

Universities or “Professional” Schools: Where Are the Limits of the Academia–Industry Linkage (*sangaku renkei*) Policy?

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We touched this question for the first time about three years ago when we had started the tricky process of obtaining the official accreditation of our newly proposed curriculum in Japanese studies, which is the basic precondition for having right to provide education, to award degrees, and for gaining the financial support from the Ministry of Education, of course. The description of this process itself, which is mainly in hands of ministerial bureaucrats, would be, without any doubts, an excellent topic for another special lecture. However, I intend to focus on a particular problem concerning the perspectives on linkage between universities and industry / business only. The main goal of my brief paper is just to pose questions, summarize the main arguments, outline the pros and cons, and provoke the further discussion and inquiries rather than provide the definite answers to the mentioned question.

Outline of the Japanese Studies programme at Charles University and its main problems

At the very beginning of my presentation, let me describe briefly the new programme of the Japanese studies we are going to provide for the first time since September 2005 and summarize the core problems we are facing at Charles University in Prague.

Although since 1947, when the study of Japanese language and culture appeared on the curriculum of the Department of Far Eastern Philology and History at the Faculty of Philosophy and Arts, the study programme has been rearranged several times (the most profound modification occurred at the very beginning of 90s), its main axis focusing mostly on the so-called classical Japanology-oriented field of studies has remained unchanged. The programme has offered – or rather is still offering – two types of the five-year Master’s programme: the first is the “one-subject (one major)” programme in so-called Japanology, the second being the “two-subject

(double major)” curriculum. The one-major programme is divided into two stages (six semesters in the first and four semesters in the second stage with the so-called “promotion” examination after the sixth semester but without awarding any degree). It includes the language-related classes (theory of Japanese language, spoken Japanese, written Japanese, reading of texts, the classical Japanese language, etc.), lectures on classical, early modern and modern Japanese literature, lectures and seminars on ancient, early modern and modern Japanese history, lectures on the various aspects of modern Japanese society and an introductory course in history of East Asian thought. Even though such curriculum, when established nearly sixty years ago perfectly corresponded to the traditional concept of humanistic studies at Charles University, it seems to be full of crucial problems, since it does not reflect the shift in both academic and practical life at the dawn of the twenty-first century.

The first problem has been the title (name) of the study programme itself. The name “Japanology”, which has been used as an official label for our studies up to this September, is a very vague and obscure term. There are disciplines such as biology, archaeology, linguistics, mathematics, economics, etc., but what kind of discipline so-called Japanology actually is? What is the methodology of such discipline? When you ask the graduates of our department “*What’s your discipline?*”, the majority of them will definitely answer “*I am a Japanologist*”. One can imagine a linguist major in Japanese language, or historian focused on the history of early modern Japan, for example, but it is hard to understand what such Japanologist actually studies. If we accept the existence of Japanology and a Japanologist, we should regard everyone who can speak German as “Germanologist” major in “Germanology”. In order to cope with such a ridiculous concept we have decided to change the official name of the study programme from “Japanology” (*japanologie* in Czech) to “Japanese studies” (*japonská studia*). Nobody, however, can imagine how much energy it took to persuade the university and ministerial bureaucrats to accept even this small cosmetic change in the name of the programme.

The second crucial point is the structure of the curriculum, or to be more precise, how to find an adequate answer to the urgent need for a shift from the traditional language-, literature-, history- and art-oriented Japanology to the more interdisciplinary Japanese studies. This demand is also closely related to the general trends in Europe, known as the Bologna process. Our primary goal when preparing the new concept of the study programme was introduction of a system of academic grades which are easy to read and compare, and system of study essentially based on two cycles – a first one geared to the employment market providing the high level of language skills, and the second grade which is more academic-oriented.

