



Desperately seeking careers: The plight of many PhD graduates

Lynn McAlpine
Lancaster, February 2018

Explore ...

- Your career experiences
- Career trajectories: interaction of multiple factors
- What can we do?
- What are the research gaps?

Your experiences: Questions

- What careers s are you imagining/ did you imagine during the PhD?
- What factors do you think influenced your thinking?
- If you experienced changes in your thinking, why was that?
- How would you rate your knowledge of labour sectors, the jobs PhD graduates get, etc.? (1 excellent – 5 poor)
- Where do/ did you get your career knowledge?
- When, in your PhD, have you/ did you start thinking about your future career?



Career trajectories and labour sectors

Labour sector	Permanence?
<u>Academic</u>	
Teaching-only: can do research 'on the side;' may involve Master's supervision	Yes often <i>over time</i>
Research-only: contracts, contingent work; <u>if fellowship</u> , then independence; for both, unlikely to teach but may informally supervise	No
Teaching-research: range of responsibilities related to teaching, research and service/administration	Yes <i>after provisional period (4-6 years)</i>
Academic professional: involves research or teaching support; may involve teaching	Yes usually
<u>Private, public and para-public</u>	
Professional: no research expected, but may do 'desk' research or 'evaluation' research	Yes often
Research professional: main responsibility research	Yes often

Three cases: What strikes you?



Hannah



Charles



KS

Global trends

- Societies need highly educated workers for global competitiveness
- Absolute number of grads risen steadily but number of academic positions has not ‘a parking lot’? (Standford et al., 2009)
- Example: Canada
 - In 2012, 6600 PhDs graduated, but only 1,500 to 2,000 tenure-track positions (Chiose 2015)



Post-PhD distribution: What's your guess? (OECD, 2011**)

Country	Spain	Belgium	NetherInd (14% unknown)	UK (2016)	US	Canada (2015)
All higher education (higher in SS, H)*	41%	43%	28%	29%	43%	36%
Private (higher in STEMM)	20%	33%	35%	29% science, 23% education, 12% health, 3% business, research & admin, 4% engineering	32%	57%
Government	36%	12%	3%		12%	6%
Para-public/NGO	3%	12%	18%		12%	0%
Researcher regardless of sector	60%	65%	62%	N/A	62%	N/A

* Not just traditional teaching-research: alternate careers; portfolio positions

** Categories not the same

Discipline matters in and out of HE

Country/ discipline cluster	UK	Canada (educ. Positions; 4/5 in universities)	US	Cont. Europe, e.g., Austria (aver .in HE sector 25%)
Academic -related humanities/social sciences	68%: Research positions (15%); teaching positions (44%)	54-76% (no further breakdown)	2/3 of English, political science	49% (30% humanists; 19% social scientists)
Academic -related sciences	34-43%: Research positions (16- 27%); teaching positions (10- 17%)	34-56% (no further breakdown)	1/3 of science, engineering and math	40% IT & engineering; 53% natural & medical sciences

Regardless of labour sector, social scientists find more opportunities in non-research occupations.

State of play



- HE trends
 - Temporary positions increasing, often linked to rise in research positions (Cantwell, 2011)
 - Growth in post-PhD teaching-only posts (Bennett et al, 2017)
 - Increase in academic professionals (Berman & Pitman, 2010)
- Other sectors, **BUT** data mostly private sector (Boulos, 2016; Cruz-castro & Sanz Menendez, 2005; OECD, 2013)
 - Private sector: no change in % of temporary positions; higher salaries than other sectors
 - Employers sceptical about added value unless have previous experience of PhD grads
 - Employers with R&D units seek PhD grads; in firms without R&D, jobs result from grads making the contact
- Mobility (OECD, 2013)
 - More frequent among PhD grads not in research (job-to-job)
 - International mobility and migration increasing over time

So, that's post-PhD ...



- What's happening during the degree?



Institution matters...

- Reputation of university impacts job attainment (Jackson & Michelson, 2015; McAlpine & Austin, in press)
- Generic skills training: but does it matter?
 - Little evaluation, but Jackson & Mickelson (2015) report lack of influence on post-PhD employment

Department matters...



- Variation in explicit support for alternate careers (O'Meara et al., 2014; Thiry et al., 2015)
 - ➔ Legitimizing alternate careers
 - Promoting external internships
 - Providing networking (non-academic) opportunities
 - Career fairs, supervisory discussions, etc.
 - Supportive social and intellectual climate
 - Data on careers of PhD graduates

NB Students often assume academics not supportive of non-academic careers

Day-to-day work environment matters

- Influences on interest in traditional academic post
 - Sustained motivation
 - Positive day-to-day intellectual and social climate; happy place to be
 - Reduced motivation
 - Negative day-to-day work environment; lack of collegiality and supervisory support
 - Dislike work pressures and total commitment that seniors experiencing



Variation in agency during PhD

- Engaging in job-search strategies substantially increases success in gaining prompt employment post-PhD (Jackson & Michelson 2015)
- Put off thinking about careers til end; 2/3 no systematic strategies (Thiry et al., 2015)
- Little use of career services (Vitae, 2012)
- PhD students wish for career preparation, but rarely engage in career-seeking strategies (McAlpine & Amundsen 2016)
- Agency: Goal setting, strategic thinking and action
 - Investing (or not) in creating the right profile during the PhD
 - Actively exploring (or not) alternate careers
 - Developing resilience: doing everything you can but accepting the influence of 'luck'
 - Adjusting goals in light of changing circumstance



Beyond work influences: The personal

(McAlpine & Amundsen, 2016)

- Family relationships
 - Elderly parents, children, co-locating with partner
 - Financial concerns re family security
- Life goals
 - Desire for children
 - Child arriving: shift in priority
- Work-life balance
- Well-being
 - Relationship break-up
 - Chronic health issues
 - Stress, anxiety, burnout
- Personal values
 - Alignment with work
- Financial duress



Nested contexts: What can we influence?



Planning for after...

Post-PhD trajectories are built from the beginning of the PhD (Mangematin, 2000)

- What can departments do?
- What can students do?
- What can supervisors do?

- Break into pairs/ small groups: be prepared to name at least two things for each question



Last thoughts

- *No matter what people may say about "the system" being unsupportive, or plagued with ...power differentials ...each [of us] needs to acknowledge these barriers and move ahead with things ... This means focusing energy and getting things done, which is ultimately an individual effort. (Charles)*
- Do we not owe individuals a more complete view of their careers to give them greater insight into how to develop, grow over time? (Khapova & Arthur, 2011)

Researching the gap

- Non-academic careers of graduates
 - Under-employed, fully employed? What PhD learning is being used? What is missing?
 - Individual changes in employment: changes over time, gaps in employment, (ease of) shifts within and across sectors
 - Specific jobs and responsibilities within specific institutions and sectors
- Employers across non-academic sectors
 - Why are they(not) prepared to hire PhDs? What is value added?
 - What do PhDs do? Specific jobs and responsibilities in specific institutions and sectors