

Chapter 4

Moving Out of the Comfort Zone: Promises and Pitfalls of Interdisciplinary Migration Research in Europe



Maren Borkert

4.1 Why Bother with Interdisciplinarity in Migration Research? An Argument for Spanning Boundaries and Disciplines

In the academic world, interdisciplinarity is a widely used and very ambiguous term. The literature making interdisciplinarity a subject of discussion for theory, research, education and policy is vast and confusing. Broadly defined, interdisciplinarity refers to the *communication and collaboration across academic disciplines* as well as to the *integration of disciplinary contributions* to provide holistic and systemic results (Bruce et al. 2004; Jacobs and Frickel 2009). Interdisciplinary research might be conducted within the social sciences (e.g. between sociology and economics), but it may also occur between the social, life and natural sciences (e.g. between sociology and neurosciences to understand how social interactions affect brain activities; between ethnography and computer science to explore the success of the online platform ‘Second Life’). In an attempt to combat terminological inexactitude, some scholars draw very clear lines of separation between cross-disciplinary, interdisciplinary and transdisciplinary research. These three concepts are consequently used to differentiate between low, moderate and high levels of interconnectedness or conceptual integration (Aboelela et al. 2007; Salter and Hearn 1996) (Table 4.1).

Others rather distinguish interdisciplinary research with regard to the scope of the scientific endeavour. In this sense, interdisciplinary research is classified to be directed either towards:

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Table 4.1 Conceptual integration in hyphen-disciplinary research

Degree of interconnectedness between the disciplines involved		Terminology
High		Transdisciplinary (When knowledge is produced jointly by professionals and academic experts)
Medium		Interdisciplinary (When emphasis is on the integration of knowledge from two or more academic disciplines)
Low		Cross-disciplinary (When contributions to a research problem stem from two or more disciplines)

- Facilitating disciplinary development through e.g. methodological import from foreign disciplines which enable new issues to be addressed or sub-disciplines to form; or
- Addressing and providing solutions to wicked problems of social, technical and/or political nature (Bruce et al. 2004; Klein 1996; Frodeman and Mitcham 2007).

Whatever the categorisation one decides to follow, interdisciplinary endeavours are grounded in a number of underlying assumptions that are worth bearing in mind. These assumptions involve matters of how knowledge is produced, how it is institutionalised and how it may affect society.

- *First*, the idea of interdisciplinarity has become increasingly intertwined with complexity in recent years. Hence, interdisciplinary knowledge is deemed to hold the potential for major breakthroughs in social challenges like climate change and global inequality. In this view, complex problems are dependent on the 360-degree vision and integrated approach which interdisciplinarity offers in order to generate new kinds of knowledge to solve them (Thompson Klein 1996; McMurtry 2001). An example of this is provided by the work of David Wrathall from United Nations University and Xin Lu from Flowminder who use mobile phone data to analyse human movement during natural disasters
- *Second*, interdisciplinary scholars assume that the growth of interdisciplinary knowledge and research is fundamental for advances in knowledge and progress in science. In this vein, in one of my own research projects, we draw upon forms of capital by Pierre Bourdieu to understand the cyclic processes of opportunity identification and evaluation among refugee entrepreneurs. By integrating sociology with business studies, we attempt to advance knowledge on personal, societal and economic factors influencing the decision-making process of business foundation among refugees beyond the current state of the art
- *Third*, proponents of interdisciplinary work support the idea that the existing academic disciplines and the institutional policies maintaining them are one of the main barriers to the diffusion of interdisciplinary scholarship worldwide. As

a consequence, interdisciplinary research groups on migration (like GRITIM at the University of Pompeu Fabra in Barcelona) have been set up all around the globe, while the interdisciplinary research network IMISCOE has become a major player on a European scale

- *Fourth*, interdisciplinary advocates anticipate that once the existing obstacles to interdisciplinary research are overcome, the efficient production of interdisciplinary knowledge will flourish.

As Jacobs and Frickel (2009) note, these beliefs are widely shared by advocates of interdisciplinary scholarship, yet ‘rarely have they been subject to empirical investigation’ (Jacobs and Frickel 2009: 48).¹

