HAL
open science

PhD education - challenges and opportunities of Europeanization

Marie-Laure Djelic

To cite this version:

Marie-Laure Djelic. PhD education - challenges and opportunities of Europeanization. Carmelo Mazza; Paolo Quattrone; Angelo Ricaboni. European Universities in Transition, Edward Elgar Publishing, pp.49 - 69, 2008, 9781847207487. hal-01891989

HAL Id: hal-01891989

https://sciencespo.hal.science/hal-01891989

Submitted on 10 Dec 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

3. PhD education – challenges and opportunities of Europeanization

Marie-Laure Djelic[1]

The European Union projects itself as becoming 'the most competitive and dynamic knowledge-driven economy by 2010' (European Parliament, 2000). Policy pronouncements advocate, beyond national specificities, a European model of economic development where knowledge drives collective and individual welfare. As a consequence, the European Union identifies as key policy priorities the development of knowledge-production and knowledge-exploitation capacities. And the European Union vouches to 'contribute to the development of quality education by encouraging cooperation between Member states and if necessary by supporting and supplementing their action' (European Parliament, 2000). This applies at all levels of the education chain but takes particular significance at the level of higher education – where knowledge is not only to be reproduced but also produced.

European universities hence are in the eye of the storm. Having traditionally been at the core of knowledge production within nation states, they are expected to play a role tomorrow in the ambitious move towards a European knowledge economy. This implies that universities have to change. First, they need to reach a European – if not global – scope and progressively deploy European identities. Second, they have to see themselves in close and tight interaction with their surrounding socio-economic environment. The knowledge they produce cannot be only knowledge for the sake of knowledge. It should also be knowledge for welfare and collective wealth. Concretely, this means that the university increasingly needs to work together with – and not in isolation of – key socio-economic actors. In particular, the nexus between the university, business and government, otherwise known as the triple helix (Etzkowitz and Leydesdorff, 1997), becomes a crucial one. Universities in Europe are in profound transition, indeed; Europeanization and the particular form it is taking today are at least a partial explanation.

In this chapter we focus on doctoral education. As the highest stage of the higher-education rocket, the doctoral level is very much at the core of discussions about and around knowledge production and knowledge

diffusion. This is so for essentially three reasons. First, doctoral or PhD programmes are or should be themselves the seat of production of new, cutting-edge research and knowledge. Second, doctoral or PhD programmes are or should be powerful intellectual magnets. They should mobilize and crystallize the dynamism of more established research communities, challenging them in the process. They are or should be powerful attractors also for different kinds of external actors and play a role in the diffusion and exploitation of new knowledge. Third, doctoral or PhD programmes deserve specific attention as they are responsible for the social reproduction of researchers and research trainers and hence have a long-term impact.

In this chapter, we propose a reading of the challenges and opportunities of Europeanization for doctoral education in Europe. First, we consider what is at stake today in European doctoral education, particularly if we keep in mind the project of a European knowledge economy. Second, we propose a broad stroke picture of doctoral education in Europe and its complexities – with a particular focus on the field of management studies. Finally, we try and suggest what the Europeanization of doctoral education could mean. We build here upon recent, budding and still fragile initiatives while pointing also to possible further transformations.

EUROPE – WHAT IS AT STAKE?

Sheer Numbers

The ambitious 'Lisbon objectives' imply that Europe should produce, retain and attract more researchers (European Parliament, 2000). Knowledge implies research, which itself implies researchers. The issue of sheer numbers is made more acute as the current population of researchers is aging. In France, for example, an expected 50 per cent of researchers are due to retire over the next ten years (Harfi, 2005).

These parallel trends – an increasing role for research in our knowledge societies and an aging population of researchers – create intense pressure. How can we produce more PhDs and more researchers over the coming years (quantity) without sacrificing, and in fact if possible while increasing, quality? This will certainly depend upon our capacity to render PhD studies more attractive, within the background of the societal capacity to enhance the status of research careers. In turn, this hangs on the willingness to invest and to use resources effectively.

Brain Drain – Myth or Reality?

Those questions are burning ones in a context where 'brain drain' trends don't always work to the advantage of Europe. We should naturally beware of catastrophism; there is often a degree of mythology associated with debates and discussions around the 'brain drain'. The simplistic scenario goes something like this. The United States and its higher education system are powerful attractors – draining the best minds from around the world, including from Europe. This attraction, furthermore, can also play a role for more mature researchers and American universities and firms, with their prestige and resources, can seduce the best knowledge producers around the world at a later stage in their career, when they are most productive. There is a reality indeed to the 'brain drain' phenomenon and Europe needs to face it. It is important, though, not to exaggerate the threat and we should in particular differentiate between the 'brain drain' and mobility and diversity of experiences.

Overall, the mobility of graduate and postgraduate students has significantly increased over the past 15 years or so in OECD countries and this is a trend to be encouraged. Across Europe, the number of students choosing to study abroad is going up. American universities remain powerful attractors. In 2002, 32 per cent of all foreign students in the OECD zone were in American universities. But Europe is also 'draining minds', and 34 per cent of all foreign students in the OECD zone go to Britain, Germany or France (Harfi, 2005, p. 2; OECD, 2002). In 1985, there were 3500 French students in American universities while the number was nearly double fifteen years later in 2000 (Harfi, 2005). Still, this represents only around 12 per cent of the entire population of French students who chose to study abroad. The big winner over the past 12 years or so has been intra-European mobility testifying to the success of European programs such as ERASMUS.

