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# Imagining mobility: the prospective cognition question in migration research

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**ABSTRACT**

Most migration research is focused on migrant experiences after mobility and settlement. We argue that empirical researchers would benefit from studying how *cognitive migration*, the narrative imagining of oneself inhabiting a foreign destination prior to the actual physical move, influences migration behaviour. This article notes a gap in our current understanding of the *process* by which individuals decide to cross international borders and offers an agenda for remedying this. The interdisciplinarity of migration research has not fully extended to social psychology or cognitive social sciences, where a dynamic research agenda has examined human decision-making processes, including prospection and the connections between culture and cognition. The study of socio-cognitive processes in migration decision-making has been largely overlooked because of the after-the-fact nature of data collection and analysis rather than an aversion to these approaches per se. We highlight a number of strategic findings from this diverse field, provide examples of migration scholarship that has benefited from these insights, and raise questions about the sides of migration process that have received insufficient attention. A more nuanced understanding of prospective thinking—imagining potential futures—can shed light on the classic puzzle of why some people move while others in comparable situations do not.

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## Introduction

In this article, we observe an important gap in our current understanding of why—and more importantly *how*—individuals *decide* to cross international borders precisely around the problematic of what constitutes a 'decision' prior to the physical move. While it is obvious that many macro- and meso-level processes also help create and sustain migration phenomena, our aim is to suggest a refocus of migration theory on the micro-level and to find fruitful possibilities for co-operation with sub-disciplines that have so far played a minor role in research on migration decision-making—the long process of how migrants come to a decision, not just an after-the-fact listing of good or rational reasons. We propose that those contemplating migration engage in *cognitive migration*, visualising themselves in a future time and place prior to making the

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actual move (Kyle and Koikkalainen 2011). We define it as the phase of decision-making in which the experimental, narrative imagination is actively engaged in negotiating one's future social worlds and, hence, future emotional states.

Migration scholars have explained migration by focusing on, among other things, economic motivations and cost/benefit analyses, push and pull factors in sending and receiving regions, transnational networks, the role of migration industries, and various historical contexts that have created and sustained a migration flow to a foreign destination (see e.g. Faist 2000; de Haas 2011; Castles, de Haas, and Miller 2014). However, these attempts have failed to fully explain why some individuals move whereas some in comparable situations do not, why migration networks persist despite hostile efforts by states to stall immigration, or why active state encouragement to labour migration does not necessarily lead to transnational mobility. As de Haas (2011, 16) concludes:

> What is really lacking, and what is hindering theoretical synthesis, is a more comprehensive and convincing 'behavioural' framework of migration than the current theories offer. The only systematically elaborated micro-behavioural model of migration is neo-classical. Although neo-classical migration theory has been much reviled for a number of more and less convincing reasons, no credible alternative has been proposed so far.

It is precisely this gap that our article wishes to highlight and explore.

The bulk of empirical migration research has thus far focused on explaining and understanding migration as something to be observed after the mobility has taken place (see e.g. Arango 2000, 294; Kley and Mulder 2010; Czaika 2015; Schewel 2015). Mobility research, largely based on the modern state's agenda and funding, privileges the physical movement of bodies such that the stark dichotomy of migrant/non-migrant cast a shadow across a wide range of theorising. Migration researchers are often content with describing the qualities or attributes of migrants after arrival rather than looking at individuals and households contemplating their life options prior to migration, which would necessarily include a much larger population in origin regions (or even regions with little out-migration at all). Social scientists build models based on aggregate level analyses that may or may not privilege rational choices and self-interest, but often does so in ways that demonstrate why the migrant's description is either incorrect or not the real or only reason for why they chose to migrate. Given the wider disciplinary context whereby such cognitive considerations have largely been relegated to psychology, social scientists have rarely problematised migration decision-making as a possible *empirical* object of inquiry, much less examined migrant's dreams of intended social worlds imagined during the decision-making process. This is a bias that assumes that all action is based on rational reasoning no matter how faulty or coerced such reasoning may be.

Another limitation in current mainstream migration research is that it tends to 'sample on the dependent variable', examining existing flows and migrants rather than the vast majority of the planet that does not move—but may have considered it, planned it, and failed or 'thought twice' about it. Schewel (2015, 4) refers to this practice as an analytical and methodological 'mobility bias' that hinders our capacity to fully understand different migratory processes (see also Carling 2002; Czaika 2015, 62). To borrow the words of Joaquín Arango '( … ) the usefulness of theories that try to explain why people move is in our days dimmed by their inability to explain why so few people move' (Arango 2000, 293).