However, the hype about interdisciplinarity that many have observed in the past years cannot be separated from the *underlying hope to be able to solve current social problems with science*. This hope is the more or less explicit foundation for a variety of public initiatives to foster collaboration across academic disciplines. An early example of the push towards interdisciplinary research is the Beckman Institute for Advanced Science and Technology at the University of Illinois, established in 1983 by the largest-ever private donation to a US public university at that time. Since the Beckmann Institute was founded, the interdisciplinary model has spread around the world, and interdisciplinary institutes have been set up in countries like the US, Europe, Japan, China and Australia, to name just a few, to solve complex problems such as global health and sustainability (Ledford 2006). We can safely assume that the promise of problem-solving is an intrinsic motivation for many scholars to get involved in interdisciplinary work. Within science though, interdisciplinary research encounters a multitude of barriers with regard to research and scholarship. Interdisciplinary scholars face epistemic barriers and may encounter difficulties in mediating between what often appear to be opposed styles of thought, research traditions, techniques and disciplinary languages. In computer science, for example, the term ‘migration’ is used to describe the process of translating data from one format to another. It is mainly motivated by saving costs. In the social sciences, on the contrary, migration focuses on people or groups of peoples who move abroad for a variety of reasons, often categorised as push factors (like economic recession and political unrest) and pull factors (such as good job opportunities and welfare services). In short, even if the terms are identical, they refer to very different phenomena which are explored with theoretical and methodological tools inherent to the respective discipline. Besides these epistemic barriers, also disciplinary and administrative structures such as disciplinary-oriented journals, conferences and departments may add to reinforcing scientific compartmentalisation. In the current situation, it is very often the individual researcher who must make an extra effort and assume the risk to pursue what is perceived as an outside-disciplinary endeavor, a fact that prompted some scholars to speak of interdisciplinary

¹ One of the recent studies that sets out to end this, is led by Frickel, Albert and Prainsack. For more information please see: Frickel et al. (2016). *Investigating interdisciplinary collaboration. Theory and practice across disciplines*, Rutgers University Press.

research as a constantly failing academic movement (Jacobs and Frickel 2009; Smelser 2003)².

Overall, the field of interdisciplinary scholarship and research is marked by opposing tendencies. On the one hand, it is nourished by the common hope that one just needs to combine the right kind of scientific knowledge with practical know-how in order to solve a concrete problem. For instance, by integrating a thorough understanding of migration patterns during natural disasters with accurate natural disaster prediction one could design and deploy appropriate mitigation tools to prevent and/or counteract so-called climate migration. On the other hand, the field is marked by relatively little empirical progress towards mainstreaming interdisciplinarity into academia (Frickel et al. 2016). Despite the evident gap between high expectations and de-facto implementation, interdisciplinary research has continued to gain popularity for the past 60 years (see, for instance, Figs. 4.3 and 4.4 in the Annexes). Yet, how do these conflicting trends impact on the interdisciplinary study of migration? Are these tensions the context in which interdisciplinary migration research is embedded? Or is the study of migration a special case and therefore exempt from the barriers which interdisciplinary research usually encounters?

With its strong emphasis on formulating innovative and effective policy proposals, the study of international migration is seen as an interdisciplinary field of research par excellence. There are inherent motives that make the study of migration a breeding ground for cross-disciplinary fertilisation: both the forces driving migration and the consequences of migration are embedded in the economic, demographic, geographic, social, political and historical realm making it almost impossible to explain migration phenomena with a single disciplinary perspective. Consequently, faculty members and researchers teaching curriculum-based education on migration usually stem from a multitude of diverse disciplines such as economics, law, history, sociology, areas studies, political science and geography, to name just a few. As a research field, Migration Studies is heterogeneous in terms of disciplinary composition, and influential scholars laud the ability and willingness of migration scholars to appropriate new concepts from other disciplines and to integrate them into novel approaches for the study of migration (see e.g. Bommes and Morawska 2005; Boswell and Mueser 2008; Brettel and Hollifield 2000). Simultaneously, though, the same authors note that interdisciplinary migration research has not yet become a common practice. They point out that the integration of (particular) disciplines has to be fostered in order to better understand the inter-related causes of migration movements, their patterns as well as accommodation policies and integration trajectories (Boswell and Mueser 2008; Morawska 2003). What does this mean for the subject under study? What is, empirically speaking, the situation of interdisciplinary scholarship in the study of migration? Is it, like inter-

²What is even more is that there is an alarming number of publications across the disciplines that establish a connection between conducting interdisciplinary research and ruining your scientific career (see e.g. Byrne 2014; Callard and Fitzgerald 2015).

disciplinary research in general, high in popularity but difficult to put in practice? These are relevant questions which will be addressed in the following sections assessing the field of interdisciplinary migration research in Europe.

4.2 Exploring the State of the Art of Interdisciplinary Migration Research with the Web of Science

To get straight to the point: for those who are looking for a comprehensive picture of the state of art and extent of diffusion of interdisciplinarity in qualitative migration research in Europe, it must be said, this data is hard to find. To this day, a systematic analysis of interdisciplinary migration research in Europe is missing and evidence is sparse and fragmented. For a first overview and as a rough indicator of the growth of scholarship in this area, I have charted the use of the term ‘interdisciplinary’ in the title of journal articles on migration, drawing on data from the Web of Science. Nearly 17,722 articles have been published using the term ‘migration research’. Of those, I excluded academic disciplines such as ‘biochemical research methods’ or ‘limnology’, ‘ornithology’ or ‘zoology’ with assumingly little relation to the human movement under study.³ This led to a total of 8,402 articles. As Fig. 4.1 demonstrates, the overall number of journal articles in the area of migration research has steadily increased over the past years and at a faster rate since 2007/2008.