On the other hand, we need to look at other dimensions of current evolution. Over recent years, the number of Asian students has exploded in OECD countries – in 2002, Asian students represented 45 per cent of the total pool of foreign students. This Asian presence is stronger in the US, though, than in Europe – in France for example, the Asian contingent represents a mere 14 per cent of foreign students, Africa being still the main source of foreign students. Another dimension to note is that foreign students in Europe will often study humanities, social sciences or languages while American universities remain particularly attractive for those targeting scientific and management studies. In 2001, 36 per cent of all PhDs in science and engineering delivered in the United States were given to foreigners. Out of a total of 9200 diplomas, 1420 went to Europeans (and 2400 to Chinese citizens!). Furthermore, 32 per cent of those foreign PhDs had

a stable project to stay in the United States – the percentage had been only half that in 1990. Forty-nine per cent of those foreign PhDs in the United States wished to stay if they could – here again a significant increase over the percentage in 1990. In contrast, only 3 per cent of American citizens with a PhD were planning to work abroad in 2002. Undeniably, this points to more than healthy mobility. 'Brain drain' there is, and even though Europe is benefiting to an extent, American research and research institutions or organizations are still powerful attractors, particularly in science, engineering or management.

Intellectual and Structural Background to Attractiveness

If we take a hard look at the possible reasons why, several explanations come to the fore. Material conditions for PhD education naturally play a role. Students find in American universities large, integrated and well-structured PhD programmes embedded in intense research environments. Those research environments are richly endowed, and material conditions are generally good, including for graduate students. Material conditions, furthermore, often come together with great intellectual conditions. Richly endowed universities can bring together several stars in a field, turning a department into a powerful intellectual magnet on the world scene – the virtuous circle here is quite easy to see. A third type of explanation has to do with the opportunities for PhD students after they graduate. In the United States, the market for postdoctoral positions and starting positions is much more structured, transparent and open to foreigners than is the case still in Europe. Hence, studying in the United States makes sense as such, but also as a way to enter a qualified labour force and to find interesting job and career opportunities. Finally, a last set of explanations may have to do with the possible difficulties of coming back into European academic and research institutions and networks when you are no longer an 'insider' to those institutions and networks. An Italian going to the United States or for that matter to any other country to go through doctoral education may find it much harder after several years to come back to Italy and find a job than if he or she had never left. Obstacles can go all the range from the rigidities of administrative systems to individual expectations that have become divorced from local conditions.

PHD EDUCATION IN EUROPE – WHERE DO WE COME FROM?

Doctoral education is naturally quite diverse across Europe. Any attempt at description is bound to be schematic and we should be conscious of the

limits of the exercise. The typology proposed below is built in part from the conclusions of a brainstorming meeting on doctoral education in Europe. This meeting was organized by the author in her capacity as member of the Scientific Committee of EIASM (European Institute for Advanced Studies in Management). It took place in March 2006, in Brussels, and brought around the table the Directors of doctoral programmes (or their representatives) from ten business schools and universities across Europe. The first part of the discussions during this meeting focused on the key features of the different programmes and of their current evolution.

Doctorate in a European Tradition or Americanized PhD?

> What is the situation of a graduate student who is intent on an Academic career in the university? In order to understand the particular nature of circumstances in Germany, it will be helpful to proceed comparatively and to see how matters stand abroad, above all in the United States, which in this respect presents the sharpest possible contrast with us (Weber, 1918 [2004], p. 1).

This claim was made by Max Weber in 1918 during his lecture on Science as a Vocation! Ninety years later, it remains valid as pointing to a persistent contrast between two quite different ways to think about and organize doctoral education. If we focus on management studies, we find that the current situation is, in Europe, one of cohabitation between two different types of doctoral programmes and doctoral programme philosophies. On the one hand, a number of European doctoral programmes in management studies are structured and organized according to what Weber called a 'German tradition' – or more broadly a 'European tradition'. On the other hand, an increasing number of institutions across Europe have built PhD programmes or are transforming their doctoral programmes into highly structured PhD programmes, very much inspired by an 'American model'.

Doctorate in a European tradition

Within this tradition, the doctoral student is essentially an 'academic trainee'. He/she is associated with a particular professor and receives his/her training mostly in and through this single association. This tradition is sometimes referred to as the 'apprenticeship model' (EUA, 2005, p. 17). In certain cases, one could provocatively argue that the doctoral student 'belongs' to the professor with whom he/she is associated. In fact, the apprenticeship model is sometimes described in a less than complimentary way as the 'master–slave' model (EUA, 2005, p. 17). In the ideal-typical version of the European tradition, there is no formal course, let alone programme. The graduate student gets his/her intellectual training only through the direct tutoring of his/her mentor.

This has a number of consequences. First, it obviously generates heterogeneity as each training is likely to be unique and we could be in a situation where there is no common base in the education of doctoral students in a particular field across Europe, within a country or even within a single department or school. This is bound to create obstacles to exchanges, mobility or collaboration. This type of organization of doctoral studies means great variability, furthermore, in the quality of training – with respect to theory, methods or the pragmatics of research and publication.