In this article, we attempt to move beyond both rationality and mobility biases toward developing a dimension of a more complete behavioural model. First, we observe, in broad strokes, some of the most common research strands within existing psychological or cognitive approaches (broadly defined) to understanding migration and migrants, though not meant to be an exhaustive review. Second, we then explore two relevant research areas from psychology and the cognitive social sciences—beyond migration research—and outline the theoretical, methodological, and practical advantages of a new research agenda focusing on imagination. Finally, we conclude by discussing how the sensitising concept of cognitive migration may bring together many of the individual threads of research in these fields to bear on the conundrum of why so many take the mobility leap of residence in another country, while others with similar reasoning capabilities and a common socioeconomic and cultural milieu do not.

## Migration research and cognitive social sciences: existing linkages

Scholarly migration research is a remarkably interdisciplinary field, where mobility is approached from a wide range of paradigmatic assumptions and methodological cultures. Historians, economists, demographers, geographers, and social scientists frequently talk across disciplinary boundaries when looking at specific geographical regions or trying to explain certain migration processes. In addition, migration researchers themselves often have cross-disciplinary training or experience. This is not surprising because of the many ways that mobility intersects with the social world and, at the same time, seems to conform easily to standard tropes of either highly atomistic rational choosers seeking a better life or less agentic arguments of forced choices embedded in constrained economic and political circumstances. The former has a ready-made model of decision-making, while the latter marginalises or dismisses it as a choice at all.

To date, however, this interdisciplinarity has not, in general, fully extended to social psychology and the wider cognitive social sciences, where a dynamic research agenda has in recent years focused considerable attention on understanding human decision-making processes empirically in ways that allow for agency but not machine-like rationality. And yet, moving abroad is one of the big, life-altering decisions that many individuals make during their lifetimes, with long-term consequences similar to choosing a partner to marry, settling on a profession, or having children. This set of big decisions typically includes imagining many unknown factors, as is also the case with migration, because the decision has to be taken in the context of uncertainty and risk (Czaika 2015).

References to these fields of research are rare in the canonical migration theory texts. *The Age of Migration* (2014) by Stephen Castles, Hein de Haas, and Mark J. Miller covers the field of migration research extensively but does not discuss the psychological aspects of mobility and migration-related decision-making. Similarly, *Migration Theory: Talking across Disciplines* (2008), by Caroline B. Brettell and James Hollifield, includes articles from fields as diverse as law and geography, but neglects the perspective of a psychology of migration, which—one assumes—could offer some understanding of the very personal choices migrants have to make when deciding to move abroad. The same is true for many other migration theory texts that incorporate insights from various different disciplines (e.g. Massey et al. 1993; Hirschman, Kasinitz, and DeWind 1999; Boswell and Mueser 2008; Goldin, Cameron, and Balajaran 2011; Smith and King 2012).

There are two major strands of research, however, where cognitive considerations have been utilised in social research. First, cognitively-oriented sociologists such as Zerubavel (1999), Brubaker, Loveman, and Stamatov (2004) have introduced research agendas in the field of cognitive sociology and on the cognitive turn in the study of ethnicity respectively. Second, researchers from psychology, geography, anthropology, computer science, and planning have tried to understand how humans perceive and behave in geographic space (Kitchin and Blades 2002). *Cognitive maps* have been used in human geography to study how we perceive the spatial environment, also in the context of migration and mobility research (Golledge 1980; Gärling and Golledge 2002; Hedberg 2007). While research done within both of these traditions is relevant to migration research, they do not, however, fill the gap we note in the current understanding of migration decision-making in state-of-the-art migration theory.

James Fawcett identified two broad areas of migration-related psychology research—examining the reasons and processes causing an individual to migrate and the consequences of that migration to the individual—already in 1985 (Fawcett 1985, 6).[1] Of these two strands of research, the latter has since received more scholarly attention. A general search for a *psychology of migration* produces mainly results of research on attitudes towards immigrants and ethnic minorities, immigrant acculturation and stress related to adjusting to the new society, and inter-group relations between immigrants and host country residents (for an overview see Berry 2001). The decision-making processes related to migration have been back on the agenda only recently, as the effects of climate change on various parts of the globe force more people to contemplate international migration as an adaptation strategy (see, e.g. Kniveton et al. 2008; Bardsley and Hugo 2010).