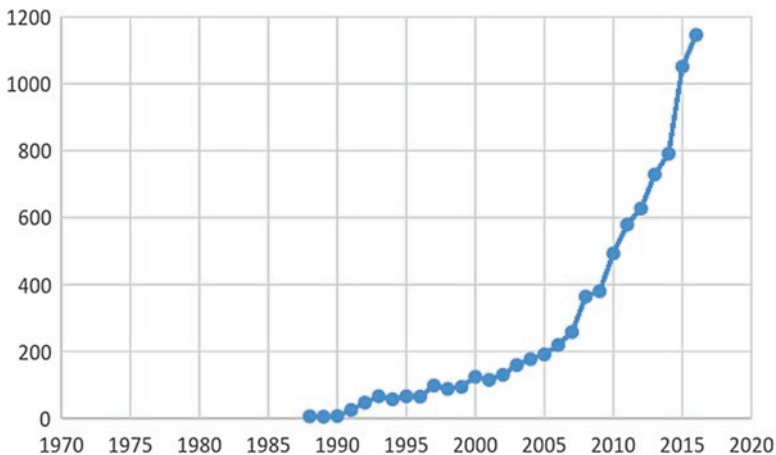


Fig. 4.1 Trend in articles with the term ‘migration research’ in title, 1988–2016 (Data from Web of Science 2017)

³For a full list of excluded categories please see Table 4.3 in the Annexes.

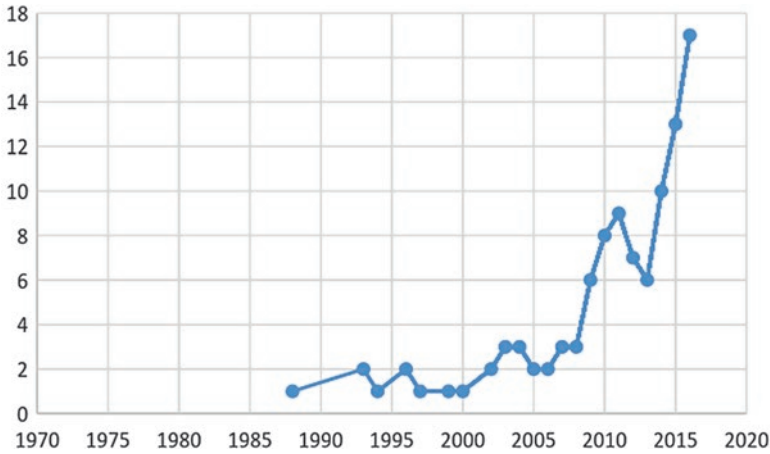


Fig. 4.2 Trend in articles with the term ‘interdisciplinary migration research’ in title, 1988–2016 (Data from Web of Science 2017)

In order to investigate if the push for more interdisciplinarity has been accompanied by more discussion of this topic in academic writing on migration, I also ran an analysis of the use of the term ‘interdisciplinary migration studies’ in the Web of Science database. As shown in Fig. 4.2, the publication of journal articles in this area has grown steadily since the 1990s, while the consistent upward trend since the 2000s is particularly remarkable. As is shown for the term ‘migration research’ in general, also the scientific production on ‘interdisciplinary migration research’ has particularly prospered since 2008, the year of the worldwide economic crisis.

But what is the distribution by academic disciplines to these articles? As Table 4.2 displays, there is a remarkable interest in the subject of ‘migration’ across a wide range of disciplines, from geography and environmental sciences to public environmental occupational health, religion and psychology.

Even if not all cited disciplines engage in the study of human migration as intended in this book, the table above illustrates an interest in the subject across a multitude of academic disciplines. How we can interpret the results from this first overview, is yet the question.

What is both indicative and surprising from this first exploration of the state of the art of interdisciplinary migration studies is that the total number of journal articles using the term ‘interdisciplinary migration research’ remains surprisingly low: of the 8,402 journal articles surveyed, only 181 (2.15%) make reference to interdisciplinarity in the title. One may, in fact, be compelled to conclude that when it comes to publishing in international peer-reviewed journals, interdisciplinarity in migration studies does not sell. Furthermore, there are academic disciplines in which the use of the term ‘interdisciplinarity’ in the context of migration is more common than in others: while geography and sociology are heading the rankings of academic disciplines with references to ‘interdisciplinary migration research’, the

Table 4.2 Distribution of articles with the term ‘interdisciplinary migration research’ in title, by journal subject category (top ranking) (Data from Web of Science 2017)