At the very initial stage of the evaluation process we applied the four-year BA programme aimed first of all at providing intensive language courses in order to

prepare students for both practical life of a translator or interpreter and for further academic studies, following by the two-year MA programme focused particularly on the academic and research activities. Both programmes would be divided into blocks and not into years, and each block would be terminated by the independent final state examinations. As you may notice, the new two-cycle programme would consist of 6 years of study in total, extending the first cycle to 4 years. There is one comprehensible reason for such extension. Under the present system, students can take the “promotion” exams after three years of study, but they must pass it by the end of the eighth semester, i.e. by the end of the fourth year of his / her studies. Our experience is that only a few students sit for the exam just after the third year, and they prefer to study, at least the language, for one additional year in order to be able to pass the language exam without problems. The other sound reason is that unlike in English, German or French studies, our students enter the university without any previous knowledge of the language. There are applicants who have some experience with Japanese (some of them have practiced their self-taught Japanese or attended some elementary course at a high school or private language school), but we cannot work on such assumption and we have to treat them as absolute beginners. Under such conditions, the four-year intensive language course seems to be a reasonable prerequisite for meeting the minimal job requirements of interpreters and translators. This policy also fully corresponds to the above-mentioned Bologna Declaration which has stated that the common goal of signatory states should be “the introduction of undergraduate and postgraduate levels in all countries, with first degrees *no shorter* than three years” (Bologna Declaration, 2000, p. 4).

Unfortunately, both university representatives and ministerial officials could not understand the particular needs of our field of studies and we were forced to limit the length of the first cycle to three years only. The main reason – as university representatives explained – is the economic aspect of the matter, since the Ministry of Education seems not to be willing to support the studies in humanities for more than five years in total.

As you may know, at the very end of nineties, the Czech government followed the general trend in the other European countries and in Japan as well, and “denationalized” the universities, incorporating them as “independent administrative entities”, which seems to be almost the same legal status as *dokuritsu gakko hojin* in Japan (see Act No. 111/1998 Coll., The higher education act). I do not intend to dispute the necessity or rightfulness of such policy, but I cannot omit its merits and demerits as seen from our, academic staff’s side.

On the one hand, the universities gained so-called “full academic freedom” which is an indispensable precondition for both teaching and research, but on the other hand almost all public universities have been thrown into the deep waters of financial

distress. The situation in the Czech Republic is further worsened by the fact that the social democratic government deprived public universities of the right to charge the tuition fee for the standard courses. In other words, public universities are obliged to provide the standard higher education completely free of charge.

In the present state of affairs, the universities are facing a heavy economic pressure. As for Charles University, approximately 70 percent of the university budget is still subsidized by the Ministry of Education, Youth and Sports on the principle of calculation of the average costs per one student, while the remaining 30 percent are covered by financing from internal or other external sources. From the point of view of universities, however, the subsidies from government are a very insecure and ambiguous source of financing. In the state budget the subsidies to universities, unlike the social benefits, do not represent so-called mandatory expenditures and the determination of the real amount is a matter of lively discussions and the behind-the-scene *temawashi* process.

Moreover, the construction of the formula for calculating the amount of subsidies for each university and faculty is based on a vague concept of so-called “standard average costs for teaching of one student”. This indicator is further multiplied by the so-called “education intensity coefficient”, which is the highest for the Faculty of Medicine (approximately 6 or 7) and the lowest for the Faculty of Arts and Philosophy (in fact, the coefficient is fixed at 1, which means, in the end, that the total amount of subsidies equals to the basic cost level). This concept is based on the outdated but still deeply rooted preconception that for the education of physicians one needs laboratories, expensive equipment and profound professional training, while for the teaching process in humanities the blackboard and a piece of chalk are sufficient. Since this way of distribution of the limited financial sources is favourable for the faculties major in natural and technical sciences, which are actually the most influential lobby in our university hierarchy (in the University Board of Representatives of Charles University, consisting of the rector and six vice-rectors, there are only two persons representing the nine faculties oriented to humanities, while the remaining five representatives come from eight science-oriented faculties), one cannot expect any radical and fundamental changes in this area. Under these conditions, one cannot rely but on the other external sources of financing – namely on the finance coming either from university–industry / business co-operation (*sangaku renkei*) or from the independent, purely academic research activities.