A professor, in this model, has generally a small team around him (mostly) or her, made up of doctoral students and postdoctoral researchers or young academics waiting either for their *habilitation* or for a permanent job to open up. One risk is that the team becomes self-centred and closed-off – exchanges and debates become mostly endogenous with little external stimuli and challenges. A doctoral student who undertakes a dissertation under the supervision of a single professor and remains in the team of that particular professor as a postdoctoral researcher will lack intellectual diversity in his/her training – however brilliant and unique his/her supervisor might be. Another, associated risk is that doctoral students become overly dependent upon their supervisor – intellectually but also with respect to status and resources.

Americanized PhD

The 'Americanized' PhD programmes that sprout up these days in Europe have a number of common features. First, these programmes have an intense period of structured coursework – generally two years. This period is associated with grades, evaluation and processes that make it possible to measure whether knowledge has been acquired and assimilated. Students are recruited into a programme and not directly by a professor; the choice of supervisor may in fact happen quite late.

There is a varying but real degree of collective and even cohort interactions in and around the classes and class work but also quite often in ancillary activities. PhD students meet and intermingle regularly, together and with the faculty as a group, for example in research seminars or workshops. The interaction between students and faculty members is likely to be much more egalitarian and collegial than would be the case in the traditional European model. Structured PhD programmes are often found in institutions with some degree of collective functioning at the level of the faculty; the PhD programme, its construction, the development of courses and the creation of articulations between those courses imply themselves a fair amount of collaborative work.

Structured PhD programmes have a tendency to be more internationally-oriented than doctoral programmes in the European tradition, in a number

of different ways. First, language is an important dimension. PhD programmes tend to allow for a significant presence of English in courses, exams and in the writing of the dissertation. English sometimes co-exists with the national language; in some cases the programme has moved to being delivered entirely in English. Another dimension of internationalization is expressed through the pressure to attend international conferences and to consider early publication in international outlets. Structured PhD programmes tend to integrate these either as requirements or as strongly encouraged activities. Varying degrees of support exist – financial but also intellectual in the form of courses or coaching on publishing and conference presentation. Finally, because basic coursework is at least in part homogeneous with what is being taught elsewhere in the same discipline, structured PhD programmes are a better platform for different forms of exchange and mobility – mobility of students or invitation of foreign faculty members to teach in the programme.

National Training for National Markets

While there are signs that the structured PhD format is making headway in management studies in Europe today, the European tradition probably remains dominant if we consider sheer numbers – and in particular the overall number of graduates trained.

Beyond the format of the programmes, though, and its current evolution, the model of doctoral education in management studies in Europe is still strongly marked by national differentiation and fragmentation. Instead of European markets for doctoral education and for doctors, we still very much find in Europe the co-existence of several national markets. Europeanization is limited and at an early stage still. Sometimes, we even find that the markets for doctoral training and for doctors are really regional, not even national (Doz et al., 2004). Departments or faculties produce doctors who stay on as postdoctoral researchers and may even take over as the next generation of professors in that same department or faculty.

There are still many obstacles to going beyond national training for national markets – language, strong national embeddedness of intellectual communities, heterogeneity of intellectual and research traditions, administrative and financial hurdles, tight connections and links of dependence between supervisors and students amongst others.

While *national training for national markets* hence remains the rule in European education in management studies, it is worth pointing to another trend that undeniably has had an impact on the field. Going back to the period of the Marshall Plan and its associated Technical Assistance

Program, the United States has been both a model and an attractor (Djelic, 1998). When it comes to management, management studies and management studies education, Europe has consistently, over the past 60 years or so, looked up to the United States (Amdam et al., 2003; Sahlin-Andersson and Engwall, 2002; Furusten and Bäcklund, 2000). There has been a regular and significant flow of bright European minds finding their way to a doctoral programme or postdoctoral experience on the other side of the Atlantic. Some stayed on but a number have returned and significantly contributed to building the field of management studies and management studies education in Europe. As an addition to national training for national markets, hence, US training for (maybe!) national markets has been an important part of doctoral education in management studies in Europe.

EUROPEANIZATION OF PHD EDUCATION: WHAT DOES IT MEAN?

European ambitions to become a knowledge power make it urgent, we argue, to seriously consider doctoral education. We need to work in three main directions. Firstly, we should increase our capacity, at the aggregate European level, to produce but also to attract and retain quality researchers. Secondly, we should be working on finding a satisfactory balance in the opening of the university, particularly in its doctoral and research functions, to pressures of accountability, relevance and productive applicability. Thirdly, we should take the necessary steps to increase not only mobility of different kinds within Europe but also to really develop a more fluid European doctoral and research space.

European Doctoral Education: Facing many Dilemmas

There are multiple dilemmas to consider when thinking about doctoral education in Europe and its necessary evolution in the context of the Lisbon objectives. Firstly, as we saw before, there is an issue of sheer numbers. Europe needs to produce large numbers of researchers in the coming years. Everybody agrees, though, that this should not come to the detriment of quality. Quite to the contrary, quality should increase (Doz et al., 2004; EUA, 2005). And this should all happen while keeping costs reasonable!