	Record count	%
Geography	16	8,8%
Sociology	13	7,2%
Demography	13	7,2%
Environmental science	12	6,6%
Public environmental occupational health	11	6,1%
Ethnic studies	11	6,1%
Environmental studies	11	6,1%
Ecology	11	6,1%
Geosciences multidisciplinary	8	4,4%
Water resources	6	3,3%
Planning development	5	2,7%
Neuroscience	5	2,7%
Urban studies	4	2,2%
Psychology social	4	2,2%
Political science	4	2,2%

use of the term, for instance, in political science and economics is less frequent. Is this a sign of academic rigour and low permeability of interdisciplinary migration literature within these disciplines? If so, can we deduce that there is a more accentuate interdisciplinary migration research community in some academic disciplines than in others? The pursuit of these questions seems to lead automatically to a call for more research in the future. Indeed, only a comprehensive citation analysis between disciplines within articles on migration would (in my view) allow visualising the scientific landscape of interdisciplinary migration research in Europe and answer the above-mentioned questions. As this type of analysis is still missing today, a look at an individual interdisciplinary career within migration studies might be illustrative to better understand the promises and pitfalls of pursuing interdisciplinary migration research in Europe. To this end, the following section will introduce the personal case of a qualitative-oriented interdisciplinary migration scholar as an example of the opportunities and existing challenges in the subject under study.

4.3 Practices of an Interdisciplinary Career in Migration Studies: My Case

There are two key elements for every testimonial or eyewitness account as far as the law is concerned. The first is the event they witnessed and the second is the identification of the person(s) committing the crime (Tredoux et al. 2004). In this case, the observed event is the undertaking of interdisciplinary migration research, while the

second is the interaction with diverse academic and non-academic cultures and environments in which the scholarship of interdisciplinary migration research is formed. The event consists of a series of acts like in a theatre play, which are going to be discussed in chronological order. In each scene, I will present the various actors at play and highlight the impact of the interdisciplinary and transdisciplinary exchange on the scientific formation of the individual researcher, i.e. me. This means that this chapter is shaped by two overlapping narratives: while the first focuses on the chronological description of the career itself, the second relates to the environment, circumstances and elements impacting interdisciplinary learning and research. In his ‘theatre in the scientific age’, Brecht demanded that ‘der Mensch ist Gegenstand der Untersuchung’, i.e. that ‘the human becomes the object of investigation’, and that ‘the spectator stands opposite him and studies him’ – with the aim to awaken the spectator’s abilities and to drive his/her sensations to knowledge (Müller 2007). In this sense, the following paragraphs will present major instances of my own interdisciplinary formation in migration studies in order to stimulate the reader’s activity and enable him/her to decide on the benefits and challenges of interdisciplinary work.

The *first step* of becoming an interdisciplinary researcher consisted of a *move from the conceptual to the empirical*. While being a student of Italian literary studies, I decided to write my diploma thesis on immigration in Italy and its perception in politics and public. It seemed like a natural move to select two supervising professors, one from romanistics and one from sociology. Both of them had a huge interest in the topic, but expressed doubts with regard to the supervision of the other. The sociology professor raised concerns about the appropriateness of an ‘aesthetic education’ for the study of the social and questioned the methodological guidance I would receive. The romanistics professor, in a humorous way, warned me against changing one professional ivory tower for another – just to keep the view. As a consequence of their gentlemen dispute, content-related instructions were rare, and both the conceptual frame for the study of perceptions on migrations in Italy and a suitable research strategy were developed autonomously. Without binding disciplinary standards, I opted for an integrated quantitative and qualitative media analysis combined with an in-depth literature review through which many Italian(-language) books were translated and introduced into the German academic discourse. In the course of the research, Italian migration concepts became known to German academia, while social science methods were introduced into literary studies in the broadest sense. Interestingly, the question of disciplinary belonging and the choice of methods for research and analysis that emerged on this occasion turned out to be a recurring theme for future interdisciplinary encounters.

The *second step* of my interdisciplinary formation went hand in hand with the move *from a paradigmatic choice of methods* induced by the German ‘Methodenstreit’, i.e. the dispute over methods that marks German sociology until today, *to empirical pragmatism*. After deciding to switch disciplines and pursue a doctorate degree in sociology, I took the opportunity to leave German academia for an extended fellowship in an Italian sociology department. This experience proved to be highly beneficial to both my intercultural and interdisciplinary training as well

as the unfolding of my dissertation project. This project was inspired and nourished by the stark contrast between the wording of Italian migration policies on paper and their actual layout in reality. As I soon noticed, most political sciences studies on migration policies at that time concentrated on the written word and on researching policy papers, while the ways policies are carried out and implemented at different levels of society were largely disregarded. Sociology, in contrast, conceptualized policies as (a condition) impacting on individuals rather than an actor itself. Nevertheless, it offered a great deal of research tradition on how the definition of a situation impacts the actual behaviour of people. Hence, it seemed to be most appropriate to combine the strengths of both disciplines. In an attempt to integrate seemingly opposed models of thought, I designed and conducted an actor-oriented analysis of the implementation of Italian migration policies as an exploration of the field inspired by grounded theory. To this end, the thesis combined qualitative and quantitative methods before mixed methods became established and recognised as a third methodological movement in Germany (Tashakkori and Creswell 2007; Teddlie and Tashakkori 2008).