Changing the concept of university

A university is usually defined as “an institution of higher education, usually comprising a liberal arts and sciences college and graduate and professional schools

and having the authority to confer degrees in various fields of study” (Encyclopaedia Britannica, 2005). The modern university evolved from the medieval schools known as *studia generalia*, which were generally recognized places of study open to students from all parts of Europe. The earliest *studia* arose out of efforts to educate clerks and monks beyond the level of the cathedral and monastic schools, in other words, the initial approach to the first universities was rather practical than academic. The inclusion of scholars from foreign countries constituted the primary difference between the *studia* and the schools from which they grew. Until the end of the eighteenth century, most universities offered a core curriculum based on the seven liberal arts: grammar, logic, rhetoric, geometry, arithmetic, astronomy, and music. Students then proceeded to study under one of the professional faculties of medicine, law, and theology.

The Protestant Reformation of the sixteenth century and the ensuing Counter-Reformation affected the universities of Europe in a significant way. New Protestant universities were founded, particularly in the German states, while many Roman Catholic universities became obdurate defenders of the traditional learning associated with the Catholic church. By the seventeenth century, both Protestant and Catholic universities however had become overly devoted to defending correct religious doctrines and hence remained resistant to the new interest in science that had begun to sweep through Europe. The new learning was discouraged, and thus many universities underwent a period of relative decline.

In the later eighteenth centuries religion was gradually displaced as the dominant force as European universities became institutions of modern learning and research and were secularized in their curriculum and administration. As the result of the processes, theological, philosophical, and other traditional doctrines were examined with a new rigour and objectivity and modern standards of academic freedom. This model of the university as a complex of graduate schools performing advanced research and experimentation proved to have a worldwide influence.

According to the tradition established by Karl Wilhelm von Humbolt at the beginning of the nineteenth century, activities of the modern universities have to be based on three principles of freedom: freedom to study according to inclination, freedom to teach according to conviction, and freedom to do research according to interest. Such an arrangement would not only foster originality of thought, but would also provide the structural basis for intellectual independence and mutual criticism among professional colleagues. The rewards for professors were threefold: decent salaries as professionals, acclaim from inspired students, and esteem for their contribution to original research. The latter is strongly illustrated, for example, by the naming of theorems after mathematicians (see Niels Henrik Abel) or diseases after doctors (see Alois Alzheimer).

In the second part of the twentieth century, however, such concept of universities was going through a process of radical and irreversible changes. In today's global world of knowledge, the realm of learning has become a strategically important factor that fosters competitiveness and economic growth of countries. Globalization, international knowledge exchange and the increasing global competition require a rapid transfer of scientific knowledge and understanding into everyday life (Ziman, 2000). Technological change, the accumulation of knowledge and its spill-over into the production process, is considered as the primary engine of economic development in the new growth theories (cf. Romer, 1991, 1994; Grossman and Helpman, 1994). This trend has resulted in a full recognition of the role of knowledge and technology in economic growth. The transition to a knowledge-based society and the application of knowledge in the production systems has changed the main roles of universities as pure academic institutions and strengthened the importance of their ties with the business world.

University–industry linkage: pros and cons

The idea of effective linkage between industry and educational institutions, mainly universities and colleges, is not a new concept at all. The first *sangaku renkei* emerged in 1906 at Cincinnati University, followed by the so-called *sandwich system* which had been introduced in many technical colleges of Great Britain. In Japan, the first linkage between universities and industrial body sprouted in Hanshin (Osaka-Kobe) region soon after the WWII, but it was not generally widespread until the amendment of School Education Law (*Gakko kyoikuho*) in 1961. Nowadays, the strong university–industry linkage is regarded as the main axis of the R&D efforts in many Japanese corporations. In the Czech Republic, too, the government has declared the vague intention to reform the R&D subsidy system in order to increase research productivity, and one of the key components of this reform process has been an emphasis on promoting interaction between university-based academic scientists and corporate R&D laboratories. However, in my view, the positive role of university–industry linkages may need to be viewed more cautiously, at least in the following points.