The focus on quality translates, on the whole, into a much more structured curriculum integrating multiple requirements. The move from the apprenticeship model towards formalized requirements in structured

programmes should be encouraged (EUA, 2005). At the same time, limited resources and various forms of accountability pressures call for a reduction of 'throughput time' – that is the time necessary to complete a doctoral degree. The objective of greater quality combines with the target of reasonable speed. This also means that there is a need to ensure a balance between continuity of supervision and a de-multiplication of intellectual and learning opportunities.

Greater structuration of doctoral programmes and a more systematic formalization of requirements should come together, having Europe in mind, with greater compatibility and comparability across borders (EUA, 2005). We should be wary, however, not to fall into sterile homogenization and we should insist on maintaining the richness that stems from a degree of diversity. Doctoral education should provide an individual with the skills and the tools to become a researcher, and as often as possible a good one! At the same time, the doctoral programme should also take seriously the challenge of having to prepare students for a job market. The competencies needed in both cases are not the same and doctoral programmes should here again find the right balance.

Academic and scientific rigor is at the very foundations of quality research. Still, the vision of Europe as a knowledge economy means that knowledge has to become socially relevant and that the researcher should be accountable to a broad set of stakeholders. We bring together in Table 3.1 this set of seven dilemmas. They characterize, we believe, the contemporary evolution of doctoral education in Europe.

The Europeanization of doctoral education, furthermore, is not a process that can be considered in isolation. It is tightly interconnected with the necessary Europeanization of academic and intellectual communities. It also begs to be associated with the issue of a European job market and its necessary fluidity. While neither of those issues are at the core of our argument, it is clear that they matter.

Table 3.1 Seven dilemmas of Europeanization for doctoral education

Increase quantity BUT Increase quality
Increase quality BUT Keep costs reasonable
Put in more requirements BUT Impose shorter throughput time
Work towards greater compatibility BUT Maintain richness stemming from diversity
Ensure continuity of supervision BUT Provide a de-multiplication of learning opportunities
Produce good researchers BUT Prepare students for a job market
Ensure scientific rigour BUT Consider relevance and accountability

Moving towards a European doctoral space should come in tight interconnection with greater Europeanization of academic and intellectual communities. In management studies both movements can be felt; they need and reinforce each other. A tighter academic community at the European level will facilitate the Europeanization of doctoral education. The progress of a European doctoral space will, on the other hand, naturally reinforce in time the European scope of academic and intellectual communities. Hence, those policies and activities that stimulate European research and academic communities also impact positively, albeit more indirectly, on the construction of a European doctoral space. They should not be neglected.

In the same way, those policies and activities that contribute to cross-border mobility of researchers and to the fluidity of job markets also have a positive impact on the structuration of a European doctoral space. There are still too many logistical, administrative and financial obstacles to the cross-border mobility of labour in general and, of particular interest to us, of knowledge labour and knowledge 'trainees' (that is doctoral students). To take one example – the lack of convertibility of retirement systems across Europe is a major obstacle. To take another example – there are still many administrative barriers in and around public universities across Europe that constrain and limit access for foreigners (including nationals from the European Union). The leverage one can gain from acting at that level should not be neglected.

Relevance and Accountability

Europe needs to produce more researchers, to increase quantity without sacrificing quality. Europe also needs to take a hard look at its capacity to attract and retain good candidates for the PhD adventure and for research careers (Europeans and non-Europeans). Another important challenge for Europe, however, if knowledge is to turn into welfare, is to think about issues of relevance and accountability. The production of knowledge and the production of knowledge producers cannot take place in total isolation from and ignorance of the questions and needs of socio-economic actors.

Gaps and challenges

Europe needs to rethink its training of knowledge producers to create a culture of connectedness, impact and relevance. Naturally, knowledge and scientific production imply processes of internal validation. Still, there is also a need to think about bridges – linking the world of knowledge to broader societal preoccupations. Knowledge producers themselves should in fact be socialized to take that role on as a dimension of their duties and responsibilities.

There are different kinds of gaps and hence we need different kinds of bridges. Firstly, there is often an apparent gap in higher education between research and the production of knowledge on the one hand, and its diffusion on the other – we call this the *diffusion or relevance gap*. The academic world has an increasing tendency to become self-centred and self-sufficient. The complexity of scientific expression, in hard as well as social sciences, has a tendency to reduce the direct impact of new ideas and new knowledge. Diffusion requires a fair amount of translation and scientific popularization. But activities around this form of translation are rarely valued within academic and scientific communities and hence are rarely given pride of place by individual scientists. If knowledge is to become socially relevant and if it is to have an impact on welfare and wealth production, then this should change. And bridges should be invented linking the newest and most original scientific ideas to diverse groups of societal stakeholders that might find those ideas interesting and relevant to their own needs and questions.

A second, and in part related gap, is the gap between fundamental new ideas and knowledge and the possibility to apply and transform them into artefacts, products or practices that can potentially improve collective welfare and wealth. We call this the *application or transformability gap*. Here, the focus should be, beyond showing relevance, on the practical interpretation of new knowledge. The challenge is not so much popularization as implementation. The scientist can him- or herself play a direct role but he or she can also rely upon partners whose task it will be to invent the pragmatics of an idea.

