# SPECIAL SECTION ARTICLE - MIGRATION METHODOLOGIES

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# Mental mapping and multinational migrations: A geographical imaginations approach

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#### Abstract

Investigating migration decision-making raises certain methodological issues because of the complexity of these practices and the diverse possibilities that exist for aspiring migrants. Migrants are increasingly engaging in multiple migrations, moving between various locations in three or more international destinations. Particularly in Asia, where short-term temporary contracts are increasingly the norm for labour migrants, it becomes counter-productive to analyse migration decision-making as a movement from one place to another. Based on research undertaken in Metro Manila, the Philippines, with 48 Filipino nurses, this article addresses how to do research related to the multinational migration pathways that structure migration goals and aspirations through demonstrating the benefits and practicalities of mental mapping, a participatory visual method. By exploring the geographical imaginations of migrants and aspiring migrants, multinational pathways are shown to be planned for at the earliest stage of migration. Overall, the work reported here leads to the conclusion that researchers need to consider multiple migrations in more multidirectional and messy terms.

#### KEYWORDS

geographical imaginations, mental maps, visual methods, migration decision-making, multinational migration, the Philippines

#### 1 | INTRODUCTION

Researching migration decision-making raises certain methodological issues because of the complexity of these practices and the diversity of possibilities that exist for potential and aspiring migrants. Migrants decide to move for a whole host of complex, competing, and contradictory reasons and have some agency in deciding and desiring where to migrate, for how long, and in what capacity. Furthermore, as the other articles in this special

section demonstrate, migrants are increasingly engaging in multinational migrations, moving between various locations in two or more international destinations. Particularly in Asia, where short-term temporary contracts are the norm for labour migrants (Battistella, 2014), it becomes counter-productive to analyse migration decision-making as a movement from just one place to another. Based on research undertaken in Metro Manila, the Philippines, with 48 nurse students and graduates, this article addresses a question about how to investigate

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the multinational migration pathways that structure migration goals and aspirations by examining geographical imaginations of aspiring migrants by using mental mapping. I demonstrate the benefits and practicalities of mental mapping in examining multinational migration decision-making and show how the mental maps reveal the multiple, messy, and multidirectional nature of migration.

Mental mapping is a participatory visual method that allows participants to represent places creatively and visually (Madaleno, 2010) and is therefore well suited to examining geographical imaginations of multiple places and migrations. The geographical imaginations approach is part of the turn to examine the aspirations of migrants to better understand migration decision-making practices (see Carling & Collins, 2018; Thompson, 2017). By examining how people view, understand, and interpret the world, insight is gained into desires to migrate and of where to migrate. Many other migration decision-making approaches suggest a preoccupation with the decision to migrate and the question of where becomes secondary. An approach centred on examining imaginations of place, however, affords both questions equal prominence. This affordance is central when researching multinational migrations in which multiple destinations are in play, and existing research suggests migrants engage in practices of categorising and creating hierarchies of potential destinations (see Paul, 2017). Conceptually, then, by reporting on developments in the use of mental mapping, this article contributes to emerging work that examines migrants' aspirations by highlighting the importance of multinational migration in the earliest stages of desiring migration.

I begin by describing the research context of nurse migration in the Philippines to situate the article's findings. I follow with a review of literature that (a) draws attention to limitations in existing work concerning multinational or stepping-stone migration; (b) demonstrates how the geographical imaginations approach is well suited to understanding multinational migrations; and (c) considers the methodological underpinnings of mental mapping that draws attention to their applicability in exploring the complexities of migration decision-making when multiple destinations are involved. I then explain the methodological approach and attend to the practicalities of using mental mapping. A discussion about the key findings concerning multinational migrations drawing on the mental maps follows. There, I examine the dominant themes incorporated into participants' maps, considering the inclusions and omissions of places and the centrality of multidirectional mobility. Finally, I reflect on how the maps bring light to the multiple, messy, and multidirectional nature of multinational migrations.

#### **Key insights**

Multinational migrations are common for Filipino migrants. However, international migrations are non-linear, multiple, and messy. The mental mapping method draws attention to the complexity of migration decision-making by enabling researchers to focus clearly on where people want to migrate, which influences how they then go about trying to achieve such ends.

# 2 | NURSE MIGRATION FROM THE PHILIPPINES

The Philippines has an extensive history of labour exportation, which has been a central development strategy since the 1970s, and vital elements of the strategy are forms of migration related to nursing and carework (Cai, 2011). Filipino nurses can be found in at least 50 countries worldwide with roughly 20,000 leaving each year on nursing contracts (Philippine Overseas Employment Administration, 2015). Unsurprisingly, because of the feminised nature of nursing and carework, many of these migrants are women, leading Tigno (2014, p. 20) to reflect that "the face of the Filipino migrant is now that of a young women." In recent years, however, as nurse migration has shown itself to be a particularly lucrative form of labour migration for the Philippines, there have been increasing numbers of men entering the field. Although limited national data exist, it appears that around 25% of employed nurses in the Philippines are men (National Database of Selected Human Resources for Health, 2017); in the United Kingdom, for example, this figure is just 11% (Williams, 2017).