First, the above mentioned structural problems that higher education institutions face in the new environment drive universities into developing and sustaining linkages with business and industry. Moreover, universities deprived of the direct access to the core funding from governments are caught between economic stringency and impressive opportunities for individual and collective scientific entrepreneurship. Under these conditions, “forced” university–industry linkages may provoke a number of unintended effects, over and beyond the expected and uncontested benefits, both in

the creation and dissemination of knowledge and the generation of income. Such unintended effects are:

- possible distortions of research and training agendas,
- potential diversion of the energy and commitment of individual staff involved in interaction with industry away from the core activities, in particular in the area of undergraduate teaching,
- growing internal fragmentation and conflicts of interest among different groups within higher education institutions or with the public interest in general (for a detailed discussion, see Hernes and Martin, 2001, pp. 13–17).

Second, although there is no doubt about the fact that increasingly strong spillovers from university-based science have helped to drive an increase in the total numbers of innovations, the results of the latest analysis, published both in Japan and the United States (see for example Branstetter, 2004), have proved that spillovers from university science have played, at best, quite a modest supporting role in the widely observed surge in innovative activities of firms. If these conclusions are correct, then the widely observed enthusiasm for promotion of formal *sangaku renkei* may need to be tempered with more realistic expectations concerning the possible benefits. Personally, I support the present efforts by the Czech government, industry and universities to remove the barriers to a productive interaction between university scientists and industrial researchers that have traditionally inhibited the *sangaku renkei* activities. However, *sangaku renkei* is, at best, only partly responsible for spurring an acceleration of innovation in Japan and the United States, and even that effect is largely limited to a narrow set of technologies and industries. It may not be realistic to expect that the positive impact of *sangaku renkei* promotion will be substantially greater in the Czech Republic than it has been in Japan or in the United States.

Third, in my opinion, the most important point is that the *sangaku renkei* activities are limited mainly to science and technical disciplines, and there is an extremely narrow space for co-operation and linkage in the field of humanities. Somebody can be under illusion that Japanese companies will be interested particularly in making close contacts with a faculty providing Japanese studies programmes and that they can play a substantial role in co-financing these programmes. But as Prof. Paul Samuelson, the Nobel Prize Winner, pointed out, “There is no free-lunch principle” and one cannot count on getting something for nothing. Being more precise, the Japanese investors enter the Eastern European markets not in order to subsidize the Japanese studies programmes at local universities but for gaining substantial profits coming from their production activities. The majority of more than 160 Japanese companies that now operate in the Czech Republic are assembly plants or their subcontractors (*shitauxe gy sha*). The TPC (Toyota–Peugeot–Citroen) joint project

seems to be the best example. Such companies look first of all for skilled workers, highly educated technicians and temporarily for a limited number of interpreters. They usually need interpreters in the initial stage of their activities when many specialists who have substantial problems with the communication in English come from Japan to set up and install the machines and other equipment. It is a more or less short stay, however, and Japanese companies thus prefer to hire a freelance interpreter for a time-limited contract only.

I can support my view by the results of a market research done at the end of 2003 by Mr. Kondo Masanori, Japanese language instructor dispatched to the Institute of East Asian Studies, Charles University, by the Japan Foundation. Mr. Kondo interviewed about 30 main Japanese production companies operating on the Czech market (Kondo, 2003). Only 14 of them are expecting to hire the Japanese-speaking staff while 16 companies do not intend to do so. When analyzing the demands from these 14 companies, only one company is willing to hire a freelance interpreter while 8 companies look for regular staff members providing not only interpretation and translation services but performing other regular administrative duties as well. My experience, however, is that most of our present or former students are not willing to become the regular employees but prefer time-limited contracts since they just want to make a fortune, perfect their knowledge of language and look for the chance to get some scholarship for further study in Japan. When the supply and demand on the labour market will be balanced and stabilized they definitely will be pushed to change their attitude, but as long as there is a relatively great demand for Japanese-speaking interpreters and translators one can expect no substantial shift in this trend.

Another interesting outcome from Kondo's survey is the reason why a lot of Japanese companies do not expect to hire the Japanese-speaking staff. I will quote their answers in the priority order given by respondents.