A third gap has to do with accountability and we call it thus – *the accountability gap*. The research activity calls for resources well before its products can themselves lead to resources. Time is an important intervening variable and there is likely to be a decoupling between those institutions, organizations and individuals producing knowledge, and the institutions, organizations or individuals transforming it into material and monetary value. Hence, research needs funding and funding organisms – whether public or private. Increasingly, those funding organisms ask for clear and detailed information on the ways in which their investment is being used. This is true today not only of private funding organisms but also of public ones. Knowledge-producing institutions and universities in particular, have therefore to adapt to a culture of accountability. This trend is reinforced by the increasingly inquisitive eye of civil society and the media. While researchers have traditionally always had to be internally accountable (to their own peer-communities), accountability to external actors with different goals and value-frames is on the whole quite new within the university. It is bringing along deep questioning and a significant challenge.

The limits

Issues of relevance and accountability are indeed important in our world and cannot be avoided when we ponder upon the place and role of research and doctoral education. Still, we should be careful not to go too far. The capacity to innovate and to generate new ideas requires, we know, a space for exploration, irrationality and playfulness (March, 1991). In fact, we should take seriously the hypothesis that relevance may be 'entirely irrelevant when it comes to the pursuit of (new) ideas' (March, 2006).

We need to convey this to our doctoral students. We have to find the ways to underscore the importance of finding a balance between the necessary reaction to relevance and accountability stimuli and the serious challenge of preserving a space of freedom and irrelevance in our research activity. We run the risk, otherwise, of sacrificing our medium- to long-term relevance on the altar of short-term reactivity and adaptability.

Many doctoral programmes across Europe will need to progress in their capacity to convey to graduate students the importance of being relevant and accountable. And relevance and accountability should be understood here both with respect to the academic community and to a much broader set of stakeholders. This implies, first, that doctoral students should understand the importance of turning research into published results that can be broadly accessible to the academic community as well as to other interested communities. At the same time, we should stop short of turning our graduate students into either publishing machines or consultants. Graduate students should be socialized as researchers who need to publish; not as mere A+ journals contributors who reduce research to what can appear in those outlets. Graduate students should be socialized as researchers open to the real issues of the world they live in; not as mere practical problem solvers. The challenge ahead, indeed, is not small!

Towards a more Integrated Doctoral Space: Different Strategies

We now turn to the issue of the emergence of a more fluid doctoral and research space in Europe. We build upon existing experiences that show the way and suggest what could be done to stimulate greater integration. We also go one step further and envision bolder moves that may appear overly ambitious today but are not impossible in the long run. We identify in fact three main types of strategies. Those are brought together in Table 3.2 and described below in greater detail.

Strategy A: Ad hoc collaboration and external Europeanization

The first strategy points to what exists already in a number of doctoral programmes across Europe. Strategy A is simply the fostering of ad hoc

Table 3.2 Three strategies to Europeanization

Strategy A	Ad hoc collaboration and external Europeanization
Strategy B	Development of tighter networks
Strategy C	Integrated European PhD programme

collaborations and exchanges and the use of existing opportunities and forums.

Faculty members have research networks across Europe and they can use those networks to provide their students with the opportunity to spend some time in another institution, individually or in groups. A visiting professor may come in from another institution and be asked to offer a course or part of a course in the PhD curriculum. Two institutions that have been working with each other for a while may decide upon the setting-up of one or a few common courses for their doctoral students.

Those are, on the whole, ad hoc moves that reflect the personal networks of a given faculty member or group or some chance interconnection between two or more institutions. Those types of ad hoc and spontaneous initiatives should not be neglected; in fact they should be encouraged and facilitated, if at all possible, by the universities involved, national governments and European institutions. The strategy to let individual initiatives bloom is an important one – at least as a first step. Quite often those initiatives are relatively cheap to sustain. In reality a great share of the costs is absorbed and taken on by the 'entrepreneurs' – the faculty members who build the initiative together. The stabilization of institutional links later on will be all the easier that those institutional links build upon interpersonal social networks (Djelic, 2004). The fostering of ad hoc collaboration and exchanges can come together with the exploration and exploitation of the financial support provided by the European Union, in particular through its ERASMUS programme and the Marie Curie Actions (Curie, 2006).

A second dimension to that strategy is to exploit a number of existing opportunities to stimulate internationalization and Europeanization. Some institutions in Europe have course and workshop offerings that represent real opportunities for programmes that remain on the whole national. Let us focus here on management studies. EIASM (European Institute for Advanced Studies in Management), EDAMBA (European Doctoral Programmes Association in Management and Business Administration) and EUDOKMA (European Doctoral School on Knowledge and Management) organize, for instance, courses, workshops and seminars that are open to students from PhD programmes all around Europe. Over the past ten years, furthermore, we see a de-multiplication of

summer schools, workshops and graduate courses organized by groups of researchers, open to all interested graduate students in Europe (with a varying intensity of selectivity) and often financed by European institutions and programmes such as the TMR (Training for Mobility of Researchers) programme or the European Science Foundation (TMR, 1999; ESF, 2006).