The *third step* of my interdisciplinary education consisted of a move from academic migration scholarship to applied migration research. Starting to work as a research officer in an international organisation focusing on migration policy development, the area I was suddenly working in was characterised by a very close relationship between professionals, i.e. policy makers and implementers, as well as academic experts (e.g. sociologists, ethnographers, Africanists, lawyers etc.). In this hybrid space, academic and non-academic knowledge, theory and practice, discipline and profession merged and impacted on knowledge production in a way that can be best described as transdisciplinary according to the definitions provided in Sect. 4.1. Having crossed national as well as disciplinary borders, I was used to processes of conceptual acculturation. This (new) hybrid mode of inquiry and knowledge production though challenged many of the dichotomies I had been educated in, like the schism between theory and practice or the adoption of an external viewpoint and a view from within (often disguised as a top-down vs. bottom-up approach). The double blurring of boundaries, between theory and practice, the insider and the outsider, was at times stressful and confusing, even if beneficial to the development of practice-based approaches in migration (policy) research and theory (many of which were not published due to political concerns). After studying German and Italian migration policymaking, this period was also rich in insights into the political, administrative and legal system of Austria and its close ties with public media. However, the decision to pursue an academic career led me to leave the microcosm of international organisations.

In my *fourth step*, I moved from applied migration research to the study of international development accepting an employment offer in the newly established Department of Development Studies at the University of Vienna. Born out of a student initiative, this Department combined a unique foundation history with an extraordinary claim – to challenge classical conventions and produce new transdisciplinary approaches and theoretical concepts of ‘development’ that transcend disciplinary boundaries. When it was founded in 2010, the department was composed

of five professorships from sociology, economics, political science, history and gender studies. Four of these professorships were assigned to a 'home faculty', meaning that the professors were appointed by their respective scientific peer community who largely showed limited interest and/or knowledge for the study of development. This in-house architecture led to the bizarre situation in which potential professors with a passion for the interdisciplinary study of development issues had to prove themselves as worthy representatives of their respective field in order to be appointed. Consequently, the disciplinary impact on the department's structure remained strong. Moreover, many of the department's research projects and discourses were faced with not very flexible disciplinary structures. In applying the concept of human security (vastly applied to research in so-called development countries) to investigate the living situation of migrants in Europe, our interdisciplinary research project was confronted with substantial challenges in passing disciplinary peer community evaluations and acquire third-party funding. However, in an attempt to move away from the dominant deficit perspective that characterises most of the approaches on migration in German-speaking (and perhaps most European) countries, my *fifth step* was marked by putting an emphasis on the *contributions* that migrants make to their new countries of residence and hence on migrant entrepreneurship and innovation. In what has been called 'the summer of migration 2015', I left the University of Vienna to move to the Technical University of Berlin to start my new position at the School of Economics and Management. In what (surprisingly) appears to be an excellent breeding ground for scientific innovation, I was able to start not one but five interdisciplinary research projects that combine classical migration theories with business studies, sociology, network analysis, innovation research and computer science. Having experienced that the publication strategy is of key importance to the impact of scientific research and academic career progression, in my current (multidisciplinary) research team we discussed and agreed on a strategy of publication at an early stage of the project. Our main considerations included the relative prestige of a publication, as evidenced by impact factors weighed against rejection rates, turn-around and backlog times. This led us to consciously focus primarily on high ranking journals in business studies and only occasionally on journals with a cross-disciplinary appeal.

What does this itinerary of interdisciplinary formation, transdisciplinary experiences and intercultural training, spanning disciplines like sociology, romanistic studies, political science, international development and economics, tell us about the emerging area of interdisciplinary migration studies? Although it is based on an individual testimony, this narrative yields insights into the undeniable potentials and perils of interdisciplinary scholarship and career advancement. Interdisciplinarity makes moving out of the comfort zone a basic condition for scientific advancement and personal development. But how does one start to embrace the uncertainties of interdisciplinary endeavours? It is rooted in curiosity and the search for new knowledge? It is triggered by imagination or awareness? As this story exemplifies, interdisciplinary thinking results from combining curiosity, imagination and awareness with an ability to ponder on disciplinary assumptions, but also to communicate them to others and take on opinions or advice from other academic disciplines. Only

then, according to my experience, genuine collaboration can begin to emerge. To call into question the fundamentals of mono-disciplinary thinking, there is no need to cross international borders. This can be seen, for instance, in the description of the first interdisciplinary collaboration attempt when writing the diploma thesis, which is a good example of trying to integrate knowledge stemming from two disciplines as an individual effort. Yet, crossing national and cultural boundaries and, associated with this, being called into question as a scientist, even if uncomfortable, proved to be beneficial to the scientific advancement of my dissertation project in migration studies, my positioning as a researcher and my personal-professional development.