One approach to understanding mobility from an individual point of view is *the value-expectancy model* which was suggested by De Jong and Fawcett (1981, 47–51) in the early 1980s. They concluded that individuals weigh personally valued goals, such as wealth, status, comfort, or stimulation, when deciding whether to stay or to go. Robert Gardner, following the same research line, concludes that it is assumed that individuals seek maximum satisfaction in as many areas of value as possible (1981, 67). He stresses that behavioural intentions are not the same thing as actual behaviour: 'The desire to move is not the same thing as an intention/decision to move (perceived constraints intervene), and an intention/decision to move is not the same thing as actual migration behaviour (real constraints intervene)' (Gardner 1981, 65). This difference is a well-known fact for migration scholars, as even though migration intentions are a good predictor as to who will later migrate, not all of those who express an interest in moving do, in fact, realise their intentions (e.g. McHugh 1984; De Jong 2000; Schewel 2015). Similarly, the many cases of communities emptying out in a single generation speak to how many who are not considering migration may begin to leave nearly *en masse* as critical but unforeseen features of their lives—challenges and opportunities—shift and transform in dynamic ways.

In his overview of the state-of-the-art in migration theory Faist (2000, 43–44) outlines some of the main theories that have been used to explain migration decisions in the field of social psychology, namely the *stress-threshold model* and *relative deprivation*. In the former, a potential migrant assigns a 'place utility' to the current place of residence and compares that with the information available of other potential places of residence. In

the latter model, the potential migrant feels deprived of something that rightly belongs to her and tries to relieve this psychological tension by migrating. The stress-threshold model has been utilised, for example, in studies examining the creation of migratory networks and estimating migration propensity from particular areas or in assessing the impact of environmental change on migration intentions (e.g. Hunter 2005; Von Reichert 2006). The relative deprivation argument, on the other hand, has been particularly influential in the new economics of migration school (e.g. Quinn 2006; Stark 2006).

There are some interesting studies that have successfully incorporated psychological insights into migration research. Several researchers have, for example, noted that migration decision-making is not an isolated event, but rather a process (e.g. Brown and Sanders 1981, 150–153; Gardner 1981, 63–65; Kley 2011). In their argument for the need of a biographical approach to migration Halfacree and Boyle (1993, 337) also proposed that migration should be understood as *action in time*: '( … ) a specific migration exists as a part of our past, our present and our future; as a part of our biography'. Their approach thus offered a more holistic view into migration as a part of an individual's life-course and stressed that the migration decision is affected by a multitude of interrelated factors and causes rooted in the everyday life.

Researchers have also searched for the characteristics of a *migrant personality* (Boneva and Frieze 2001; Polek 2007; Frieze and Li 2010). In their article Boneva and Frieze (2001) outline a history of psychological research focusing on the personality traits and individual characteristics of migrants and non-migrants. Their study on Eastern European students found that certain personality characteristics do predict future desires to emigrate. Namely high achievement and power motivations, especially when combined with high work-orientation, predict international mobility, while high affiliation motivation and family centrality tend to predict staying rather than leaving. They argue ' … unfavorable economies in the country of origin, emigration and immigration policies, network support in the receiving country, and other environmental factors create the conditions for wanting to leave, but desires to do so are based on the personality of those who make the choice' (Boneva and Frieze 2001, 478). Evidence has also been found on the influence of certain personality traits on intra-State migration in the United States (Jokela 2009).

While 'personality' frameworks and related assessments have been around for a century, and carry their own set of critiques, they do represent the black box in question in need of more theorising and research. If 'personality' means anything, it is a set of ready-made orientations and mental shortcuts to how we imagine our own and others' future motivations and actions. It is a predictive stamp we use to make a bet on individual *future* actions under an extremely wide set of social situations and cognitive challenges.

These examples are of value in generating a more thorough understanding of human mobility and the micro-level of migration research; yet they fail to fully take into account some key developments discussed in the following sections. Building on this body of research we, therefore, want to focus our attention on the role of imagination and prospective thinking in the mobility decision-making process, a field ripe for some fresh thinking.