Those courses and workshops are places for cross-national encounters and discussions. They are a relatively cheap means towards the internationalization and Europeanization of otherwise local programmes. They generally contribute to an increase in the quality of knowledge acquired by PhD students, particularly those coming from programmes functioning within a European tradition. Since many doctoral programmes across Europe are small and locally bound, the strategy of mutualization solves many problems at the same time. It is a way to go around limited resources (intellectual and financial) at the local level. It is also a way to ensure collectively, at a European level, that graduate students are confronted with knowledge and techniques that none of them could have encountered locally. Finally, it is a way to bring graduate students into European and international networks and communities.

There are, at this stage however, a number of problems with this strategy. Firstly, communication and the circulation of information are neither fluid nor systematic. Not all doctoral programmes and doctoral students across Europe know what courses take place, when and where. We lack information hubs by discipline that would give an overview, easily accessible, of what is taking place, where, when and how. Secondly, the offer at a European level, albeit interesting, remains irregular and patchy. It is not structured into curricula and coordination is weak, including in the overall offer of any particular institution. A doctoral programme, as a consequence, that would want to systematically outsource, every year, parts of its curriculum would find it difficult to do so. Courses may take place only every other year or else at different time periods of the year. They may be cancelled or redefined with little advanced warning. And in any case the overall offer will not be a structured and stable pattern with a curricular logic. This could change, naturally, but it would call for some attempt at coordination at least within and between the institutions that contribute most to the offer of courses and workshops. Finally, there are issues of costs. It is, in all likelihood, much better financially for small-sized doctoral programmes (most programmes in Europe) to send a couple of students to a European course rather than to open the same course locally. The two types of costs, though, are not the same. On the one hand, there is a need for direct cash outflows. On the other hand, costs may be higher but they are hidden in the overall university structure and

hence relatively invisible. The reality is that, today, many doctoral programmes across Europe would find it difficult to earmark the amounts in cash necessary to finance the participation of their doctoral students in European courses and workshops.

Strategy B: Development of networks

A second type of strategy is more ambitious and more demanding in terms of resources and institutional investment. The idea here is that several European schools or university departments, across national borders, build a long-lasting network around doctoral education. Partners come together and agree to create different kinds of bridges between their respective doctoral programmes.

The network could represent an opportunity for students to benefit from a co-supervision of their dissertation work. It could allow graduate students to move around and spend some time in different programmes across Europe. The network could also lead to a stable collaboration on parts of the curriculum or more simply to a division of labour where different partners offer different courses to the entire pool of students. This type of complex strategy does not yet exist in management studies. It does exist, however, in economics (as well as in other disciplines, more often in natural sciences). We can definitely find inspiration in what has been achieved by our colleagues in economics by considering the case of the ENTER programme.

The ENTER (European Network for Training in Economic Research) programme is a cooperative venture between seven European economics departments from seven different countries. The partners are Universitat Autònoma de Barcelona, University College London, Universität Mannheim, Université Libre de Bruxelles, Stockholm Universitet, CentER at Tilburg University and MPSE at Université des Sciences Sociales de Toulouse. Doctoral students in the programme spend one or two semesters in one or two institutions of the network on the same footing as local students. They either take courses or pursue dissertation research under the additional supervision of another faculty member at the host institution (co-supervision). Typically, students will take the first year of courses in their original institution. Then a selection process will direct some of those students towards the ENTER programme, on the basis of academic excellence. A student who has fulfilled the requirements for the PhD in his or her original institution and has spent, in addition, at least six months in another ENTER partner institution, will also be awarded a European PhD degree in economics jointly delivered by the seven ENTER partner institutions.

The ENTER programme also implies an annual network-wide meeting

(or 'jamboree') where students and faculty members come together to present their current research and results. Both the exchange of students and the annual jamborees have been funded under the European Union ERASMUS and TMR (Training and Mobility of Researchers) programmes.

This type of strategy is receiving a lot of attention and increasing support from European institutions as well as national governments (for other examples of parallel initiatives see EUA, 2005, p. 38). Recently, the European Union launched the Marie Curie Research Training Networks with a view, precisely, to foster the type of stable doctoral networks exemplified by the ENTER programme (Curie, 2006). The European Union and nation states are also taking steps to formalize co-supervision or *co-tutelle* in French. A graduate student who has shared his/her time between two European departments and has worked under the close supervision of two advisers, one in each of those departments, may obtain a double doctoral degree. More often than not, though, a graduate student involved today in a structured European network will obtain a doctoral degree from his or her home university and an additional 'European certificate', vouching for the European dimension of the training. As we will see below, the 'Doctor Europaeus', a single doctoral degree and diploma delivered at the European (and not national) level, has been discussed since 1991. It is not yet reality, though.

Strategy C: Integrated European PhD Programme

This third type of strategy remains for the most part a vision, a projection into the future – but a future that may be getting closer. The idea, here, is to build from scratch integrated programmes that will have a European scope and identity.

This could mean for an existing network of partner institutions to go one step further than they already do. Let us take again, as a matter of example, the case of the ENTER programme in economics. The move towards an integrated programme would mean a number of things. Firstly, partner institutions would need to agree on a single recruiting process that could then be locally decentralized and administered. Secondly, partner institutions would need to agree on an overarching and common curriculum, which they would then 'share'. Parts of the curriculum would be run in one department, others elsewhere. Thirdly, co-supervision would probably be systematized together with the generalization of mobility across partner institutions. Finally, candidates would all have to go through the same requirements and the defence would have been collectively formalized. A successful candidate would obtain, as a consequence, a single degree and diploma with a European scope and identity that would be functionally equivalent, everywhere in Europe, to the national doctoral degree.

