

CHAPTER

The Modern University and its Main Activities

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AUTONOMY AND RESPONSIBILITY

In the industrialized world, universities are concerned first of all with basic research and with research-based education. Research and education are closely and indissolubly intertwined. In most of Europe, education is considered as a fundamental human right, which must, therefore, be guaranteed by government. In some countries, this is expressed by including this right to education in the constitution. Consequently, governments must commit themselves to the suitable financing of universities, to enable universities to materialize this fundamental right. These subsidies must be sustainable and sufficiently reliable for the foreseeable future. The fact that universities depend on public financing, however, does not mean that they lose their essential autonomy. Universities are, and must be, autonomous institutions. This autonomy is nothing new. As a matter of fact, "corporate independence" has been a main characteristic of universities ever since their inception in the Middle Ages. In some instances, this independence even included judicial autonomy, sometimes even allowing the rector of the university to put troublesome professors or students in the university prison. Where are the good old times? Some of my colleagues may regret that this is no longer the case...

A university's autonomy needs to be deserved and justified because of its reliance on public money. Accepting subsidies implies accepting responsibility to spend them wisely, efficiently and transparently. One of the consequences is that universities must commit themselves to careful financial management, and that this management is under public control. Although universities are quite different from corporations and from companies, they

should at all times apply the principles of top-quality corporate governance. They must also make sure that they are accountable for their independent decisions. The bottom line is that universities must live up to a complicated set of expectations, namely the expectations of their wide range of stakeholders.

ACADEMIC FREEDOM

What is true on the "corporate" level is also true on the individual level. The age-old concept of academic freedom must continue to exist, but it should be understood in the proper way. Academic freedom can never be an excuse for poor performance or for refusing internal or external quality control. Academic freedom includes the inalienable right to decide upon one's own research content, and to express one's opinion in the classroom, the only limitations being the standards of scientific method in general and of the particular discipline in which one is active. Simply put: academic freedom includes the right to pursue the truth, no matter what the truth is. As Rector Pieter De Somer, my predecessor in Leuven¹, once expressed it during his speech at the occasion of Pope John Paul II's visit to our university, academic freedom includes the right to err, the right to make a mistake. Academic freedom, however, does not include the right to perform poorly.

Academic freedom does not exist for itself. It exists to serve the greater purpose of the university, which is the creation, accumulation and dissemination of knowledge. Academic freedom, therefore, is not absolute. It is a freedom with a particular purpose. Consequently, academic freedom automatically includes academic responsibility, both for the university as a whole and for the individual professor or researcher.

Academic freedom is what our stakeholders grant us, on the condition that we deserve it, i.e. that we live up to the expectations of our stakeholders. These are quite varied. Obviously, the students, as well as our staff, are our stakeholders. But society at large also has a set of expectations. Many subdi-

¹ Founded in 1425, the K.U.Leuven belongs to the group of the 30 oldest universities in the world. It is Belgium's largest university, with some 28,000 students. About 30 % of its 3,000 doctoral students are of international origin. Its total budget amounts to 450 million Euro. Less than half of this budget consists of government subsidies, which is spent for education purposes. More than half of its budget finances research. From this segment, 28 % consists of contract research with industry, in the broad sense of the word. K.U.Leuven has been the source of more than 50 spin-offs. K.U.Leuven Research & Development is the university's special interface office, which is responsible for negotiating contract research, scouting for research valorization, intellectual property and patent filing, and for interfacing with industry. It is also very closely involved with finding and investing seed money, which the university organizes in its own seed money fund (Gemma Frisius Fund).

visions can be made, for instance: cultural life, public health and so on. Paying attention to all these stakeholders' expectations is the essential responsibility of all universities.

CORE ACTIVITIES

This statement is far too general, of course. How does a university actually do that? How do we live up to what our stakeholders expect us to do? I think it is wise to take a look at the traditional threefold mission which we find back in most universities' basic documents. These three core activities are not equally old, however.

The oldest function of a university, dating back to the Middle Ages, is knowledge distribution. This is what universities have done for many centuries, without bothering too much about knowledge creation. Only towards the end of the 18th and the beginning of the 19th centuries, did universities feel the need to contribute to knowledge progress, and to actively create new knowledge. Von Humboldt and the German intellectual elite of his time spread this idea worldwide. At the same time, this was the birth of our individual academic freedom. Before this period, academic freedom mainly meant institutional freedom. The third essential activity, apart from knowledge distribution and knowledge creation, is still younger. We have to wait till the second half of the 20th century to witness the birth of what is called knowledge transfer to society at large. This meant that universities started to realize that they are not located in an isolated ivory tower, but that they have responsibilities to fulfil which go beyond knowledge creation and knowledge distribution, not only among our students, but in society at large, which should benefit from the very existence of universities.