The migration of Filipino nurses and careworkers more broadly has received significant attention from feminist and postcolonial scholars interested in how ethnic and gendered inequalities in the Philippines (Guevarra, 2006; Tyner, 2004) and receiving countries (Choi & Lyons, 2012; Espiritu, 2005) produce and control the mobilities and experiences of migrants. This interest connects to wider literatures in migration studies in which discussions of the feminisation of international migration has necessitated a shift away from purely economic explanations of movement to incorporate cultural and social factors, as well as an engagement with theories of globalisation and neoliberalism to explain the rise in demand for increasingly flexible feminised labour forces (Kofman, 2014; Nawyn, 2010).

In this article, however, I turn to the ways in which Filipino nurses plan and make decisions given these wider structural constraints and pressures.

The fact that there are limited data on the migratory trajectories of Filipino nurses means there is uncertainty as to their exact geographies, but it is evident that they are diverse. Filipino nurse graduates often leave on careworker and student visas (Walton-Roberts & Hennebry, 2012) and, therefore, actual numbers leaving each year are likely to be several times higher than the 20,000 who leave with a position in nursing secured. Furthermore, Filipino nurses have been found to move between destinations, using temporary destinations as 'stepping stones' to other preferred destinations, often in the global north (Matsuno, 2009). Although minimal data exist on the 'stepping-stone' or multinational migrations of Filipinos, anecdotal evidence suggests that this practice is relatively commonplace (see Ball, 2004), with nurses in particular tending to move temporarily to destinations in the Gulf Cooperation Countries (GCC) and Southeast Asia before settling down in North America, Western Europe, or Australasia (NAWEA).

## 3 | UNDERSTANDING MULTINATIONAL MIGRATION DECISION-MAKING

Multinational migration pathways have been recognised as relatively common for Filipino nurse migrants (Ball, 2004). However, despite repeated calls by scholars focused on Asian migration to turn to multiple, temporary, and non-linear forms of migration (Battistella, 2014; Ghosh, 2013; Xiang, 2014; Yeoh, 2014), there have been few attempts to provide a conceptual frame by which to understand these movements. Here, I refer to existing work that considers this phenomenon—stepping-stone migration—before turning to the geographical imaginations approach as an emerging conceptual tool to better understand the decision-making processes of migrants, focusing on its ability to account for multiple destinations and multiple directions of travel. I then discuss mental mapping as a methodological tool useful for elucidating these geographical imaginations.

# 3.1 | Stepping-stone migration

Stepping-stone or stepwise migration is the most common terms for multinational migration.<sup>1</sup> Stepping-stone migration refers to multinational migration involving at least three destinations in which a migrant moves intentionally or otherwise from one place to gain something to

facilitate their onwards movement to another preferred or final destination (Brown, 1998; Tuckett, 2016). Stepping-stone migration has historical precedence, as established by Morris (2016), who has shown that during the 1860s and 1870s Irish migrants engaged in step migration to Wales to accrue the financial capital to reach the United States. Today, the idea is similarly applied to migrants who move from the colonised to the colonising world (see also the Introductory editorial to this special section).

Stepping-stone migration refers to cases where whether intentionally or otherwise—migrants use temporary stays in certain destinations to accrue various forms of capital to reach a preferred or final destination (Brown, 1998; Tuckett, 2016), often in the west (Paul, 2011). Temporary migration can allow migrants to acquire additional qualifications, skills, and experiences required for employment in higher income countries; provide the required finances to meet visa costs; and/or introduce them to wider social networks to facilitate subsequent migration. The concept is applicable to certain common pathways of multinational migrations. For example, research with Filipino healthcare workers has found they often first move to destinations in Southeast Asia or the GCC before finding employment in NAWEA<sup>2</sup> and 'settling down' (Ball, 2004; Ghosh, 2013; Matsuno, 2009; Paul, 2011). In this sense, destinations such as Saudi Arabia and Singapore are represented as liminal 'stepping-stones' for workers to gain additional experience and financial capital before reaching a final destination.

There is clear understanding about how certain migratory destinations are formed as stepping-stones through political means. For destinations in Asia, the temporariness is associated with a wider Association of Southeast Asian Nations migration policy framework that prioritises temporary migration (Bal & Gerard, 2018). Gulf monarchies have similarly "cultivated a model of migration management anchored in the paradigm of 'temporary labour import" through various policy interventions (Thiollet, 2016, p. 4). However, although some is known about how migrants and aspiring migrants understand and experience the temporariness of destinations (see Parreñas, 2010), little is known about how they plan and make decisions to engage in and navigate multinational futures. This article contributes to the latter point.

Furthermore, discussions of stepping-stone migration imply a highly linear pattern of international mobility in which migrants move from A to B to C. However, evidence suggests that often this pattern is not the case and, instead, returns home often disrupt more linear migratory trajectories. Nonetheless, those researchers advancing concepts that are more attuned to the messy

and multidirectional nature tend not to examine multiple destinations. Circular or repeat migration, for example, examines repeat movement between just two locations, such as for seasonal or guestworker migration (see for example Constant & Zimmermann, 2011) or for entertainers (Parreñas, 2010). Discussions on circular migration are useful because they bring attention to the ways in which sending states such as the Philippines promote forms of circular migration (Privarova & Privara, 2016) or repeated returns home in order to ensure migrants remain loyal and send significant remittances to their home countries.