## Imagining possible futures in relation to 'the future'

The idea that past life events along with current circumstances are the key to understanding an individual's future behaviour has been one of the empirical social sciences' fundamental

assumptions, especially in psychology (Seligman et al. 2013). In recent years, however, the efforts of Professor Martin Seligman and colleagues (e.g. Peter Railton, Roy F. Baumeister, and Chandra Sripada) have stressed the importance of refocusing research on *prospection*; the mental representation and evaluation of possible futures. They argue that '( … ) prospection is a central organising feature of perception, cognition, affect, memory, motivation, and action' (Seligman et al. 2013, 119). The various cognitive processes involved adhere to the concept of *mental simulation*, which can be defined as ' … an act of imagination and the generation of alternative realities' (Markman, Klein, and Suhr 2009, vii). These alternative realities form the basis of how we navigate our path through everyday life, making various decisions that shape our future. Some choices are small and insignificant while others have life-changing consequences. Therefore, the kinds of alternative realities we imagine do matter also for migration research: do those contemplating migration imagine possible futures that include life in a foreign destination? Or are all the scenarios they imagine tied to the current home and country of residence?

Though time confines us all to be living physically in the present, our minds are constantly ranging over the social landscape of time. It is a common feature of human cognition to spend a considerable amount of our time in some form of *mental time travel*: remembering the past (retrospection) and imagining possible future events (prospection). We also engage in counterfactual thinking, imagine possible scenarios of what our life would be like now if we had made different decisions or if some crucial event of our past had happened differently (Byrne 2005). The capacity to use our previous experiences, and our recollections of the past, to imagine how similar or related events will play out in the future is unique to humans (Suddendorf and Corballis 2007). Suddendorf and Busby (2005, 119) conclude that mental time travel has been essential to the very survival of the human species: 'Mental time travel and its associated changes in the motivational system enabled humans to successfully spread across the globe and adapt to the challenges, present and future, of a diversity of habitats.'

The concept of *episodic memory*, or the way we remember specific, emotionally complete episodes, is also an important part of the decision-making process, when understood as a constructive system that enables the mental simulation of both the past and the future. Especially when planning or deciding something that is new to them, decision-makers tend to engage in what Atance and O'Neill (2001) have called *episodic future thinking*, that is projection of the self into the future to pre-experience an event. According to Atance and O'Neill, recent studies have shown that although all healthy adults have the ability to think about the future, people differ in their inclination to actually do so. They conclude that research should look into how the individual differences in 'future orientation' or the differences in the ability to project oneself into the future has an effect on behavioural outcomes (Atance and O'Neill 2001, 533–536; see also Szpunar and McDermott 2008; Szpunar 2010).

It has been noted that when reconstructing past events humans often make 'educated guesses' about what must have happened. Even when engaging in counterfactual thinking our 'what-if' scenarios' do not tend to differ much from reality. Van Boven, Kane, and McGraw (2009, 134) suggest ' … that the mental practice of reality checking in retrospection generally constrains the practice of past tense mental simulation.' In contrast, the futures that we tend to imagine are much more optimistic about reaching our goals, less constrained by reality checks and tend to neglect many contextual details of future

realities. The same phenomenon was observed by Newby-Clark and Ross (2003), who found that '( … ) individuals spontaneously recall an affectively mixed past, containing both "highs" and "lows", whereas they anticipate homogeneously ideal futures' (Newby-Clark and Ross 2003, 807).

The potential migrant's ability to evaluate future risks and to cope with uncertainty is closely linked with migration decision-making (Jaeger et al. 2007; Williams and Baláž 2012). The decision is often made with partial knowledge of what kinds of risks the journey abroad entails and what the future life in the destination will be like. In an innovative lab-in-the-field experiment, Gereke (2015) tested the risk perception of Thai vocational school students, a group of potential labour migrants, who were presented with a risky decision. She notes that instead of evaluating the risks involved in a probabilistic manner, they relied on intuitive judgments and what she calls a 'fortuna heuristic'. These results were replicated in a survey with would-be migrants (individuals actively preparing to go abroad for temporary work) from the same region who were presented with a hypothetical risky migration offer. Overall, the results show that a belief in being a lucky individual correlates with one's likelihood of accepting a risky deal.

