other hand, the university was founded in times of great student unrest. These times left an impression on regional economic actors that the university is ‘resonating until the present day. It has been resonating for more than 30 years in certain circles.’

A bibliometric analysis we conducted for the years 1980, 1985, 1990, 1995, and 2000<sup>2</sup> supports the president’s observations. Compared to other universities in the same German state, the number of co-publications with industry per professor is below the average (0.055 compared to 0.129). Given the disciplinary profile of the university, this result comes as no surprise. Nevertheless, a sharp increase can be observed for the year 2000. Here, 26 of the total of 43 co-publications with industry in our sample could be found. One has to bear in mind, though, that the absolute numbers are very small.

Interestingly, more than half of the co-publications of the university’s researchers with industry — 23 — have their co-publication partner from industry abroad, and among German co-authorships, only one is located in the university’s home region. This corroborates the finding that the immediate socio-economic surroundings of the university are hardly relevant in this regard.

We will turn now to the role the university’s infrastructure plays in fostering technology transfer. Though the university has a technology transfer office and an appointee for technology transfer, according to our interview partners on that subject — the president and two transfer-oriented professors — direct ties between university professors and industry seem to play the most important role. When asked about the relevance of the university’s transfer office for his work, one of the professors answered:

To put it bluntly: this office is absolutely irrelevant for us. Either I have the contacts or I don’t have them. The transfer office does not come near to this point. One does not have the overview there and does not know what we are doing here. Therefore, such an office cannot be the mediator for us. That is unequivocal.

This harsh comment, however, does not reflect the specific situation at the university we analyzed, but

rather a more general pattern. The limited role transfer offices play in promoting and facilitating technology transfer at German universities has been corroborated by several studies based on larger samples. Here, it is estimated that only less than 10% of the transfer projects between universities and industry have been achieved through transfer offices (Krücken, 2003; Reinhard and Schmalholz, 1996). In that regard, the university is no exception to this robust pattern. Despite many initiatives since the 1980s, when fostering stronger ties between German universities and their socio-economic environments became an issue, personalized, non-institutionalized transfer activities still prevail over technology transfer as an organizational activity.

### **The university's ties to civil society and local administrative bodies**

In this section we will give a brief overview of the heterogeneous initiatives and activities that currently connect the university with its surrounding civil society as well as local political bodies. It is quite clear that this overview cannot be complete, as the great majority of these initiatives and activities are not centrally planned and in many cases there is not even a central entity to keep track of them. As will become obvious, interaction with societal partners is emerging in a rather decentralized way all over the university. We briefly describe five of these activities, which are institutionalized in very different forms and, therefore, give an impression of the range of current ties to civil society and local administrative bodies.

#### *Further education*

A broad range of heterogeneous activities is subsumed under the heading of further education. Again, it includes institutionalized activities as well as activities of individual professors; business firms are addressed as well as ordinary citizens; and they range from single presentations to full study programs. Further education is an obligatory mission of German universities. The degree of institutionalization of further education, however, is still rather low, as the university president told us: 'If I take a look at where we are engaged in further education as an institution ... there is relatively little.'

Though the university has established a contact address for further education in order to support the more institutionalized activities of the single departments, there is no centralized planning of further education activities.

Apparently, the basic conditions do not seem to be very supportive of institutionalized further education. In particular, there do not seem to be incentives for departments and professors to initiate study programs. On the one hand, as one interviewee complained, a department has to pay fees for overheads

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to the university and thus can hardly make considerable profits with its program. On the other hand, further education is not taken into account when it comes to calculating the individual professor's teaching load.

Like technology transfer, further education is highly dependent on the involvement of individual professors and their linkages to the non-academic world. While the incentives for departments and individual professors to set up further education programs within the university context are low, some reach out in a more individualized and profitable way:

In addition to institutionalized activities, there are traditional forms of lecturing in the context of professional organizations or business firms. But we really don't know what is going on there concerning the frequency and the fees being taken. I guess the number of unreported cases is very high.