Stepping-stone migration presents a highly linear form of migration and creates a hierarchy of destinations in which, invariably, places in the global north are understood as final destinations whereas places in the global south are represented as waiting posts (see Paul, 2017). Although stepping-stone migration can be an active strategy undertaken by migrants to reach destinations "onwards and upwards" (Paul, 2017, p. 37), understandings of the pathways migrants take and the destinations they prefer are relatively underdeveloped, and there is no recognition of where movements may be "downwards or sidewards." Furthermore, this body of work is oriented to migrants who have (almost) finished their multinational migratory journey and it pays little attention to how multinational migrations are planned before migration occurs. As I show in the following section, adopting a geographical imaginations approach that focuses on where migrants desire to migrate and is open to multiple destinations, journeys, and directions of travel is key in furthering this understanding.

# 3.2 | The geographical imaginations approach

When examining migration decision-making, there is a need to go beyond economically determined narratives of migration decision-making that have "long held an almost sacred place in the theories of migration" (Carling & Collins, 2018, p. 913). Aspiring migrants make decisions that are not always rational, that rarely are based on the evaluation of sufficient and accurate information, and that almost always are influenced by their social networks. Furthermore, many movements of migrants are structured by macro and meso level political-economic demands and barriers such as labour shortages, restrictions in mobility, and neocolonial networks of power (Bach, 2015). However, within the parameters of these structural realities, would-be migrants generally retain the capacity to make decisions about whether to migrate and where to migrate to

(Paul, 2017; Thompson, 2017). There has therefore been a turn in studies examining migration decision-making to explore the aspirations migrants have (Carling & Collins, 2018). The geographical imaginations approach is situated within this aspirational turn.

Geographical imaginations are the images and perceptions that we all have about places and spaces in the world and encompass the diverse "perspectives, positions, and subjectivities embodied in human understandings of place, space, landscape and the people who inhabit physical settings" (Riaño & Baghdadi, 2007, p. 7). The information people receive and use to make decisions comes "from multiple sources, not just one ... in fits and starts, not all of it is retained, and it can often be inaccurate or incomplete" (Paul, 2017, p. 155). Personal experiences such as travel or knowing someone living in another place greatly influence geographical imaginations (Gould & White, 1974) and are understood as the most important sources of information about places (Paul, 2017). Education is another crucial factor because it exposes children to dominant national imaginations of different places in the world, and, additionally, the media also impact and create geographical imaginations (Quiminal & Blum le Coat, 2011). The internet has not yet been fully examined as a key contributor of geographical imaginations despite the access it gives to vast information. Nonetheless, in this study, despite high internet usage in Manila, few reported actively using the internet to search for information; instead, personal contacts, recruitment agencies, media, and popular culture drive imaginations and resulting decisions. Despite this characteristic, the internet clearly facilitates a passive acquisition of geographical understanding from access to media, popular culture, and social media. Consequently, the imaginations of those who have never travelled overseas are far more detailed than previous narratives of Filipino migration would suggest (see for example Paul, 2017).

As I have argued elsewhere (Thompson, 2017), the geographical imaginations approach has four key elements that are useful for migration decision-making. First, it is sensitive to the influence of individual agency within the confines of structural realities. Second, it helps us understand why migrants do not necessarily move towards the best economic, social, or political opportunities and incorporates cultural and geographical qualities of multiple places into analysis. Third, it demands a detailed examination of images of home and multiple potential migratory destinations, of how life is now, and how it may be different elsewhere (Marcus, 2010)—it is acutely interested in where people desire and plan to move and why. Fourth, it accounts for those with no aspirations to migrate (De Clerck, Willems, & Jolivet, 2012). The second and third elements, the sensitivity to multiple images of home

and potential destinations, are most useful for examining multinational migrations.

Employing the geographical imaginations approach to explore migration decision-making involves examining the images and perceptions people have of different places and of their desires or otherwise to visit or migrate there. Rather than migration being the central focus, discussions are concerned with how places and the planned and desired movements from, to, and between places are imagined and influence actions. This focus of concern allows participants to express their priorities, perceptions of places, and understanding of the barriers that inhibit movement and the connections that facilitate it. The geographical imaginations approach allows discussion of multiple places and movements. It allows participants to discuss their plans of migration in multiple, messy, and multidirectional terms and is well suited to examining the complexities of multinational migrations.

# 3.3 | Mental mapping

Despite the benefits of the geographical imaginations approach, it can be difficult to verbalise complex future plans involving multiple destinations within interview settings (Alpes, 2014). A visual participatory method whose methodological underpinnings are concerned with perceptions and understandings of the world, mental mapping is well placed to examine geographical imaginations and migration decision-making. Indeed, mental mapping was initially employed in the 1970s in behavioural geography to examine migration decision-making (Gould & White, 1974). It is currently enjoying a renaissance in migration research more broadly, although generally it is used as a tool to examine understandings between a single migratory destination and home for those who have migrated (see for example Jung, 2014). Here, I demonstrate how contemporary mental mapping has renewed applicability for understanding migration decision-making.