Sociologist Cerulo (2006) also concludes that humans are psychologically predisposed to favouring best-case scenarios over more problematic versions of our imagined futures. Individuals considering mobility may fall into the trap of 'positive asymmetry' (Cerulo 2006, 6), and choose to see a positive future as the most likely one to become true. Not only is positive asymmetry a basic feature of how our brains process data, it is also a culturally supported phenomenon: '( … ) culture harnesses the brain's propensity toward asymmetrical thinking and encodes that process into a much more targeted and specialised experiential bias.' Depending on the situation, seeing the future in a positive light may thus obscure either the risks involved in migrating or in staying behind.

We argue that more empirical research is needed to ascertain how the alternative futures one imagines influence future migration behaviour. Such an exercise would be quite possible, as there is existing migration research which has noted the importance of imagination. Appadurai (1996), for example, has argued that in our post-electronic world imagination has become a collective, social fact and is now the basis of a plurality of imagined worlds. Mass-mediated imaginary that transcends national space has made it possible for more people than ever before to imagine a life abroad in 'faraway worlds' (Appadurai 1996, 5–6, 53). Also Ullah (2010, 111) notes the following on his study of labour migrants moving from Bangladesh: 'Respondents reported going through a process of making forecasts, asserting their expectations and considering some of the possible consequences of migration before making the journey overseas.' The critical role of migrant hope, with powerful images of a better future, is beautifully described by Hagan (2008) in her book, Migration Miracle. Also, other migration studies have explored the influence of imaginations, aspirations, and visions of particular would-be migrants (e.g. Teo 2003; Halfacree 2004; Thorsen 2010; Coe 2012; Czaika and Vothknecht 2012; Gereke 2015; Schewel 2015).

## Cognitive migration and the phases of becoming mobile

In the previous sections, based on a wide range of recent research, we have explored how migration decision-making is influenced not only by the individual's capacity to imagine

possible futures abroad, but also by the complexities of the act of making the mobility decision itself. It is typical for much of migration research to ignore what takes place before the migrant actually *becomes* a migrant and to focus only on the delimited act of migration itself. We believe that it is precisely here that the contributions from the diverse subfields of cognitive social sciences and social psychology can be of vital relevance to migration scholarship, specifically, the nature of imagining one's future choices, and process by which this imagining constructs 'the future'. In other words, how does the 'future' shape the present?

A number of models have been proposed as to how the process of becoming a migrant proceeds. Van der Velde and van Naerssen (2011, 2015a, 267–8) argue that there are three thresholds that need to be crossed before mobility occurs: the individual's mindset about migrating (*mental threshold*), choosing a destination (*locational threshold*) and figuring out the specific routes across borders to reach that destination (*trajectory threshold*). They stress that this is not a linear process, but some thresholds may overlap or be indistinguishable from each other. Stefanie Kley (2011, 472), who studied migration from two German towns, noted that there are three distinct phases in the decision-making process that also apply to migration. These stages are *the pre-decisional phase* (considering migration), *the preactional phase* (planning migration), and *the actional phase* (realising migration). The research by Kley (2011) and Van der Velde and Naerssen (2015b) and their collegues are among the rather rare examples of empirical analysis in trying to understand what happens during the whole migration decision-making process, and which also takes into account those who choose to stay.

We focus our attention to the first two phases of migration decision-making process. During the *predecisional* and *preactional phases* potential migrants imagine themselves socially and emotionally in a particular place in the future—days, weeks, or months before they enter the *actional phase* and physically migrate. When making a life-altering decision such as embarking on international or even regional migration, the individual needs to explore the emotional and psychological consequences of one's actions. In order to make the decision to migrate, the potential migrants therefore engage in episodic future thinking (Atance and O'Neill 2001; see also Szpunar 2010) to pre-experience a possible future abroad. This mental time travel can take many forms, but the key factor is that it includes affective forecasting (Dunn, Forrin, and Ashton-James 2009; Loewenstein and Lerner 2009), trying out different situations or images that can help one determine what one's future self would feel in a given context.