#### *Regional development*

One project should be mentioned in particular with regard to the area of regional development. This project was suggested by an association of local decision-makers. It is funded jointly by the university and the local authorities, and it is affiliated to the department of economics. It employs a half-time executive and a student assistant in its office. With these limited resources, the project depends predominantly on voluntary work.

In about 10 topical task groups, roughly 100 volunteers from the university, regional decision-makers and representatives of other relevant regional actors (the University of Applied Sciences, local authorities, the Chamber of Commerce, etc.) are involved. The task groups work on a variety of very heterogeneous projects that are in some way related to the region and regional development.

According to one of our interviewees, reports provided by the agency's task groups stimulate discussions on a regional level. The participation of high ranking decision-makers in the agency means that project results are discussed in local decision-making processes.

Two more general considerations can be derived from this case. First, the agency thrives on a network of influential regional actors. Its foundation can be traced back to an association that an interviewee labels as a local 'who's who', that is, the project could rely on a pre-existing network, which included high-level participants. This feature makes it much easier to get things done, as our interviewee told us. It is doubtful whether such an ambitious project could have been started from scratch without the involvement of high-level decision-makers.

Second, the agency shows that the involvement of the university in regional affairs is not limited to the provision of infrastructure and ideas. Its affiliation to the university provides the project with a reputation of neutrality that is attributed to science and its institutions. This allows 'hot' topics to be taken out of the context of local politics and dealt with in a less heated environment. Those responsible for the project are well aware of the relevance and fragility of neutrality as a critical resource. Our interviewee told us that they are careful not to appear politically biased or unbalanced. This is true with regard to the choice of lecturers, the topics of the task groups and their participants.

#### *Open Science Forum*

The Open Science Forum presents a lecture series each semester that deals with a broad topic of general interest. The lecturers are predominantly researchers from the university who represent a broad range of disciplinary backgrounds. In fact, interdisciplinarity is a central idea of the forum. Another is the openness with regard to the auditorium. Target groups of the forum are not only university researchers and students — actually, according to our interviewee it would be welcomed if more students were to attend the forum — but also the 'general public'.

Openness also characterizes the organizers' circle, which, however, is composed of a core of people who have been working together from the very beginning of the forum. A special feature of the organizers' circle is the participation of a representative of the forum's attendees. This is one of the means by which the forum tries to establish the possibility of feedback, along with the regular discussions that follow the lectures and feedback by mail.

All these forms of response enable the organizers to adjust the program to the interests and needs of the attendees. Nevertheless, the forum is understood as a means to provide knowledge to the general public, and not as a means to exchange knowledge. The latter is not ruled out, but was described as a theoretical possibility rather than an observed process.

#### *The Department of Public Health*

In 1994, the university's Department of Public Health was founded. From the very beginning, close

interactions existed with regional health-related organizations. According to our interviewee, these interactions are vital for public health research as an applied scientific enterprise.

Interaction with external partners takes place both at the institutional level and at the level of the individual researcher. Close coordination with external partners at the institutional level was easier when the department was still small. It began to loosen as the department grew bigger and more internal demands had to be dealt with. Therefore, trying to give the established relations with external partners a new formal framework, the department established an agency for interacting with practitioners in the field.

The agency does not have any additional resources at its disposal. According to our interviewee, though interactions with practitioners are essential for public health research, the willingness to actually engage with and invest in these interactions is unevenly distributed and lacks support from the university. Again, we can see that extra-academic activities, even if they seem to be of vital importance for a department, are mainly carried out on a voluntary basis.

#### *Pupil-related activities*

In recent years, the university developed a variety of activities that are directed at school children at both primary and secondary levels. In 2004 a pupils' office was established, which provides information about the heterogeneous activities at the university and which serves as a contact address for both sides, that is, inwards and outwards. In addition, the office organizes some of the activities itself, in particular with regard to the transition from school to university.

The most outstanding pupil-related project of the university is a children's laboratory that allows pupils to perform their own experiments. The lab was created in the Department of Chemistry in 1999. Recently, two additional labs in physics and mathematics were installed. The children's lab has been funded by a broad range of agencies, foundations and the regional economy.