Mental maps, also known as cognitive maps, were first used in migration research in the 1960s. Although arguably all maps are 'mental' in that their "design rests on the decisions of mapmakers" (Götz & Holmén, 2018, p. 157; see also Bjørn & Michael, 1987), mental maps refer not to fixed cartographic representations but to the imaginative ways individuals and groups understand spatial meaning in the world. Mental maps were initially employed in behavioural geography during the quantitative revolution, most commonly in urban planning and travel studies (Hannes et al., 2012). This tradition stands, but they have since been adopted by scholars of international relations to analyse foreign policy (see da

Vinha, 2012), cultural and political geographers to examine perceptions of the world (Didelon-Loiseau, de Ruffray, & Lambert, 2018; Holmén, 2018; Reuchamps, Kavadias, & Deschouwer, 2014), and by migration researchers (Jung, 2014; Madaleno, 2010). Recent applications tend to examine the qualitative dimensions of maps, instead of or alongside a quantitative approach.

The use of mental maps in migration research resulted from a dissatisfaction with the supposed rationality inherent within neoclassical economics (Golledge, 1980), much as their re-emergence does today (Boschmann & Cubbon, 2014). It was suggested that everyone carries around imperfect mental images of place that are integral in influencing human behaviours. When needed, an individual recalls these images and uses their spatial information to make considered, but not necessarily rational, decisions (Fuller & Chapman, 1974; Golledge, 1980; Gould & White, 1974). Participants were usually given an outline map and asked to highlight places they would and would not move to and/or to rank places according to desirability. Generally, participants' maps are amalgamated into a single map to statistically display the group imaginations allowing for similarities and trends to emerge (Fuller & Chapman, 1974; Gould & White, 1974). Although useful to demonstrate trends, the behaviourist and positivist approach quantifies human behaviour and desires, masking differences and outliers. It does not allow an exploration of peoples' perceptions nor does it interrogate how perceptions are formed.

Recent approaches to mental mapping are far more complex and diversified and generally employed as qualitative participatory visual methods alongside conversational research methods (Campos-Delgado, 2017; Jung, 2014). In contemporary examples of mental mapping, participants are rarely given an outline map to fill out nor provided with a list of places to rank. Gökten and Südaş (2014, p. 91) have clearly demonstrated the advantages of "freely drawn mental maps" compared with outline maps in their study that asked Turkish migrants in Australia to produce two maps of their new home. They found that "imaginary [mental] maps may lead us to understand the place-related experiences of people and how they perceive a region better than the formal representations and boundaries which are reflected more in the outline maps." In this sense, contemporary examples of mental mapping examine the qualities ascribed to places rather than quantifying preferences.

In mental mapping, participants are generally given a blank sheet of paper and asked to draw something; this can be a map of places with the characteristics they know (Gökten & Südaş, 2014) or a world map demonstrating their understandings of places and of relationships between places (Madaleno, 2010). In Jung's (2014) study, participants were asked to sketch their neighbourhood in their country of origin and in their migratory destination, whereas in my research, participants were asked to sketch their understanding of the world. The flexibility and openness of mental mapping (Reuchamps et al., 2014) make it highly suitable for exploring and analysing desires of migration. Rather than presupposing migratory patterns through a base map, mental maps allow for non-linear movements (Campos-Delgado, 2017). Participants are free to choose what is and is not included and to decide how to frame their maps, and therefore, mental mapping becomes a tool to elucidate understandings, perceptions, aspirations, and experiences of future, present, and past journeys.

Removing a base map also removes the expectation for prior geographical knowledge, allowing mapping to be an accessible cross-cultural and cross-linguistic methodological tool through giving participants the opportunity to represent their worlds and narratives in a medium that does not rely on secondary languages (Campos-Delgado, 2017; Jung, 2014). Furthermore, with regard to visual participatory methods such as photo elicitation, mental mapping is much less intrusive, does not endanger the anonymity of the participant, and is publishable (Dowling, Lloyd, & Suchet-Pearson, 2016). Finally, it is key to note that although mental maps offer richer data than other forms of mapping methods, this comes at the price of consistency. As the exemplar maps included below show, participants addressed the task in vastly different ways.

#### 4 | RESEARCH APPROACH

The larger research project from which this article is drawn explored the migration decision-making practices of Filipino nurses living in the Philippines with a keen focus on understanding *where* nurses desire to migrate, rather than focusing only on their desire *to* migrate. It became apparent that many would-be migrants are acutely aware of the increasing need for multinational migration. Multinational migrations are built into migration decision-making practices from the earliest stage.

To gather the maps, after securing ethical clearance from Newcastle University and the University of the Philippines, Manila, I spoke with 48 nurse students and graduates, in 46 interactions (in two cases, participants were interviewed in pairs as per their request), and 39 of these participants produced mental maps. Interviews were conducted between July and November 2015 throughout Metro Manila, primarily in cafés and restaurants. I recruited participants partly via snowballing that relied

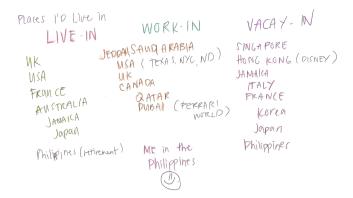
on existing contacts, connections with a nursing college in Manila, and mainly via social media through the creation of a Page on Facebook. All participants have chosen or been allocated a pseudonym.