4.4 Conclusion: Promises and Pitfalls of Pursuing an Interdisciplinary Career in Migration Studies

Doing interdisciplinary research means stepping outside traditional disciplinary boundaries (Barry et al. 2008) and making a commitment to uncertainty, disciplinary detachment and conceptual overload. The latter refers to the paradox finding that providing individuals with more options in terms of theoretical input can be detrimental to choice. Speaking from my own experiences in interdisciplinary formation, placing interdisciplinarity in the work of migration scholars is not without risks. As Mills and Ratcliffe (2012) note, the common calls for interdisciplinarity are part of a push for research in the *knowledge economy* marked by a shift from 'pure' research to applied science. On one hand I am convinced of the potential of interdisciplinary work to foster scientific innovation, provide for more systemic and holistic insights into recurrent scientific and social challenges, and to train our ability to capture 'the complexities and conflicting motivations that spur along change' (Gleason 2004). On the other hand, I am also mindful of the undeniable downsides and even negative effects at the personal, institutional and systemic level.

On the *individual level*, scientists who decide to pursue an interdisciplinary approach are faced with opposing and, sometimes, conflicting styles of thought, research traditions (like inductive and deductive thinking, positivism and constructivism), methodological ideologies (claiming, for instance, the incompatibility of quantitative and qualitative methods) and disciplinary languages. The tricky aspect of these epistemic barriers, as was shown above, is that one can have no idea of what resides on the other side, or how many more barriers one may encounter beyond it. Against this background, interdisciplinarity unfolds as the individual competence to overcome barriers and to stimulate the free flow of knowledge between two or more parties. If this seems trivial, it is worth reminding ourselves what is associated with and claimed in the name of a 'discipline'.

According to Kuhn (1962), scholars of a disciplinary field share a set of underlying theories, models or generalisations that guide their work. He maintained that those trained in a discipline learn to see the same things when they are stimulated in the same way. Leaning on anthropological terms, Becher and Trowler (2001)

referred to ‘academic tribes’ to convey the idea of disciplines as self-regulating and self-sustaining communities with proper identities, practices and rules of conduct. This property list of disciplinary behaviour can be expanded by shared understandings of a particular language, processes of data collection, ways of organising material and interpretative protocols. In other words, only once you are ‘in’ a particular discipline, you understand what others in the same discipline are talking and writing about (Dressel and Marcus 1982). These norms and values that bind and regulate the disciplines are tightly woven to systems of power that regulate human conduct and social relations (Foucault 1980).

This compartmentalisation of sciences into disciplines and the resulting *disciplinary structure* started to dominate liberal arts colleges in North America in the nineteenth century, as historian Thompson Klein (1990) noted. It was facilitated by the proliferation of specialities in science demanded by a growing industry.

Despite the great deal of attention that interdisciplinarity in general is receiving today – an attention that Gleason (2004) compared to the force of a figurative hammer – empirical research suggests that disciplinary and administrative structures such as discipline-oriented journals, conferences and appointment procedures still remain strong. This topic, i.e. the nature of disciplines and the relations among them, has been a subject of scholarly reflection in philosophy, history of science and sociology since the second half of the last century, and there is no shortage of theories about it (see e.g. Jacobs and Frickel 2009 for a list of references). As Abbott (2001) points out, the same set of natural sciences, social sciences and humanities can be found in almost all universities and colleges around the world and changed very little from its institutionalisation in the last century. According to him, disciplines function as employment markets and essentially economic cartels which hire from within, thus institutionalising rules of access, exchanges of faculty and training markets. The point of disciplinary continuity is sustained also by Fuller (2004), who emphasises that the benefits of interdisciplinarity lie in its capacity to interpenetrate disciplines and to provide for platforms of communication, exchange and the creation of new epistemic standards, but not on removing them. When taken into account the thesis that women scientists engage more often in cross-disciplinary activities, collaborations and problem-oriented research than their male counterparts, and hence that interdisciplinarity has a gender dimension (Rhoten and Pfirman 2006), this raises important questions about the consequences of pursuing an interdisciplinary career.