Another way to move towards an integrated European PhD programme would be for existing departments or universities to build an entirely new programme. One could obviously also envision the emergence (either through 'mergers' or outright creation) of new departments, universities or schools with a European identity and scope. Although evolution in this direction is slow, it is not impossible and INSEAD Business School (located in Fontainebleau, France) or the European University Institute (located in Florence, Italy) were early harbingers (Barsoux, 2000, www.iue.it). Let us start, here again, from a concrete case – the CLEI International PhD programme (Center for the Comparative Analysis of Law and Economics, Economics of Law, Economics of Institution).

The CLEI programme was created from scratch in 2003 by a group of European institutions – Polytechnique-CRG (Centre de Recherche en Gestion), France; the Law School of the Centre of Advanced Studies in Law and Economics at the University of Gent in Belgium; Universita degli Studi di Torino in Italy – together with an American University, Cornell. This is an innovative three-year doctoral programme combining coursework and dissertation projects on the comparative analysis of law and economics, economics of law, economics of institution with a strong interdisciplinary orientation. Recruiting is being done locally by the different partner institutions but with common grids and criteria. Then, the first year is a year in residence in Turin, Italy, for all recruited students. At the end of a year of intensive coursework, they go through preliminary exams. Starting from the second year, graduate students work on the development of their research and dissertation work at one of the partner institutions. The choice of institution is closely related to the nature of the topic they focus on. They may spend time in several partner institutions. At the end, the doctoral degree is awarded by the University of Turin.

The evolution towards the integrated PhD programme is closely associated with debates and discussions around the European Doctorate degree – 'Doctor Europaeus'. The idea of a European Doctorate originated in 1991 from an informal initiative of the Confederation of European Union Rectors' Conferences. This group identified the following requirements (EUA, 2005, p. 39):

1. At the PhD thesis defence, at least two professors from higher education institutions of two European countries other than the one where the thesis is defended should provide a review of the manuscript.
2. At least one member of the jury should come from a higher education institution in another European country other than the one where the thesis is defended.

3. A part of the defence must take place in one of the official languages other than the one(s) of the country where the thesis is defended.
4. The thesis must partly have been prepared as a result of a research period of at least one trimester spent in another European country.

The debate on and around the European Doctorate is still open. An obvious issue is whether and in what conditions such a diploma could represent an added value for the graduating student looking for a job in European institutions of higher education. Going one step further, the question could be whether such a degree could replace (and not come on top of) a national degree.

CONCLUDING REMARKS

The European Doctoral space is going through a challenging period, with questions and transformation all around. Firstly, the double challenge of providing graduate students with better training and of producing altogether more graduates is a real one. This challenge is putting pressure across Europe on most doctoral programmes and institutions of higher education. Secondly, the European Doctoral space as part of the European research space has to face the double pressure of accountability and relevance. Not only do European researchers have to be accountable to their peers and take into account the criteria of their own communities with respect to relevance and quality, they also have to take into consideration broader sets of stakeholders. Thirdly, doctoral programmes need to evolve in order to acquire progressively a more European identity. There are different paths towards Europeanization. Those different paths imply different kinds of resources, networks, ambitions and self-projections. We suggest, though, that more structured forms of Europeanization (Strategies B or C) are likely to gain ground, building upon and going beyond simpler ad hoc initiatives.

When we think about doctoral education in Europe, we also need to think in parallel about what happens after. Firstly, it is important to consider the question of job markets. How can we make job markets in Europe more fluid and more . . . European? How can we improve communication and the circulation of information on research jobs and vacancies? How can we move towards professionalized, merit-based selection processes at a European level? Secondly, we need to envision postdoctoral opportunities as an important and interesting first step towards the job market. Here again Europe is late. The overall offering of postdoctoral positions across Europe remains limited. When they exist, those positions are associated

with either too much teaching and pedagogical requirements or else with low remuneration. Still, one should mention here a recent initiative of the European University Institute in Florence that undeniably moves us in the right direction.

In 2005, the European University Institute launched the Max Weber Programme, the largest postdoctoral programme in the social sciences in Europe. Funded by the European Commission, Max Weber Fellowships are open to candidates who have received their doctorates in the last five years, in economics, social and political sciences, law or history and who wish to pursue an academic career. Fellows are selected on the basis of the excellence of their research accomplishments and potential. They have the opportunity to work in close cooperation with the various departments and faculties of the European University Institute. Fellowships are granted for 12 or 24 months and there are each year 40 Fellows in residence. The stipend amounts to 2000 euros per month to which are added some family allowances when applicable. The Fellowship programme is associated with a number of postdoctoral activities – writing and presentation workshops, conferences and research seminars. The time of the Fellows, though, is mostly devoted to research and publication. On its website, the European University Institute has created a virtual job market, posting the profiles and curricula of those Fellows who are looking for a position in academia.