Fourteen of the participants were men, reflecting the Philippines' relatively diverse nursing cohort; all but two were under 40 years of age, and all selfnominated as Christian, although some did not practice their faith. Participants worked in a diverse range of occupations but had all studied or were still studying (13) a nursing degree in the Philippines. I spoke to nurses who worked in call centres, owned businesses, retrained as fire fighters, became estate agents, and who were unemployed. I also spoke to nurses engaging in exploitative 'volunteer' practices in hospitals, in humanitarian work for non-governmental organisations, in a variety of professional and semi-professional nursing roles, and in postgraduate study. Three nurses had already engaged in overseas labour migration: Sofia returned from Singapore and moved to Australia, Tisha studied in Singapore and engaged in circular migration to the United States, and Erin disliked her experiences in Saudi Arabia and left the nursing profession to start her own business in Manila. Fourteen were actively seeking migration opportunities, and 12 wanted to in the near future but were not yet doing so. Seventeen preferred not to migrate, and five were undecided. Here, although I focus on the 27 participants with experience of or plans and desires to migrate, I also draw on data from the wider group.

I employed mental maps alongside semi-structured interviews as a complementary method and recorded all interactions on a Dictaphone. Towards the end of interviews, participants were provided with a blank sheet of paper, approximately 20 coloured pencils from a standard pack, and four coloured biros for the mental mapping activity. There are extensive discussions of the practicalities, benefits, and drawbacks of conducting and analysing semi-structured interviews (see for example Baxter & Eyles, 1997). I therefore dedicate the following sub-section to reflecting on my experiences of employing mental mapping to understand how participants navigate and represent multinational migrations.

# 4.1 | Practicalities of mental mapping

Despite the accessibility of mental mapping, I encountered two major barriers when employing it as a method—practicalities of mapping in awkward spaces and some participants' levels of discomfort in engaging in a creative activity (see also Campos-Delgado, 2017). These barriers meant 10 participants elected not to draw,



**FIGURE 1** Rose's mental map. Rose separates the world in places suitable for living in on a long-term basis, places suitable to "work in" on a more temporary basis of up to three years and places she desires to travel to for vacation purposes. Note that she desires to return to the Philippines for retirement

and one dictated their imaginations for me to draw. Four participants were uncertain of their drawing skills and asked if they could write information on paper instead; generally, this was done as a list (Figure 1), and because of the flexible and open-ended nature of mental mapping, it can be included in analysis.

To mitigate the apprehension of some to engaging in spontaneous creativity, I employed three tactics. First, I introduced the exercise near the end of the conversation when a good deal of rapport had been built. Second, I brought maps drawn by me that were of a low standard to show that artistic skill is not required. I presented these maps quickly to reduce the risk of participants copying the style, and this tactic appears to have worked given the diverse range of images produced and the fact that those who undertook the activity in pairs opted for completely different representations. Third, I introduced the task in non-threatening terms, stressing that nothing was right or wrong, asking participants to "draw how you see the world" rather than explicitly referring to mapping.

As advocated by Jung (2014) following her experiences of mental mapping with Asian migrant women living in South Korea, I always observed the mapping exercise and asked participants to explain their map as they drew. Jung (2014) had initially been unable to interview her participants as they created their maps and on a subsequent return to the field found she had misinterpreted them. I therefore questioned participants on their use of colours, symbols, and words, as well as the overall message of each map, which allowed for the triangulation of results and provided "the research subjects with better chances to express themselves more accurately" (Jung, 2014, p. 987). Conversations tended to stray as participants got distracted

with their drawings, and colouring pencils evoked memories of youthfulness. Indeed, on reflection, it may be preferable to do the activity near the beginning of the interview after building some rapport. Either way, many of the conversations had direct relevance for the research, whereas the drawing produced many opportunities for follow-up questions.

Finally, a key practicality relates to the materials used to produce the maps and the ease of digitising maps for inclusion in the presentation of findings. I selected colouring pencils for their cheapness and effectiveness in tropical monsoon weather in comparison with pens. However, I did not account for the fact that they are particularly difficult to digitise and photographing and scanning the maps result in significant loss of image quality. Although that outcome has not hindered analysis, it influences the presentation of data. Because a benefit of mental mapping is the ability to present the drawings in findings, it is key to ensure that maps can be visible when digitised; colouring pencils should be avoided!

#### 5 | ANALYSING MENTAL MAPS

Meaning can be more easily misconstrued with just visual data (Crang, 2003). Therefore, the analysis presented below is also based on the conversations that preceded and accompanied the drawing of maps and that allowed me to develop a deeper understanding of participants' complex narratives (Keats, 2009).