The lab was initiated by one of our interview partners, a professor at the Department of Chemistry. Her first experiences with hands-on experiments in chemistry were with her own daughter. As the interviewee's job description does not include working at the children's lab, she labels her work ironically as 'leisure time activity'. Generally, the lab relies heavily on the intrinsic motivation, time and energy of volunteers and part-time staff members who are either not paid or invest more time on a regular basis than they are paid for.

The interviewee described the lab as a 'spider in a web'. This symbolizes the fact that the lab maintains a network of collaborating schools, which act as 'satellite labs' and offer laboratory experiences to elementary schools themselves. But the web

metaphor also symbolizes a more general point, which is illustrated by the following quotation:

We would like to create a platform where we could mediate between schools, universities, the local economy, professional associations, other hands-on labs, and other pupil-related activities ... This is a situation where we sit together with very different groups and try to fulfil their needs without questioning the overall network and our general concept ... But things develop, and we don't push towards a certain direction. We listen carefully and try to initiate processes through many communications with other universities, school teachers, people from firms and associations, parents and grandparents.

To sum up: what becomes clear is that pupil-related activities at the university are not the result of a comprehensive strategic process, though the strategic management of the university is actively engaged in enabling these structures. Pupil-related activities stem from decentralized existing projects in an increasingly growing and highly interactive network. Though the activities of the children's lab may be organized around a core idea or a concept, they are by no means homogeneous. The same holds true for the broad range of other pupil-related activities at the university.

The interviews showed that a variety of activities and a large number of actors are involved in pupil-related activities, tied together in a dynamic process. Once a seed crystal exists, more and more ideas, projects, people, resources, and demands get attached and form a growing and increasingly complex structure of activities.

### General analytical considerations and conclusions

The heterogeneity and complexity of third mission and extension activities at the university are striking. In order to roughly summarize and stimulate further discussion, we would like to highlight the following points:

1. It becomes obvious that third mission and extension activities at the university cannot be grasped by understanding the university as an isolated entity. Instead, the socio-economic and socio-political environments that grant the university the necessary resources for organizational innovations have to be taken into account. Likewise, interactions with other universities and attempts at copying structures and practices that are regarded as highly legitimate in the field are of importance here. Our analysis clearly shows that the university reflects broader trends in higher education, which diffuse across countries and organizations. To mention the most conspicuous:

- The stronger emphasis on applied natural sciences and technology;
- The creation of formal structures for the transfer of knowledge and technology;
- The growing number of co-publications with industrial partners;
- The university's search for stronger links to its regional environment; and
- Outreach activities with regard to school children.

Further research is needed in order to fully understand the carriers and mechanisms of the underlying diffusion processes.

2. Most of the projects and activities under scrutiny were not initiated centrally, but emerged at many decentralized places all around the university. Though one can witness a global trend of 'turning the university into an organizational actor' (Krücken and Meier, 2006), in which organizational leadership, strategic management, and elaborate formal structures play an increasingly important role, both technology transfer and the university's ties to civil society and political bodies are mainly carried out in a decentralized way. In this, universities are still to be seen as 'specific organizations' (Musselin, 2006) whose core activities — research and teaching — are heavily dependent on personal commitment and tacit knowledge. This observation is particularly true for third mission and extension activities. According to our analysis, they all thrive on personal motivation, voluntary commitment, and informal, pre-existing personal ties to their outer-academic environment, which can hardly be steered from a central level. Taking this into account, the university's role might not be seen in strategic planning action, but in providing a sound setting that enables decentralized activities to emerge.
3. Our analysis sheds some doubts on the claim that we can currently observe the evaporation of boundaries between the university and its surrounding environment, as is suggested in many recent theoretical accounts of science and society (see, for example, Nowotny *et al*, 2001). It seems as if in interactions with the non-academic world the authority of science is confirmed, not

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questioned. Most of the very heterogeneous interactions of the university with societal partners seem to be based on a clear division between academic advice-giving and societal advice-taking. Even in the case of the children's lab, which displays the strongest openness towards external influences, the critical and neutral source of scientific expertise has institutional status for all nodes in the heterogeneous network. Based on the taken-for-granted assumption that science is indeed different and does not blend with politics, academics can play an active role in regional affairs, as the example of the regional development agency clearly shows. Due to the on-going relevance of institutional boundaries, it is not surprising that, according to our analysis, third mission and extension activities have only a moderate, if any, effect on research and teaching as the university's core missions.