Aside from difficulties that may emerge with the scientific peer community, the landscape of research funding is often uneasy with interdisciplinary project applications. This occurs, in the first place, with regards to the question of how to assess the quality of interdisciplinary research proposals since evaluation criteria and processes are standardized to gauge disciplinary depth before intellectual breadth. Secondly, it entails the practical dimension of how to find interdisciplinary evaluators to ensure fairness in selecting winners (Mallard et al. 2009). In addition to the points mentioned above, interdisciplinary scholars are also faced with the question of what has been coined the ‘citation penalty’, i.e. the difficulties to be recognised and invited to publish in a disciplinary journal or adjust for the relative lower status

of an interdisciplinary journal. What might come as comfort from research on citation patterns is that some concepts actually successfully diffuse across the humanities and the social sciences as well (Crane 2008; Jacobs and Frickel 2009). Taking Bruno Latour's 'actor-network theory' as an example, Jacobs and Frickel (2009) demonstrate that the concept has appeared in a wide range of disciplinary journals such as anthropology, business, ethics, law, public health, urban studies, and, of course, sociology. Their results seem to contradict the (interdisciplinary) assumption that there is little (if any) diffusion of ideas across disciplinary boundaries. In contrast, the empirical studies conducted by Jacobs and Frickel suggest that empirical evidence of academic silos impeding diffusion is hard to sustain. One may, in fact, hypothesize that a concept needs to be well-accepted within its discipline of origin before it is adopted in another.

When taking active account of the downsides of cross-disciplinary work and collaborations at the individual, institutional and systemic level, one might easily ask why all the fuss about interdisciplinary research? And how to make it attractive to junior migration scholars at a crossroads of their professional career?

In the narrative of interdisciplinary formation provided above, contemporary incidents played a significant role. Witnessing important events in how migration impacts and transforms society—such as the German 'guestworker' admission in the 1970s, the self-imposed consequences of the 'failure of integration' jolting most European countries in the 1990s, the silent Europeanisation and urbanisation of migration policies around the turn of the millennium as well as what has been coined as the European 'refugee crises' in 2015 together with the Brexit vote in 2016—made me aware that complex questions in a global society cannot be answered using a single method or approach alone. Even if the empirical proof for the general superiority of interdisciplinary over disciplinary knowledge is still missing, as Jacobs and Frickel (2009) critically note, today's masters and doctoral students in migration studies will be, as researchers, called upon to approach and possibly answer the grand questions of migration. Subtle, or with the figurative hammer, they are going to be confronted with questions about what societies' needs are and what their respective discipline can offer to meet them. In this chapter, I argued that moving beyond the bounds of one academic discipline is beneficial to migration research because it allows us to see connections across fields. The interdisciplinary formation as a migration researcher laid out in Sect. 4.3 was characterised by striving for diversity, making international experiences and softening monodisciplinary boundaries. It came with a cost. Almost 20 years of research and academic migrancy in the field have weakened the ties to the (national) scientific peer community. Still, the question of knowledge-producing institutions like universities and colleges being able to deliver the knowledge needed to meet societies' grand challenges is a strong driver to continue pursuing the interdisciplinary path. Together with Koen Leurs and the researchers from the IMISCOE research group on ICT & Migrations, we thus continue to establish the new and highly interdisciplinary research field of Digital Migration Studies at the intersections of traditional disciplines and computational (social science) methods. If interdisciplinarity is a path, one might conclude, the journey of discovery is far from being at the end.

Annexes

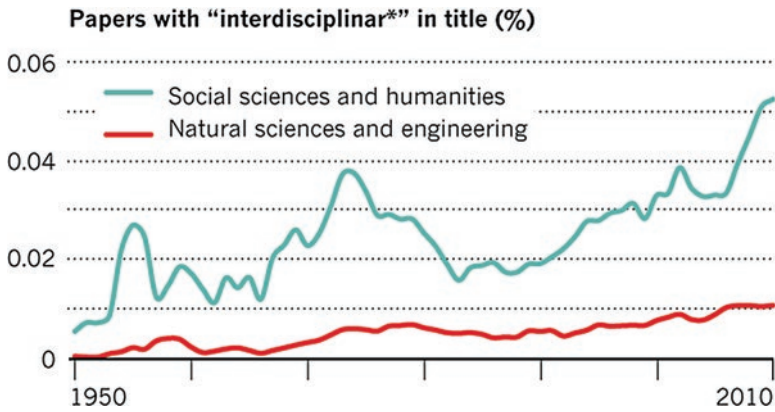


Fig. 4.3 The rise of interdisciplinary articles (Larivière and Gingras 2014)