The analysis is organised into four key sub-sections. I begin by providing an overview of the general trends discernible in the maps, before focusing on two central and interconnecting motifs that run through most of the maps—the inclusions and omissions of certain places and representations of multidirectional movements. In the final sub-section, I draw on these findings to demonstrate how the maps aid understanding of multinational migrations. While not reducing individual representations to generalised categories, these findings demonstrate two key points: (a) the migration decision-making practices of Filipino nurses are largely limited to and reflect the structural realities they face and (b) that complex forms of stepping-stone or multinational migration are planned and imagined from the earliest stage and are more complex than existing accounts suggest. This research with Filipino nurses brings attention to the fact that multinational migrations are messy and multidirectional. By giving participants the opportunity to 'draw the world,' mental maps allow these nuances to arise and aid understanding of multinational migrations.

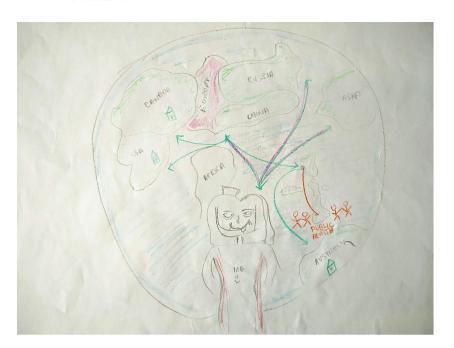


FIGURE 2 Alyssa's mental map. Alyssa has drawn a globe and included the names of key regions/countries. Places with hospital symbols and green arrows represent places she would consider living in more permanently, whereas those with purple arrows are for shorter term migrations or tourism. Notably, the final arrow, in orange represents a return to her province in the south of the Philippines. The unclear writing to the right is Asia

### 5.1 | General trends

Participants interpreted the task I gave them in vastly different ways, producing several images and representations, and using a combination of visual images, symbols, and text. Twenty-nine of the 39 maps incorporate text, and two are lists of preferred migratory destinations with no images (Figure 1). Thirty include representations of the Philippines or their locality—home—and inclusion of home was common regardless of migratory desire.<sup>3</sup> All but one of the maps include representations of elsewhere, either referring to specific places (23) or representing the world, usually as a globe (15). In the latter cases, participants tended to

note that their globes were not geographically accurate. Figure 2 shows an example of a globe-based mental map drawn by Alyssa, a final year student with a determination to migrate. Of those who were actively seeking migration, only one did not refer to specific places in their mental map.<sup>4</sup>

Specific places beyond the Philippines were predominantly represented by combinations of text of place names (18), national flags (8), cultural symbols such as landmarks (9), and socio-economic signifiers in the form of currency and representation of lifestyle (10). Research shows that participants often prioritise depictions of landscape, climate, environment, relative location/distance, language, and cultural norms over socio-economic and



FIGURE 3 Victoria's mental map. Victoria represents places she is in the process of applying for overseas work. Starting at the top left and moving clockwise, she represents Canada with a maple leaf, Japan with its flag, the United Kingdom represented by the London Eye and fashion, and Australia, her preferred destination as she would be with her partner and therefore represented with dollar signs and a place of employment. Note the double-ended arrow indicating her planned return to the Philippines, represented in the centre of the globe

political imaginations such as images of education, healthcare, democracy, and economic power, although the latter may be referred to (Fuller & Chapman, 1974; Gökten & Südaş, 2014; Haynes, 1980; Jung, 2014; Madaleno, 2010; Rédei, Kincses, & Jakobi, 2011). Notably, in this study, those without desires to migrate followed this trend by incorporating cultural symbols and representations such as landscapes and landmarks and omitting socio-economic signifiers of places. Those with desires to migrate, however, included a variety of symbols to represent other places and often did not hide the economic element of the decision to migrate. Additionally, reflecting the professional background of participants, 19 maps include representations of healthcare. Victoria's map was chosen because it incorporates all of these elements and is illustrative of the types of symbols participants used (Figure 3). Here, Victoria has incorporated a variety of symbols to represent the places she is actively searching for migratory opportunities.

### 5.2 | Inclusions and omissions of places

By enabling researchers to pay attention to the more

'technical' representative qualities including colour choice, sizes, (mis)locations, and inclusions and exclusions of places (Campos-Delgado, 2017), mental maps augment traditional conversational methods. For instance, it is fruitful to consider how participants' representations challenge and reflect dominant geographical imaginations, as mental maps do not always reflect geopolitical maps and many include intended mislocations and exaggerations of places (Ben-Ze'ev, 2015). Madaleno (2010), for example, found around half of his participants drew the southern hemisphere at the top of the map, challenging dominant western cartographic imaginations. Although my participants all drew the north at the top (where relevant), some

chose not to depict the world as a whole and included

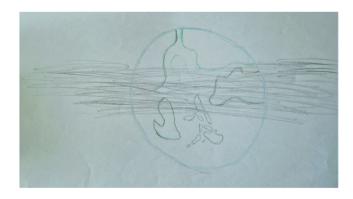
only places they planned to migrate to.

Certain regions were nearly always depicted on maps—locations in NAWEA, the 'Middle East' (locations within the GCC), and Southeast Asia were over-represented-whereas locations in Africa and Latin America were almost always absent; this trend is clear in Figures 1 and 3. Australia and New Zealand, as relatively new destinations receiving large numbers of Filipino nurse migrants, feature only in the imaginations of those with active plans to migrate. Eva, for example, was not aware of the potential of migration to Australasia until mentioned by "the people in the review centre [for language exams]." In this sense, the maps reflect the common migratory destinations for Filipino nurses and healthcare migrants (Philippine Overseas Employment Administration, 2010). Although the maps might challenge traditional cartographic representations of space, they do not disrupt or challenge the maps of migratory possibilities for Filipino-trained nurses; indeed, they very keenly represent them.