1. English language is sufficient for the work.
2. Since we have a lot of customers outside the Czech Republic, we give a high priority to employees with a high level of English language knowledge.
3. It seems to be difficult to hire a person who can use the Japanese language in business communication. The knowledge of the language alone is not a sufficient qualification for hiring.
4. For our business we do not need any Japanese-speaking employee at all.
5. We emphasize the knowledge of English.
6. We employed such person in the past but he / she did not meet our expectations.
7. If he / she can speak English it is sufficient for communication.
8. We do not need such person at all now.
9. The official communication language used in our company / office is English.

10. He / she is unable to keep the business information in secret. If we need a person with the knowledge of Japanese, we prefer to hire an external interpreter.
11. If somebody from the local staff can speak Japanese, he / she becomes the “top speaker” of our company and it may have a negative impact on the other local partners.
12. We have a (Czech-speaking) Japanese staff.
13. Our Japanese staff is fluent in English.

Although I highly appreciate Mr. Kondo’s research, I cannot agree with its conclusion. According to Mr. Kondo, Japanese companies look not for the persons with the knowledge of Japanese capability but for the men / women with the capacity of becoming Japanese-like employees (). From this point Mr. Kondo concludes that we, university staff, should educate students not only in the language but in Japanese business manners and Japanese work ethics as well fi

fi I fully agree that business ethics is an important aspect of the modern Japanese society, but we should study and teach such aspects in the broad context of, for example, sociology, social psychology or sociolinguistics and not as part of practical business education which actually comes under the field of activities of professional schools such as the Prague School of Economics or the Czech Technical College, etc.

From university–industry linkage to university–university ties

Under the above-mentioned conditions, it seems obvious that in various fields of studies, namely in humanities, not the industry but the universities should be the leading actor in cultivating the adequate environment for significant research activities. Before discussing this agenda, an important prerequisite for both the effective fund-raising process and the creative research activities should be mentioned: it is the existence of effectively operating university administration.

It is true, I admit, that university administrators too are under an increasing economic pressure and work very hard. This causes no doubt. All I want to argue is that the major part of their work is unproductive and does not free us of our drudgery administration duties which deprive us of the precious time designated for teaching and creative research.

Given these facts, it is time to acknowledge that administration itself is an outmoded colonial concept that has outlived its usefulness. Administrators are empire builders and that's the last thing we need in the modern university. Today, what is needed is good management and not archaic administration (for the further discussions on this issue see, for example, Hexham, 1997, p. 4).

What is the difference between administration and management? Historically, colonial administrators administered subject peoples. Today, university administrators are a type of civil servants who seek to organize an institution. Such administrators are constantly on the lookout for new things to do, for the problems to be solved and for the ways to demonstrate their usefulness to their superiors. Hence the endless and time-consuming initiatives which university administrators are always inventing. Thus, current administrative practices are both wasteful and destructive of faculty morale.

Managers, by contrast, are concerned with the bottom line and the efficiency of an enterprise. Therefore, they seek to eliminate unnecessary tasks which prevent them and others from concentrating on the prime goal of their organization. This means that the management ethos is diametrically opposed to that of the administrator. What we need today is the management ethos that reduces unnecessary work by focusing on the primary functions of the university.

What are these functions? Surely the prime function and task of the modern university is the creation and transmission of knowledge in a broad sense, including both teaching and research. There are regular complaints about the lack of financial sources, but in my view the situation is not as catastrophic. In the Czech Republic, there are several ways how to get substantial financial subsidies. One group of research projects comes under the system of financing or co-financing by the Ministry of Education, the other group consists of the projects sponsored by the state Grant Agency. The limited national sources can be supplemented with external, i.e. foreign ones. I mean the sources from both Japan and the EU. It is true that the Japanese universities are going through the very crucial period of transformation and suffer from the same financial distress, but since for many universities in Japan the cooperation with foreign universities and participation in international projects seems to be the best way to justify their own existence, they are willing to provide some financial support to any meaningful project.