While for some these steps are necessary in reaching the decision to move, for others it may lead to certainty that one shall stay, regardless of the various push and pull factors that might suggest that leaving is the right choice. This may be in fact the choice for most people, as we are prone to the 'status quo bias' (Samuelson and Zeckhauser 1988) that leads us to often decide that the best course of action is to do nothing. However, the specificity and believed reality of imagined futures may lead to changing one's mind based on seemingly minute or small bore developments—an admired friend has left, a relative who always wished for you to stay has died, or the destination country is hosting the World Cup or is glorified in a Hollywood movie, for example. Like falling in love based on an imagined future together, we can recognise the reality of a private 'logic' even when it may make little sense to others, let alone be considered a rational choice.

Consistent with this research, we therefore propose that a large group, if not the vast majority, of potential migrants engage in what we label *cognitive migration* (Kyle and Koikkalainen. 2011) during the three-phase decision-making process that Kley (2011) identified. We define cognitive migration as the phase of decision-making in which the experimental, always-on, imagination actively, though not always consciously, negotiates one's future social worlds and, hence, emotional states converging around a core destination. This mental time travel into a possible future in a different country constructs a narrative on how one's life is likely to proceed if one chooses to migrate, not in the abstract, *but under specific conditions in specific destinations*. The importance of focusing on individual imaginations as integral to a 'decision', which we have advocated in this article, does not negate the importance of migration networks and cultures (e.g. Connell 2008; Haug 2008), or the important role of various migration industries that facilitate mobility (e.g. Kyle and Goldstein 2011; Koikkalainen 2013, 88–91). The specific conditions in which the mobility decision is embedded naturally shapes the outcome of that decision process.

In conclusion we argue, therefore, that when making important decisions, such as deciding to move to an unknown destination, we play out different possibilities 'in our head' trying to figure out and negotiate with ourselves how we shall feel: what will the *future me* be like if I choose one option over another? Hence, those contemplating migration poignantly engage in this process, visualising themselves in a future time and place that feels real but, of course, is unknowable in the particulars. Logically, there are many more 'cognitive migrants' than actual migrants. This is a potentially fruitful insight that warrants more empirical and conceptual work, not to mention raising epistemological and research design questions beyond the limits of this article.

## The process of making the decision to migrate

We might ask what all of this attention to mental time travel means, in reality, for bodily spatial travel. We take a well-known migration puzzle as a launching point for one possible application of these past findings and sensitising concepts. In his famous formulation of one of the key puzzles of migration research Faist (2000) asks: why are there so many international migrants out of few places, while there are so few out of most places (see also Kyle 2000)? The explanations as to why people decide to migrate have, in general, been twofold. Some theories are based on the assumption of rational migrant agency of calculating the pros and cons of mobility while others, in contrast, see individual agency as a mere illusion because either local, national, and global structures of power and cultures of oppression, or migration networks and systems, guide the migrants' paths. However, those who favour individual agency as the key driver of migration have so far largely ignored research done at the crossroads of psychology, cognitive neuroscience, and decision sciences. Empirical research in these fields has demonstrated the numerous flaws or oddities in our subjective judgment when faced with a 'logical choice'. These include cognitive or information-processing biases, social biases, as well as emotional self-protective mechanisms that influence individual decision-making (Griffin 1988).

Recent research into human reasoning and decision-making in these fields seriously undermines the rational migrant argument. The work of Nobel laureate Daniel Kahneman and his colleague Amos Tversky on prospect theory presented an alternative to

the standard 'rational-agent' model of decision-making, and it has since influenced economists, political scientists, philosophers, as well as cognitive scientists (e.g. Kahneman and Tversky 2000; Dawes 2001).[2] Building on the work of Kahneman and Tversky (1979) Mathias Czaika (2015, 59) proposes a 'migration prospect theory'. He notes '( … ) an individual's migration decision about staying, leaving or returning depends on recent changes in rational beliefs about the present and future economic situation in the origin country *and* destination country'. We agree with Czaika (2015, 64) that expectations about future outcomes affects 'utility in the present'. However, we argue that the estimations of future prospects are not limited to reasoning based on changes in the general economic situation or unemployment levels, but extend to many other areas of life as well (see also Halfacree 2004).

