European Review, Vol. 23, No. S1, S1–S5 © 2015 Academia Europæa. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/3.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Preface

doi:10.1017/S1062798714000751

ALESSANDRO CAVALLI and ULRICH TEICHLER

International Centre for Higher Education Research, INCHER-Kassel, University of Kassel, Moenchebergstr. 17, 34109 Kassel, Germany E-mail: teichler@incher.uni-kassel.de

The mobility of academics has been always occurred and scientists have always considered themselves to be living in a cosmopolitan world, even at a time when worldwide communication and travel could not be realized with our present-day ease. Some experts estimate that some centuries ago one tenth of academics, or even more, could be viewed as 'foreign' or 'mobile' according today's criteria. The development of nation states in the 19th century was not only linked with features of modernization and technological progress that facilitated worldwide communication and travel, but also underscored the weight of national differences and national borders, thereby creating new, often substantial, barriers to migration and mobility. Altogether, however, we note that ideas moved ever more quickly around the world in the 19th and early 20th centuries and that – at least in some disciplines – the search for the most advanced knowledge all over the world became a matter of procedure.

After the Second World War, international cooperation and the mobility of academics spread more rapidly than ever before, following the expansion of student enrolment and research activities. The growth of the higher education and research system made such cooperation and mobility more visible, and these phenomena were reinforced, notably because economic wealth increased, other conditions for physical mobility dramatically improved and opportunities for migration also increased – not always consistently all over the world, but altogether substantially. Today's frequent use of terms such as 'knowledge society' and 'globalization' suggests that crossing borders in higher education and science is held in higher esteem than ever before. This might be illustrated by the facts that some 'ranking studies' of 'world-class universities' even count quotas of foreigners as indicators of quality per se and that the bundle of substantial higher education reforms in Europe in recent years, called the 'Bologna Process', were advocated primarily as a means of increasing student mobility, even if actual achievements sometimes fell short of good intentions. Many policy statements suggest that conditions for increasing border-crossing in academia

are more supportive than ever before, that there is a trend towards a further growth of border-crossing and that this trend is desirable.

A closer look seems to be in order. First, there is an enormous conceptual vagueness in the identification of the theme under consideration. What phenomena of border-crossing do we really have in mind when we talk about quantitative growth and its beneficial consequences? Do we have more or less permanent relocations in mind, which the use of the term 'migration' suggests, or is mobility for certain stages of learning and professional development the focus of attention? Are there different rationales involved when 'mobility' and border-crossing are addressed on the one hand while 'foreign' students and scholars and study or research 'abroad' are considered on the other, or are these just coincidental variations of expression? What range of phenomena is of interest in this context? Is attention paid to attendance at a conference in another country, for example, by including such events in accountability reports and career incentives? Do we focus on phenomena that are the result of academics' strategic action, i.e. moving oneself for shorter or longer periods to another country, or do we also include persons having moved for reasons not linked to their own academic activities, e.g. their parents' migration even before the scholars under consideration were born?

Second, views vary as to how one should delineate the sector to be addressed in this framework. Do we talk about 'academics', 'scholars', 'researchers', professionals active in 'science', the 'knowledge system', and so on? Often, we find that a distinction is made between persons active in 'academia' or 'higher education', i.e. a sector where a link between research and teaching prevails, on the one hand, and 'research' on the other, i.e. a sector where research is seen as the prime professional activity and where often a link between research and 'development' can be observed. Additionally, information provided on the former sector might address those professionally active in 'universities', 'higher education' or even 'tertiary education'. Moreover, varying thresholds are chosen: doctoral candidates might be viewed as 'students' or as earlystage scholars; definitions of 'researchers' might range from any person with at least a bachelor degree employed in a unit in charge of research to only persons in such units with at least a doctoral degree. Last but not least, views vary as regards the degree of professional involvement in this area. Some statistics include researchers who spend one hour per week on knowledge generation in a relatively loose contractual link to their organization, while other analyses take note only of persons who are regularly employed for at least half of a normal week's work time.

Third, even if we opt for a certain conceptual framework and for the analysis of a certain target group of persons professionally involved in systematic knowledge generation, preservation and dissemination, we will face a lack of transparency. The factual information is poor. Statistics on student mobility are frequently reported, even though they are mostly ill-defined and incomplete. Reports on the migration and mobility of scholars are less frequent; for example, they hardly play a role in reports of organizations such as UNESCO and OECD on the international state of research. This reflects the fact that statistics on migration and mobility of scholars are even poorer than those on students.