Let us now focus on these three activities separately. I will briefly sketch a few characteristics of each one of them, and indicate the way they are inter-related. As I will point out, the unique and distinctive feature of a university is, in my opinion, to be found in this carefully balanced set of connections between the three core activities.

RESEARCH

Academic research is clearly the basis of modern universities. Research, as we see it now, has a personal and a societal purpose. We do research because we want personal development, out of personal curiosity and because we want to contribute to the progress of science and society. Modern academic research has a double aspect. There is fundamental research, on the one hand, without too much concern for external relevance or economic applicability, and there is applied research, which focuses on economic relevance. Funda-

mental and applied research are not, however, separated to a great degree. Both are clearly linked, and neither can exist without the other. Essential synergies exist and must be nurtured.

University research is undergoing important changes. One of them is rather worrying. Compared to what multinational companies can spend on research, university research budgets are very small, especially the part which is subsidized by government. It must be stressed that governments must maintain healthy levels of financing, especially to allow universities to continue their fundamental research. It is equally important that universities are given the necessary freedom to engage in applied research, because this gives them access to much-needed extra finances. Industry-based research may be equal to university research as far as quality is concerned, but it lacks the obligation to publish which is so characteristic of university research. Universities publish their ideas to the entire scientific community in order to get feedback from their peers, or even for society as a whole. This is not possible, or at least not to the same extent, for industry-based research, which by its nature must be concerned in the first place with the future of the company in which the research is performed. This is done by non-disclosure clauses and by various legal provisions for the protection of intellectual property. Sometimes, this difference can obstruct collaboration between universities and industry. In my opinion, there should be no problem, provided universities accept the idea of a certain delay in publication, long enough for the protection of intellectual property to be implemented. For instance, sufficient time should be allowed for a patent to be filed.

Another important change in academic research is the focus on interdisciplinary areas, and the urgent need to establish sufficient critical mass. The time of the lone researcher may not have completely vanished, but research has definitely become a team effort. This has quite noteworthy implications for the way universities are organized. Ever since the Middle Ages, the most characteristic organizational unit in a university has been the faculty. In many cases, faculties operate as smaller kingdoms within a greater framework. Very often, real walls exist between faculties, jeopardizing or often limiting research, certainly in the case of large-scale interdisciplinary research. Maybe the time has come to reconsider these walls, no matter how venerable they are.

Research is related to the other two basic activities of a university. The link with education is not universally accepted. Some plead for a separation between teaching universities and research universities. In my opinion, this is not very wise. Professors must be researchers in order to be able to transfer the research attitude to their students, especially at the graduate level. Obviously, not all students will become researchers, and the presence of research in the classroom will definitely be less at the undergraduate level.

However, even professors who lecture only to bachelor students, must have research experience. From the very first day, students need to be exposed to the spirit of innovation and to a critical attitude, both resulting from research experience.

Input from research is also required in order to keep education up to date. This is especially true for postgraduate university courses, whose main purpose is not only to refresh the basics, but primarily to gain access to new developments and insights.

The role of research in the university's service to society is obvious. By its research, universities contribute to society's general progress.

EDUCATION

Let us now turn to education, the second core activity of any modern university. On the one hand, in tomorrow's Europe, which will be governed by the principles of the Bologna Agreement, and which will be far more internationalized than it is today, research, and definitely basic research, will be the most important element to determine the quality of universities, and will certainly be used in the ranking process. But, on the other hand, we should not forget that most, if not all, first-year students want a marketable diploma, rather than top-level research. Simply put: students are looking for education, not for Nobel Prizes. Modern university education is aiming at self-learning, flexibility and learning how to learn. Encyclopedic knowledge transfer is no longer appropriate.

Throughout Europe, the Bologna Agreement is having far-reaching ramifications for university programmes. The introduction of the so-called Bachelor-Master Structure necessitates a thorough overhaul of all programmes. Up to now, in most educational systems of continental Europe, university degrees had no significant value after the first level (the candidature). This will change dramatically, since the Bologna Agreement stipulates that the Bachelor's degree should have a value on the labour market. Obviously, this compels universities to reorganize their programmes from the very first year onward. In most European countries, this reorganization is now in full progress.