The European PhD landscape is changing. A lot of things still need to be done but there are positive transformations. In 1988, a small social network of Scandinavian 'friends' decided together with James March from Stanford University to move towards the formalization and institutionalization of their collaboration. They obtained the support of their respective institutions, and Scancor (Scandinavian Consortium for Organizational Research) thus opened its doors in 1989 at Stanford University (Scancor, 2006). Scancor was conceived as a hub, where researchers and doctoral students from all across Scandinavia could come for different lengths of stay – working on their theses, research projects and interacting formally and informally. In hindsight, Scancor has played a significant role in the development of Scandinavian management studies. It has also been a conduit for the diffusion of Scandinavian ideas and contributions. Our challenge for the coming years, is that a parallel initiative emerge between one or several institutions in Europe and universities from other parts of the world. We, as Europeans, should become intellectually and logistically attractive enough that the best researchers and graduate students from South America, Asia or Africa would want to spend time exchanging with us. We ourselves would greatly benefit from this opening to other worlds. The challenge is on us!

NOTE

1. The author is also member of the Scientific Committee (SC) of EIASM (European Institute for Advanced Studies in Management). Although the author thanks the Institute and other members of the SC for engaging discussions and many insights, the positions expressed here do not engage that institution.

REFERENCES

Amdam, Rolv Petter, Ragnild Kvalshaugen and Eirinn Larssen (eds) (2003), *Inside the Business School*, Copenhagen: Copenhagen Business School Press.

Barsoux, Jean-Louis (2000), *INSEAD – From Institution to Institution*, Basingstoke: Palgrave MacMillan.

Curie (2006), 'Marie Curie actions – research training networks, European Commission', accessed 1 November at http://ec.europa.eu/research/fp 6/ mariecurie-actions/project/networks_en.html.

Djelic, Marie-Laure (1998), *Exporting the American Model*, Oxford: Oxford University Press.

Djelic, Marie-Laure (2004), 'Social networks and country-to-country transfer: dense and weak ties in the diffusion of knowledge', *Socio-Economic Review*, **2**(3), 341–70.

Doz, Yves, Marie-Laure Djelic, Sven Jönsson, Bo Carlsson, Juhani Kuusi and Kjell Gronhaug (2004), *Research in Business Disciplines in Finland – Evaluation Report*, Helsinki: Academy of Finland.

European Doctoral Programmes Association in Management and Business Administration (EDAMBA) (2006), 'Activities', accessed 8 November at http://edamba.wu-wien.ac.at/Activities.htm.

European Group for Organizational Studies (EGOS) (2006), 'Pre-conference doctoral and postdoctoral workshops', accessed 8 November at www.egosnet.org/ conferences/collo23/colloquium_2007.shtml.

European Institute for Advanced Studies in Management (EIASM) (2006), 'European conferences', accessed 8 November at www.eiasm.org/index1.html.

European Science Foundation (ESF) (2006), 'Research networking programs, European Commission', accessed 1 November at www.esf.org/esf_domain_activity.php?language=0&domain=5&activity=1.

Etzkowitz, Henri and Loet Leydesdorff (eds) (1997), *Universities in the Global Economy: A Triple Helix of University–Industry–Government Relations*, London: Cassell Academic.

European University Association (EUA) (2005), 'Doctoral programmes for the European knowledge society – report on the European University Association doctoral project', accessed 20 October 2006 at www.eua.be/eua/ jsp/en/upload/Doctoral_Programmes_Project_Report.1129278878120.pdf.

European Doctoral School on Knowledge and Management (EUDOKMA) (2006), 'Courses', accessed 8 November at www.eudokma.dk/Courses.htm.

European Parliament (2000), 'Lisbon European Council 23 and 24 March 2000 – Presidency conclusions', accessed 23 November 2006 at www.europarl.europa. eu/summits/lis 1_en.htm.

Furusten, Staffan and Jonas Bäcklund (2000), 'In the shadow of American stars – on American dominance and the Americanization of the Swedish consultancy field', in *Score Rapportserie 2000:3*, Stockholm: Score.

Harfi, Mohamed (2005), 'Etudiants et chercheurs à l'horizon 2020. Enjeux de la mobilité internationale et de l'attractivité de la France – rapport du projet Saraswati', Paris: Commissariat Général au Plan.

March, James (1971), 'The technology of foolishness', in James March (ed.), *Decisions and Organizations*, Oxford: Blackwell, pp. 253–65.

March, James (1991), 'Exploration and exploitation in organized learning', *Organizational Science*, **2**(1), 71–87.

March, James (2006),'Ideas as art – the HBR interview', *Harvard Business Review*, **84**(10), 82–9.

Organisation for Economic Co-operation and Development (OECD) (2002), 'International mobility of the highly skilled', accessed 20 August, 2006 at www1.oecd.org/publications/e-book/9202011E.PDF.

Sahlin-Andersson, Kerstin and Lars Engwall (eds) (2002), *The Expansion of Management Knowledge*, Stanford, CA: Stanford University Press.

Scandinavian Consortium for Organizational Research (Scancor) (2006), accessed 24 November at www.scancor.org.

Training and Mobility of Researchers (TMR) (1999), 'Training and mobility of researchers, Cordis, European Union', accessed 1 November, 2006 at http://cordis.europa.eu/tmr/src/contmeet.htm.

Weber, Max (1918), 'Science as a vocation', reprinted in D. Owen, T. Strong and R. Livingstone (eds) (2004), *The Vocation Lectures*, Indianapolis, IN: Hackett Publishing Company.