Furthermore, reflecting findings in existing research on multinational migrations, many of the maps demonstrate a clear categorising of places into distinctive hierarchies. Rose's map in Figure 1 is perhaps the best example of this trend, as she clearly categorises and separates global destinations as suitable for living, working, or vacationing. This tendency is also evident in Alyssa's depiction of the world (Figure 2), in which only places marked with hospital symbols are deemed suitable migratory destinations. However, the ranking and ordering of destinations is in no way uniform, and preferences to live in as opposed to just visiting destinations are highly variable. Rose, for example, prioritises the United Kingdom as her preferred destination, whereas Alyssa has no desire to live anywhere in Europe, and Victoria prefers Australia. In this sense, the mental mapping approach renders visible on the maps certain structural realities—the political realities of visas, structural racism, financial costs of entry, and so on-and, crucially, also provides space to understand how participants respond to these structural realities and how they shape their geographical imaginations and migration decision-making practices in multiple ways.<sup>5</sup>

#### 5.3 | Multidirectional movements

Mobility is another common theme in the mental maps. Jung's (2014) participants' images were relatively static and focused on localised scales and assumed immobilities. In my study, only Sarah, who had long decided



**FIGURE 4** Camille's mental map. Camille has included the Philippines as the island group to the south and has used black lines to highlight global pollution, showing how places such as the Philippines are particularly at risk

against pursuing overseas opportunities, represented her world in static and localised ways, drawing her home, herself, and her daughter. Other participants without desires to migrate used their maps to show their interconnections and relations with elsewhere, incorporating symbols of places they desire to travel to for leisure purposes or using their maps to highlight how global and local injustices contribute to their decision not to migrate. For example, Camille (Figure 4) created an abstract representation of the threat of global pollution with a clear focus on the Philippines as being vulnerable. Camille's ability to provide care to their fellow citizens drives her to remain in the Philippines, and she has no desires to migrate. Two other participants produced similarly abstract maps highlighting global issues.

Most participants, however, infused their maps with symbols and imagery connoting multiple and varied forms of international mobility. The maps include an appreciation of the interconnectedness of the world and are visual representations of home and elsewhere, and of planned movements between places. In six maps, this movement was represented by airplanes, usually accompanied by a globe, whereas in 20 lines and arrows were used to connote movement, again, those maps were usually accompanied by a globe. Figures 2 and 3 are typical examples of this mobility infused mental mapping approach.

To add further complexity, Eva—who had long wanted to migrate—allocated each of her family members a colour to demonstrate the different possibilities and requirements of migratory destinations for family members. Sofia—who had already engaged in short-term migration to Singapore—drew two halves to her map, her immediate future and her goals for a "perfect life." This work demonstrates both that "mental mapping allows a non-linear narrative in *time* and space" (Campos-Delgado, 2017, p. 187, my emphasis) and that its openness provides space for participants to include representations of multiple multinational pasts, presents, and futures.

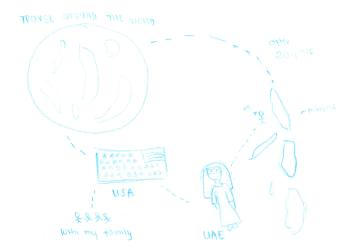
These maps show participants rarely presented migration in simple linear terms, because oftentimes arrows connoting directions of movement are double-ended, indicating desires for short- and long-term returns home. Discussions indicated that there is a willingness and often an active desire to engage in multiple forms and directions of movement but that rarely is this aspiration one by which to reach an overall preferred destination at the top of the hierarchy. In most cases, participants are planning not just to engage in multinational migrations but to do so in multiple directions that enable planned returns home.

### 5.4 | Multinational migrations

The mental maps generated in this study included many destinations and directions of travel, revealing significant complexity in participants' migration plans and desires. Here, I consider what this complexity means for discussions on multinational migrations by considering participants' plans to engage in both typical and novel forms of multinational or stepping-stone migration.

Six maps appear to show desires and plans to engage in typical forms of stepping-stone migration common for Filipino migrants; that is, they represent planned shortterm migration to destinations in the GCC, Hong Kong, and/or Singapore and longer term migration to a destination in NAWEA (see also Matsuno, 2009). No participant who considered working in the GCC of Southeast Asian destinations planned to stay beyond five years. Even Rose (Figure 1)—who migrated to Riyadh as a young child, stayed until she was 17 and has favourable memories of her time spent there-imagines the Middle East as a "training ground." Rose will return but only for a few years to gain the required amount of work experience needed to access preferable destinations—"the UK, or the US, or maybe Canada"—that are more difficult, timely, and expensive to reach. Rose's mental map clearly demonstrates her hierarchy of destinations (see Paul, 2017) that shows certain places as only suitable for temporary work.