One of the basic considerations to start the Bologna process was to make European education more competitive on a global level. By 2010, Europe should become a single "higher-education area". Students should be able to move throughout Europe without too much difficulty, and programmes should be comparable from one end of Europe to the other. At the present time, this is clearly not the case. Even though diplomas may carry the same name, their value and their contents can be quite different. In a few years time, European education should be far more transparent than it is now.

Transparency does not mean similarity, however. Programmes will continue to differ from each other, but these differences will no longer be hidden under similar names. A system of evaluating and possibly classifying the programmes will enable students (and employers) to judge the relative value of any given curriculum credit or full programmes.

For a long time, university financing was directly related to the number of students they attracted. Fortunately, this is starting to change. This may lead to a decrease in the number of fashionable programmes, which were aimed not so much at quality, but at short-term attraction.

Education is related to research, of course. It is the cradle of future researchers. Good education is the best way for a university to guarantee its future research success.

Education is also related to a university's service to society. In our knowledge society, there is an increasing need for permanent education and life-long learning, which universities are very well suited to provide. Obviously, they can also improve cultural diversity, the ongoing social debates on a variety of topics, etc.

SERVICE TO SOCIETY

The third core activity of a modern university is the most recent one. Service to society is the area where universities interact with their stakeholders. In this contact, universities prove their wider relevance, not just to their own staff and students, but to society at large. They can show that their research leads to the creation of new jobs, that it can get rid of societal bottlenecks etc. This is also the area where universities can engage in new types of activities. Furthermore, this is the area where universities can prove their relevance by spreading their knowledge through intensive media contact.

Through the valorization of their research results, universities can engage in certain forms of economic activities, for instance by revitalizing existing companies, introducing new technologies, new approaches to the market, and the optimization of existing processing, so that they can better compete in the international world. Also important is the creation of spin-offs. Most of these start on campus, and can be used as an example and a model for young entrepreneurial students and entrepreneurs of the future. Interacting with society will also indicate new areas of research and new needs of education. Obviously, universities will have access to additional financial opportunities and new forms of recognition. On the other hand, economic applicability can never be the main target of university research as a whole.

CORPORATE GOVERNANCE AS A BALANCING ACT

It goes without saying that the three essential activities of modern universities require continued attention and awareness, even more so because they need to be in constant balance. Therefore, it makes good sense to comprehensively describe them in a mission statement, which can serve as a guideline for important policy- and decision-making, and in a vision statement and a strategic plan, describing the goals and the ways to achieve the essential targets and the organizational structure they require.

These three activities will serve as the criteria with which a university's performance will be measured. Therefore, they will also be the main basis for the university's continued request for autonomy and, in short, for its future. Due diligence and consideration about research, education and service to society are, therefore, a prerequisite for our university's future possibilities.

The delicate balance between a university's three core activities requires constant attention. A disequilibrium can cause a university to become a research institute, a specialized vocational school or an economic actor. Although all of these have their own *raison d'être*, none of them can ever be a university. Without a balance of the three core activities, there can be no university. Obviously, this has far-reaching managerial consequences. From a rigid business point of view, fundamental research or even educating students could be considered a waste of effort and money. From the point of view of some researchers, engaging in economically relevant activities could be considered inadmissible. Even providing education might be considered by some as a waste of time which could be spent on research. Once again, however, the uniqueness of the university lies in the balance.

This balance requires university management to be of a special nature. It should reconcile contradictory interests. It should endeavour to bring highly individual personalities together to pursue the same goals. It should try to give equal importance to various groups of stakeholders, each one of them with their own genuine interest in what the university does.

So what kind of wizard or miracle workers should university management consist of? The problem is that there is no clear-cut answer to this question. Every university has its own managerial "climate", sometimes with considerable differences from one institution to another. For instance, in Leuven, "extreme democracy" is the ruling principle. Provided he or she manages to collect 30 supporting signatures, all professors can, in principle, become rector of the university. But at the moment, external managers cannot. In most universities in Holland, quite the opposite is true, and the top of university management is not elected, but appointed. There is probably something to be gained from both systems. Modern universities are facing such a tremendous set of expectations that we probably cannot hope to find the best person

for every managerial function simply by trusting fully democratic elections. On the other hand, imposing outside managers on the academic community could have paralyzing effects. The best solution, therefore, would be to carefully design a profile of the "ideal university president", an optimal combination of a good researcher, a good professor and a good manager. This profile can only be the result of a wide and open discussion within the academic community, because it not only serves as a "checklist" used in finding suitable candidates for managerial positions, but also as a blueprint for the future which the university wants for itself.