Fourth, a closer look at the magnitude of mobility calls for a more differentiated view of the 'map'. We note substantial differences of data depending, as already mentioned, on whether citizenship ('foreign' and 'abroad') or border-crossing for the purpose of study or scholarly work is taken as the measure. Similarly, again as already pointed out, the world of mobility looks different if we pay attention only to relatively long phases of learning and research work in other countries or if we include, for example, mobility within a sabbatical, a semester of study abroad, or also one or two weeks for exchange of information within an international research consortium, teaching an intensive course in another country or even the attendance of a conference in another country. For many years in the past, policy discourses on the mobility of scholars have paid attention primarily to relatively long periods, such as the students' whole degree programme, the doctoral education and training abroad, or a visible period of the career as a scholar. In recent years, accounts in this domain have started to pay more attention to relatively short border-crossing encounters, e.g. mobility of students for a semester or a year, short-term teaching in another country, etc. Data are collected even on short periods in another country, for work on a doctoral dissertation, students spending an internship period or attending summer school in another country, or scholars just travelling to meet partners of an international research consortium or, as already pointed out, attending a conference in another country. Short international encounters are referred to more often in recent years because they may have an enormous impact on subsequent research work. Recently, more attention has also been paid to mobility that is not part of the rational choice of the scholars themselves, for example parental migration. This has led to research into the phenomena of disadvantage and discrimination of scholars with a migration background as well as to their specific potentials to contribute to intercultural learning and understanding.

Fifth, as already briefly hinted at above, a closer look is needed with regard to the extent and the ways migration and mobility actually affect the situation and the scientific work of scholars and with regard to the scholars' overall impact on the quality and the relevance of systematic knowledge. Mobility, obviously, could not have become such a highly esteemed phenomenon if there were not plenty of first-hand experience of its benefits. But there is a major public discourse as well regarding the dark sides of mobility, e.g. a 'brain drain' or the stealing of secret innovations. Moreover, there are also studies that suggest that the impact of mobility assumed at first glance might be less impressive if carefully scrutinized.

Sixth, the national policies and institutional strategies with respect to mobility and migration deserve attention. We might ask, for example, why the magnitude and the modes of mobility are so diverse even among countries with similar knowledge and economic potentials. And we might ask why the respective policies and strategies are convergent in some respects but so divergent in others across countries. We might also try to assess the impact EU agencies have on migration and mobility within and across the Union's borders. Finally, we might address the overall scenario of 'internationalization' and 'globalization' policies in the world of higher education and research. Do joint efforts for the worldwide enhancement of the knowledge system prevail, or do 'normal' phenomena of 'healthy' competition, with wins here and losses

there, dominate, or are there increasing signs of inequality, domination and conflict in the world of higher education and research? What do we head for in this sector of society: towards a 'global village', a 'global market' or a world characterized by domination, mistrust and various kinds of explosive open conflicts?

Beyond such an in-depth view on the current scene of mobility and migration in science, we might look ahead. What do we expect in the future? Do we expect a long-term growth trend, and do we expect a continuous value of mobility and migration? Some voices 'warn' that the growth of worldwide virtual communication in science may favour a reduction of physical mobility. The value of first-hand experiences in another country might diminish when the world becomes increasingly international and 'internationalization at home' replaces first-hand experiences abroad almost completely. And recent developments such as a rise in the worldwide numbers of political refugees, political campaigns in favour of unlimited espionage, and increasing worldwide anti-terror measures creeping into the daily life of citizens might be indicators that the necessary trust for supporting international mobility and cooperation in science might be short-lived. Do we have reasons to consider certain future scenarios more likely than others?

The Academia Europaea initiated the conference 'Migration and Mobility in Science: Impact on Cultures and the Profession in Institutions of Higher Education' in order to take account of the trends, policies and actual consequences of migration and mobility in science. The conference was held at the Palazzo Corsini in Rome on 14–16 November 2013 in cooperation with the Accademia Nazionale dei Lincei and supported by the Compagnia di San Paolo. Within the Academia Europaea, the HERCULES (Higher Education, Research and Culture in European Society) group has organized numerous conferences on salient issues in higher education and science in Europe over the past 20 years, the scope of which was never limited to Europe only. The conference, from which the papers collected in this special issue of the *European Review* result, was organized by Alessandro Cavalli, Anne Buttimer and Ulrich Teichler, with the much-valued effective support of the Secretary General of the Academia Europaea, David Coates, and his colleague, Teresa McGovern.

This special supplementary issue of the *European Review* documents some key contributions to the conference. Two articles – by Ulrich Teichler and Michele Rostan and Flavio Antonio – present an account of the available information on the frequency and pattern of migration and mobility: the sources of information, the concepts and methods underlying the collection of information, the major findings and their implications for understanding the roles migration and mobility actually play in higher education and research in general. Two further articles – by Peter Scott and Marijke van der Wende – summarize the policy discourse on migration and mobility in science: what is expected by governments, universities and research institutes, scholars and other actors? What is noted as valuable and problematic? What changes are considered and pursued? An article by Adriano Zecchina points to some unintended consequences of the implementation of the granting policies of the European Research Council on researchers' mobility. Finally, the article by Anthony Welch looks at how the international map of mobility and migration in the field of the sciences changes when countries that had for the longest time been marginal in the

domain of international communication, cooperation and mobility begin to play an internationally visible role. Welch's case study concerns China, a country in which the increasing wealth and involvement in the international scene of academia and research is most visible due its sheer size. Finally, the two editors of this issue – Alessandro Cavalli and Ulrich Teichler – highlight various issues of migration and mobility in science that cut across the discussions held at the conference and in the articles presented here.