Rüdiger Pohl's edited volume on *Cognitive Illusions* (2004) distinguishes three types of illusions, those related to thinking, judgment, and memory. Especially the illusions related to thinking are of significance also for migration decision-making. A cognitive illusion related to thinking is for example the 'confirmation bias', the tendency to only look for evidence that supports one's own hypothesis (e.g. that moving to a certain destination is wise), and the 'illusion of control', where individuals overestimate their own role in producing certain outcomes (e.g. that one can survive a risky boat trip across the Mediterranean). This feature of human reasoning is neatly summarised by Reid Hastie and Robyn Dawes (2010) as follows: 'We not only under-appreciate uncertainty in the world outside of us; we are also prone to illusions of consistency, reliability, and certainty about the world inside our own heads. There can be no doubt that we think we are more logical, rational, and consistent than we really are' (Hastie and Dawes 2010, 325).

If we accept that many human decisions cannot be characterised as the actions of rational agents who can carefully calculate the economic and psychological costs and benefits of their actions—even in laboratory experiments faced with limited choices—then these 'brain quirks' must surely also shape complex mobility decisions, even the 'big decision' to imagine a future change in status and social connections. Intriguing studies have examined cognitive biases loosely connected to the field of ethnicity and immigration, but none fully examine the mobility decision itself (Hamilton Krieger 1995; Reskin 2000; Lee and Ottat 2002; Rydgren 2007; Epstein 2008; Rubin, Paolini, and Crisp 2010; for a rare exeption see Czaika 2015).

One example of unravelling the process of migration decision-making is found from the work of de Haas (2011) who has proposed that research should take into account the importance of aspirations and capabilities: 'People will only migrate if they *perceive* better opportunities elsewhere and have the *capabilities* to move' (de Haas 2011, 16, italics in the original). Following this line of argument Czaika and Vothknecht (2012, 6–7, 20) examine the role of aspirations, that is, ambitions and plans for the future, in migration decision-making. Based on research in Indonesia they conclude that migrants, in general, have higher aspirations than non-migrants, both because they had a better 'capacity to aspire' already prior to migrating, but also because the experience of migration supports higher aspirations. In addition, those migrating also possessed the required 'capacity to realise migration'. Also Schewel (2015) gives a nuanced account of the complexity of the relationship between aspirations and migration, but based on data on young adults in Senegal she finds evidence that in fact the capacity to aspire may also be linked to

the desire to stay. Findings from all of these studies resonate with the migrant 'personality' approaches (Boneva and Frieze 2001) outlined earlier in the article.

There is clearly demand for migration research that learns from the insights gained in empirical research conducted in different decision-making situations. For example, Galotti (2007) examined five different studies focusing on real-life decision-making situations that are comparable to migration decision-making. She notes: 'In making real-life decisions, people appear to constrain the amount of information, and especially the number of options that they actively consider' (Galotti 2007, 322). She draws on the 'image theory' developed by Lee Roy Beach (1990, 1998), who argues that when making decisions, individuals first limit the different options to a manageable number. In the mental simulation process, these options are then tested against three images: *the value image* reflecting the persons' principles, *the trajectory image* representing the adopted goals and hopes for the future, and *the strategic image* constituted by the plans and strategies that one wishes to use to attain the trajectory image goals. Having made these evaluations, the individual then proceeds to choosing the best option available and making forecasts of future events based on adopting the chosen plan of action. (Beach 1998, 12–13.)

A separate, but parallel research agenda examines the linkage between emotions and decision-making. Research into the psychology of emotions has shown that 'affective states have a powerful influence on the way we perceive and respond to social situations' (Forgas 2009, 596). Loewenstein and Lerner (2009, 620) conclude that emotions play a role in decision-making in two ways: as *expected emotions*, predictions of the emotional consequences of one's actions and as *immediate emotions* that are experienced when the decision is made. The insights gained from also this field are of help when researching the role of imagination and prospective thinking in migration decision-making, as these types of emotions are surely present when one thinks about a possible future abroad.

Based on the research briefly outlined here we can suggest several questions worthy of careful consideration. Are individuals who actively imagine life in a foreign destination more likely than others to migrate? How do emotions surrounding imagined future states influence the decision-making process of a potential migrant considering a risky, clandestine journey across the desert? How does the imagined future of a highly skilled migrant, who ponders a job offer requiring relocation to the other side of the globe, impact her ultimate trajectory, objective success, and personal perception of its value? And if indeed cognitive biases and emotional states shape migrants' decisions in myriad ways, exactly how do they add value to existing models?