The most promising source of finance seems to be the EU funds. But there is a snag in it. European funds usually require a minimum sum of money one must apply for, and such sum is actually too high for one university. Under the circumstances, joint projects of two or three co-operating universities only have a chance to be approved.

Conclusion

In my opinion, the clue to the solution of our common above-mentioned problems (mainly the crucial problem of how to finance the research activities in the field of Japanese studies) lies in the linkage between universities (*gakugaku renkei*) rather than in academia–industry linkage (*sangaku renkei*). For implementation of such *gakugaku renkei* policy, however it is necessary to meet the following conditions at least.

1. To create an information network to enable an effective sharing of information. The first step towards meeting this requirement is to persuade specialists to make their best ideas available to others. We should steadily cultivate the awareness that we are not competitors but partners. Nonetheless, convincing people to freely publicize their most inspired concepts is a persistent problem. Revealing their discoveries may entail rendering power; it means a loss if others siphon inventors' ideas and present them as their own, thus depriving inventors of the honour that is rightly theirs. However, there are strong academic norms as to how contributions to the public good and in the public domain should be made known, and the opposite negative procedure is highly sanctioned. There are strong imperatives to identify and quote those whose ideas are used, and taboos are vehement towards plagiarism or falsification.
2. To set the group of meaningful and realistic tasks and targets in which we can cooperate. Every institution has its comparative advantages, and we should not waste time and money for doubling our activities.
3. To facilitate the mobility of both staff and the students by organizing summer schools and cooperation in supervision of students, particularly PhD students, and in the screening of their PhD theses. Since an important precondition for such mobility is the existence of interuniversity agreements, it is necessary to initiate their conclusion.
4. Last but not least, to organize a consistent lobbying (*temawashi* or *nemawashi*) not only on the university or national level, but even in Japan or on the EU level.

References

Act No. 111/1998 Coll. On higher education institutions and on the amendment and supplement to some other acts (The higher education act), as resulting from amendments made by Act No. 210/2000 coll., Act No. 147/2001 coll., Act No. 362/2003 coll., Act No. 96/2004 coll., and Act No.

121/2004 coll. The Ministry of Education, Youth and Sports of the Czech Republic website, online as of 2005-11-10 at: <http://www.msmt.cz/Files/vysokeskoly/Legislativa/HigherEduAct-new.htm>.

Bologna Declaration on the European Space for Higher Education: An Explanation. European Commission website, online at: <http://europa.eu.int/comm/education/policies/educ/bologna/bologna.pdf> (10-11-2005).

Branstetter, Lee. *Is Academic Science Driving a Surge in Industrial Innovation? – Some Preliminary Findings and a Research Agenda*, Research Institute of Economy, Trade and Industry, Tokyo, 2004. Online at: http://www.rieti.go.jp/en/columns/a01_0119.html (2005-11-10).

Encyclopaedia Britannica. Deluxe Edition CD-ROM, 2005.

Grossman, Gene M., and Elhanan Helpman. “Endogenous innovation in the theory of growth”, *Journal of Economic Perspectives* (Winter 1994): 23–44

Hernes, Gundmund, and Michaela Martin (eds.). *Management of University-Industry Linkages*. Policy Forum No 11, International Institute of Educational Planning, UNESCO, Paris 2001.

Hexham, Irving. “University Reform: A Radical Proposal”, *The University of Calgary Gazette* 26, 31 (February, 1997).

(Kondo Masanori).

[Survey of the demand for the Japanese-speaking employees in the Japanese companies operating on the Czech market]. Unpublished research report, 2004.

Romer, Paul M. “Endogenous Technological Change”, *Journal of Political Economy* 98, 5, Part 2: The Problem of Development. A Conference of the Institute for the Study of Free Enterprise Systems (Oct. 1990): 71–102.

Romer, Paul M. “The origins of endogenous growth”, *Journal of Economic Perspectives* (Winter 1994): 3–22.

Ziman, John (ed.). *Technological Innovation as an Evolutionary Process*, Cambridge: Cambridge University Press, 2000.

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