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Title	Researcher Mobility in Policy and Practice: When Rhetoric and Reality Meet
Submitter	Dr. Rebekah Smith McGloin

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Part 1: Abstract

This paper reconsiders the value and virtue of mobility in policy and practice for researchers, from its origins in the conceptualisation of a "global research system" and "knowledge society" to the practical application of, for example, a BBSRC-funded PhD student on a 12-week industry placement in a large pharma lab, an Eastern European post-doc on a six-month Humboldt Research Fellowship (Jöns, 2011) or a Norwegian scientist who makes a career move to commercial research (Aksnes et al, 2013). Through a thematic analysis of policy and academic literature the paper begins to elucidate key gaps in knowledge and evidence in terms of equality of access, suitability and effectiveness of mobility schemes. It explores alternatives to physical mobility and poses questions of the role of the local in global research capability development.

Part 2: Blind Paper

Mobility is a sought-after characteristic in researchers. Mobility can be defined as the movement between universities (national and international), between sectors (to business and industry) and latterly 'virtual mobility' – collaboration using the internet. It is promoted by the Organisation for Economic Co-operation and Development (OECD: 2000, 2008a, 2008b) as important within a theorised "global research system". It is fundamental to the positive construct of a "knowledge society". The movement of university staff between universities and to business and industry are framed in this understanding as fundamental to the advancement of knowledge and society.

This theory can be traced through to national and transnational research and innovation policies. In the UK, researcher mobility is a fundamental part of the policy discourse around research and innovation through people, knowledge exchange and new knowledge absorption by business, industry and the third sector. Mobility has been consistently tied into innovation and economic development through Lambert (2003), Warry (2006), Leitch (2006), Sainsbury (2007), Smith et al. (2010), Witty (2013) and University Alliance & the National Council for Universities and Business (2014). More recent review publications have called for additional and more effective mechanisms to encourage and enhance researcher mobility between sectors (Wilson, 2012; Dowling, 2015) whilst a 2013 analysis from the UK Department for Business, Innovation and Skills (BIS, 2013) and a 2016 Royal Society commissioned report (Guthrie et al., 2016) demonstrated national benefit to the UK of researcher mobility. The importance and value of mobile researchers was summarised by the Research Councils UK (2016) submission to the House of Commons Science and Technology Committee's inquiry into Leaving the EU: implications and opportunities for science and research.

Mobility is embedded within all UK Research Council strategic delivery plans. There are also multiple examples of schemes which aim to support international or cross-sectoral mobility at a variety of levels from PhD to professor. These include BBSRC PIP (Professional Internship for PhDs) and FLIP (Flexible Interchange Programme) schemes for doctoral and early career researchers and onwards respectively, The International Placements Scheme for AHRC and ESRC-funded PhD students and EPSRC Impact Acceleration Account Knowledge Transfer Fellowships. Most recently Newton funding

has been targeted in partnership with learned societies and research councils, to support researcher mobility with specific partner countries in receipt of Official Development Assistance.
Within the European Research Area (ERA) researcher mobility is considered a so-called 'fifth freedom' (EC, 2007). European Union Policy makers are seeking to develop mobility further and enhance the permeability of boundaries between universities and business, industry and the third sector at all career stages. It is one of the European Research Area's five priorities (Borell-Damian, 2009), ensuring a circulation of skills and ideas around the world in a so-called global research system in which the best scientists follow the best science and the best resources.
This has produced a series of initiatives designed to facilitate researcher mobility both within and from outside ERA including: removing obstacles to cross-border mobility of researchers and movement between public and private research centres; launching joint programmes and common calls for research and innovation funding (e.g. Horizon 2020) along with targeting specific actions to support researchers' careers and to encourage transnational, intersectoral and interdisciplinary mobility (Marie Skłodowska-Curie actions); and creating joint infrastructure such as EURAXESS - a joint initiative of the European Commission and countries participating in the EU's Framework Programme for Research – which manages a network of over 500 Service Centres in 40 European countries offering advice and information about the employment and other rights and obligations of researchers and employers in Europe.
The globalisation discourse, higher education league tables and metrics which privilege international co-authorship and citation numbers also drive policy and practice at an institutional and national level.
The paper presents a thematic analysis of policy and academic literature on researcher mobility and considers three key themes arising: the impact of mobility on career development; the effect of mobility on knowledge development; and equality and diversity in uptake of mobility schemes.
The assumption that researcher mobility is a 'good thing' is not questioned nor interrogated in research and innovation policy. In fact, there is little deviation from the line that mobility leads to the creation of better, more dynamic networks, improved scientific performance, improved knowledge and technology transfer, enhanced productivity and ultimately better economic and social welfare.
Positive outcomes predominate in the academic literature also and include: transnational networks that sustain productive international collaborations (Woolley et al., 2016); enhanced productivity (De Filippo, Casado & Gomez, 2009); access to equipment and technology (Guth, 2008); production of new knowledge; international transfer of existing knowledge; and establishment of research collaborations (Ackers, 2005; Van de Sande et al., 2005; Jons, 2011; O'Hara, 2009),
There are however, some key questions raised and some gaps in the evidence base presented in the academic literature.
The paper goes on to highlight these gaps which relate to: an exclusive focus on countries (and continents) where the research infrastructure is most developed; a lack of comparative studies between mobility across different disciplines; and a restricted consideration of equality of access to mobility opportunities. There follows an exposition of a variety of disadvantages and disincentives of traditional researcher mobility schemes – including loss of networks and esteem in the home institution (Gaughan & Robin, 2004; Cruz-Castro and Sanz-Menendez, 2010; Pezzoni et al., 2009), decrease in productivity (Van Heeringen and Dijkwel, 1986), inequality of engagement (Hansen et al., 2004; Leemann, 2010; Weert, 2013) and reticence to take risks (Ackers, 2005). It discusses whether these disincentives make those researchers who are most likely to gain from mobility experiences the least likely to undertake them.
The paper concludes with a reframing of mobility in terms of the individual researcher rather than national or global research system. It considers how career and knowledge development might be better supported and addressed for the many (researchers from less developed research environments, those from under-represented groups) rather than the few (mobile, financially moresecure,

confident risk-takers in developed research environments). It calls for further research into how local activity – peer networks, community(ies) of practice, the notion of the 'civic university' – have a role to play in supporting a broader range of researchers to develop the same skills, competencies and networks that are posed in policy as fundamental to the advancement of knowledge and society.

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