## Conclusion: imagining a way forward

We have argued that more empirical research focusing on imagination and prospective thinking is required in migration research, balanced by insights from the cognitive social sciences, so that we may better understand migrant decision-making processes even in phases that cannot be labelled as such. To this end, we have highlighted some of the key ingredients necessary for such conceptualisations and suggested linkages between one's mental time travel and one's physical mobility and resettlement abroad.

The proposed research agenda on migration decision-making builds on a line of research initiated already more than 30 years ago (e.g. De Jong and Gardner 1981; Fawcett 1985; see also White 1980), but greatly benefits from recent state-of-the-art

findings in a variety of cognitive subfields across the social sciences. The process of mental time travel to possible, imagined futures, the complex dynamics of decision-making and the role of immediate and expected emotions have been explored in neuroscience, cognitive, social, developmental, and clinical psychology—all disciplines that have so far had little contact with core migration theorising. Yet these advancements in science are bound to have an effect on our understanding of the ways in which potential migrants estimate the pros and cons of mobility options that are both presented to them and creatively imagined by them within both dense and loose networks of friendship and information.

In addition, we believe that we can best get a purchase on this by focusing on the process by which our minds migrate before our bodies do; a phenomenon we have labelled *cognitive migration*. We believe this little understood socio-cognitive dimension is useful for developing a sociologically informed cultural cognitive research agenda concerning choice and decision-making in the context of potentially risky, emotionally laden, major decisions.

We, therefore, make two assertions as outcomes of this venture into the role of imagining mobility as integral to the migration process. *First*, migration research could fully acknowledge the role of imagination and prospective thinking in the migration decision-making process, no matter how difficult or complex. How do individuals contemplating mobility see their possible future in a new location? When engaging in cognitive migration, what kinds of episodes do potential migrants experience in the imagined future where they have moved abroad? And are those who are more prone to imagine a positive future abroad more likely to migrate? Though difficult to operationalise with survey research, for example, it may lead to more creative ways to address this significant dimension of mental time travel before actual travel abroad.

*Second*, migration research could take into account, as a starting point only, the insights from research on how people make major decisions in general, not just in relation to what is often perceived as a dichotomous and special decision to leave or stay. Mobility researchers have their own unique set of tools, concepts, and often fascinating and strategic research sites and questions they can bring to bear on these much broader questions and literatures. How do emotions and cognitive biases influence the decisions of potential migrants? How does the real-life context where the decision is made influence migration outcomes?

As others (Czaika 2015; Schewel 2015; Van der Velde and van Naerssen 2015b) have recently noted, the mobility decision has to be examined in a way that also takes into account those who stay—at least for the moment. Schewel (2015, 28) notes: 'Research on migration aspirations needs to be expanded even further to include the broader life aspirations, hopes, and motivations that contribute to the particular aspirations to migrate or stay'. As a way forward, we suggest deepening a research agenda focusing on all the phases of migration 'decision-making', especially exploring the insight that, to a large extent, 'the future' shapes our present as much, or possibly more, than 'the past' (e.g. Newby-Clark and Ross 2003; Schacter and Addis 2007; Suddendorf and Corballis 2007; Seligman et al. 2013). A natural and necessary next step is to combine the results from recent psychological and cognitive science research related to human decision-making and test the hypothesis of the crucial role of imagination and prospective thinking with real-life populations, some of whom, but not necessarily all, may later become migrants.

Extending the scope of migration research to examining a wider population imagining possible mobile or immobile futures can increase our understanding of various highly topical migration phenomena. Could the differences in the imagined alternative futures and the processes involved in making the decision unveil the mystery of who decides to migrate and who chooses to stay? We believe that a thorough examination of this process, admittedly requiring creative research designs and methods, can add a new dimension to our understanding of why some people move, while others, in comparable situations, do not. This is a social as much as a psychological or cognitive process in ways that are, in reality, impossible to disentangle.

## Notes

1. Fawcett also provides a valuable overview of key texts in migration psychology prior to 1985.
2. For empirically based, yet popularly written books on how we make choices see Iyengar (2010), are predictably irrational see Ariely (2008), how mistakes of reasoning rule our minds see Piattelli-Palmarini (1994), how to nudge people into making decisions see Thaler and Sunstein (2009), and how we perceive time see Hammond (2013).

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