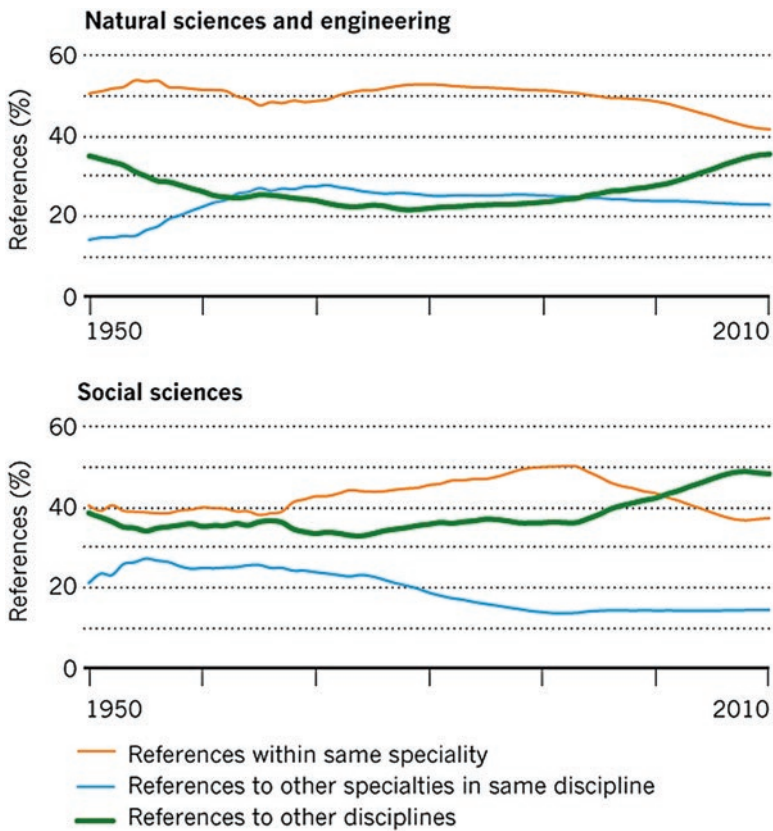


Fig. 4.4 The rise of citations outside the own discipline (Larivière and Gingras 2014)

Table 4.3 Non-relevant disciplines in which articles on 'migration research' were published, in alphabetic order (Data from Web of Science 2017)

Analysis: [excluding]:

WEB OF SCIENCE CATEGORIES: (BIOCHEMICAL RESEARCH METHODS OR LIMNOLOGY OR ENGINEERING CIVIL OR REPRODUCTIVE BIOLOGY OR BIOPHYSICS OR ENGINEERING CHEMICAL OR ONCOLOGY OR ORTHOPEDICS OR PLANT SCIENCES OR CELL BIOLOGY OR BIOTECHNOLOGY APPLIED MICROBIOLOGY OR BIOCHEMISTRY MOLECULAR BIOLOGY OR SURGERY OR HEMATOLOGY OR ENDOCRINOLOGY METABOLISM OR PATHOLOGY OR ARCHAEOLOGY OR CHEMISTRY ANALYTICAL OR MATERIALS SCIENCE BIOMATERIALS OR PHYSIOLOGY OR EVOLUTIONARY BIOLOGY OR OBSTETRICS GYNECOLOGY OR MARINE FRESHWATER BIOLOGY OR COMPUTER SCIENCE THEORY METHODS OR CLINICAL NEUROLOGY OR SOCIAL SCIENCES BIOMEDICAL OR PERIPHERAL VASCULAR DISEASE OR ORNITHOLOGY OR PHARMACOLOGY PHARMACY OR ENERGY FUELS OR CHEMISTRY MEDICINAL OR NEUROSCIENCES OR MEDICINE GENERAL INTERNAL OR INFORMATION SCIENCE LIBRARY SCIENCE OR MEDICINE RESEARCH EXPERIMENTAL OR BIODIVERSITY CONSERVATION OR CHEMISTRY PHYSICAL OR COMPUTER SCIENCE SOFTWARE ENGINEERING OR METEOROLOGY ATMOSPHERIC SCIENCES OR PHYSICS APPLIED OR MATERIALS SCIENCE MULTIDISCIPLINARY OR COMPUTER SCIENCE INTERDISCIPLINARY APPLICATIONS OR NANOSCIENCE NANOTECHNOLOGY OR BIOLOGY OR DEVELOPMENTAL BIOLOGY OR IMMUNOLOGY OR ENGINEERING ENVIRONMENTAL OR CELL TISSUE ENGINEERING OR OCEANOGRAPHY OR ENGINEERING BIOMEDICAL OR CARDIAC CARDIOVASCULAR SYSTEMS OR GEOGRAPHY PHYSICAL OR PSYCHOLOGY MULTIDISCIPLINARY OR PSYCHOLOGY SOCIAL OR WATER RESOURCES OR FOOD SCIENCE TECHNOLOGY OR GERONTOLOGY OR NUCLEAR SCIENCE TECHNOLOGY OR PEDIATRICS OR GENETICS HEREDITY OR TOXICOLOGY OR ZOOLOGY OR NURSING OR VETERINARY SCIENCES OR CHEMISTRY MULTIDISCIPLINARY OR RADIOLOGY NUCLEAR MEDICINE MEDICAL IMAGING OR ENGINEERING ELECTRICAL ELECTRONIC OR INFECTIOUS DISEASES OR GEOCHEMISTRY GEOPHYSICS)

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