4. Based on our results, we expect a growing tension between the more general call for additional missions, on the one hand, and the actual activities of academics on the other hand. By looking more closely at the incentive structure in current academic life, however, one can find an explanation for this rather sceptical perspective on third mission and extension activities. While the university as an organization is taking on more and more tasks, at the individual level a contraction rather than an extension of tasks can be witnessed. Especially ties to civil society and political bodies do not lead to pay-offs that can be mapped by conventional indicators of successful scientific action, such as peer-reviewed publications and third-party funding. As these indicators are of growing importance for individual careers, in an increasingly competitive environment younger academics deliberately avoid 'distracting' activities. This, on the other hand, at least partly explains why in our case mainly older academics — who in most cases were also academically socialized at a time when the involvement in public affairs was highly valued and aspired to — take time to interact with external partners, that is, for activities that are not immediately beneficial for their scientific careers. As technology transfer typically leads to

research funding and, ultimately, publications, the situation is somewhat different here. But also with regard to transfer activities, scientific competition seems to be the main motivation for scientists to increasingly engage in university-industry interactions, not any additional or intrinsic value of these interactions.<sup>3</sup>

## Notes

1. The general position of universities in the German system of innovation is described in Schmoch (2008).
2. Our analysis is based on longitudinal data taken from the online version of the bibliometric databases SCI, SSCI, and A&HCI of Thomson ISI. We measured the overall publication output ('articles') of the university as well as the share of those publications that was produced jointly with partners from industry.
3. We found additional evidence for this finding through interviews we conducted with transfer-oriented professors at several German universities (see Meier and Müller, 2006).

## References

- Etzkowitz, Henry, Andrew Webster and Peter Healey 1998. Introduction. In *Capitalizing Knowledge: New Intersections of Industry and Academia*, eds. Henry Etzkowitz, Andrew Webster and Peter Healey, pp. 1–17. New York: SUNY Press.
- Krücken, Georg 2003. Learning the 'new, new thing': on the role of path dependency in university structures. *Higher Education*, **46**, 315–339.
- Krücken, Georg and Frank Meier 2006. Turning the university into an organizational actor. In *Globalization and Organization*, eds. Gili Drori, John Meyer and Hokyung Hwang, pp. 241–257. Oxford: Oxford University Press.
- Meier, Frank and Andre Müller 2006. Wissenschaft und Wirtschaft. Forschung im Zeitalter des akademischen Kapitalismus. *Universitäre Forschung im Wandel*. Thematic issue. *die hochschule, journal für wissenschaft und bildung*, ed. Georg Krücken, **15**, 86–102.
- Musselin, Christine 2006. Are universities specific organisations? In *Towards a Multiversity? Universities between Global Trends and National Traditions*, eds. Georg Krücken, Anna Kosmützky and Marc Torca, pp. 61–82. Bielefeld: Transcript-Verlag.
- Nowotny, Helga, Peter Scott and Michael Gibbons 2001. *Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty*. Oxford: Polity Press.
- Reinhard, Michael and Heinz Schmalholz 1996. *Technologietransfer in Deutschland: Stand und Reformbedarf*. Berlin: Duncker & Humblot.
- Schmoch, Ulrich 2008. The Role of Universities in Economic Growth – The German Situation. UniDev Discussion Paper Series Paper no. 1. Published online at <<http://developinguniversities.blogspot.com/>> by Research Policy Institute, Lund, Sweden.