Similarly, maps by Nikki (Figure 5) and Jason (Figure 6) demonstrate standard stepping-stone pathways. Notably, Nikki was the only participant who declined to have her interview recorded due to shyness



**FIGURE 5** Nikki's mental map. Nikki's mental map shows quite a typical stepping-stone trajectory in which she will move to the UAE temporarily and with her family, to the United States where she will bring her family, but after 20 years plans to return to the Philippines



**FIGURE 6** Jason's mental map. Jason represents certain migrations in red—to Singapore and back to the Philippines—and potential/desirable migrations in green—Canada, Europe, United States, "anywhere." The drawing on the left above the house is the Singapore Merlion, with a heart representing his girlfriend that lives there. The hands represent God's direction

about speaking in English but she found the mapping exercise useful. Her map shows how she plans for migration to the United Arab Emirates (UAE) to be temporary, with her family remaining in Manila. In her early 20s, she did not yet have children but was sure she would in the near future. She did not feel the UAE is a suitable place to raise children because of the restrictive conditions imposed on migrants and women, explaining that the depiction of herself in traditional UAE dress, covering her hair, represents the personal sacrifices she will make in moving there.6 Instead, Nikki will wait until she reaches the United States to include her family in her migration plans. Jason's pathway is more open, as after moving to Singapore to reunite with his girlfriend, he is less certain of the next stage in his journey. Jason represents the migrations he is certain about in red, showing beyond Singapore, return to the Philippines is the only other certainty built into his plans.

The hierarchy of places appears less apparent in Jason's representation, and while he referred to preferred places he also included question marks and the term 'anywhere.' This openness to move to 'any' destination, however, does not suggest that the *where* is irrelevant. When questioned, just three participants stated that 'anywhere' meant anywhere, and all of these had desires to engage in humanitarian work. For most, 'anywhere' meant anywhere within NAWEA, Jason included. What this flexibility does show is that although multiple destinations are planned for, participants are also acutely aware that structural realities—demand for nurses,

national immigration policy, and so on—can and do change and build in flexibility into their plans. This finding speaks to discussions concerning the ways in which Filipino nurse and careworker migrants are produced (Ortiga, 2014), made (Tyner, 2004), or manufactured (Guevarra, 2010) to be a pliable migrant workforce.

Rose's map includes multiple potential destinations, and although she was open to multiple directions of travel, her preferred movement was Riyadh to the United Kingdom. Nikki's planned trajectory was more linear and included just two overseas destinations, whereas Jason's had some certainties and some flexibility. Crucially, in all maps migration does not end in the preferred destination at the top of a hierarchy of overseas places. Instead, the Philippines is both the place of departure and return, the top and bottom of the 'hierarchy.' The end goal for engaging in traditional stepping-stone patterns of migration is, in all but two cases, to be able to return home to the Philippines. Planning to engage in stepping-stone or multinational migration is necessary not just to gain capital to move to new destinations but to gain capital to access opportunities or live comfortably in the country of origin, the Philippines.

Planned return to the Philippines, however, is not just the end point for multinational futures. Instead, as demonstrated in Ryugazaki's map (Figure 7), for some participants, a form of circular multinational migration is planned and desired. Ryugazaki was a final year nursing student at the time of interview. She was particularly

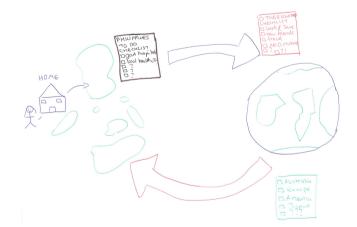


FIGURE 7 Ryugazaki's mental map. This map was impossible to digitalise. I have instead reproduced it by tracing the original image and taking care to use the same colours. Ryugazaki shows repeated migration from "Home," the Philippines as represented to the left, and between multiple destinations in the world, including Australia, Europe, America, Japan, and question marks indicating other options may arise. While overseas, she plans to "work and save," meet "new friends, travel" and volunteer for "NGO missions." On her returns to the Philippines, she wishes to work for government hospitals and local health centres

invested in using nursing to help the neediest and was planning to apply for overseas volunteering missions in Africa (was one of just three participants to include 'Africa' in her mental map). She discussed Africa as more 'third world' than the Philippines, demonstrating a planned downward migration (Alyssa similarly spoke of this). Ryugazaki also desired to further her work in community nursing in rural areas of the Philippines, as well as engage in migration for economic purposes on a longer term basis, to a destination within NAWEA. Japan is included for leisure purposes.

Ryugazaki's map clearly shows plans for circular and multiple forms of migration and return to the Philippines, and in her interview she confirmed that repeat returns to the Philippines were an essential component of her plans. Peñafiel (2015) has suggested the Philippine state should actively encourage circular forms of migration to ensure that citizens remain loyal and invest in the state, in this case via healthcare provision. Again, this suggestion shows that maps and imaginations reflect structural pressures exerted on the participants. Indeed, Tisha—who is in her late 20s and who I met on her annual return to the Philippines—exemplifies this kind of multinational circular migrant.

Tisha moved to Singapore to study a postgraduate degree in nursing and then gained work experience before finding a role in a care home in California. She also accepted part-time laboratory work. Despite working two jobs in the United States, by agreeing to additional overtime, Tisha managed to negotiate a guaranteed monthlong period of leave each year. She uses this leave to return

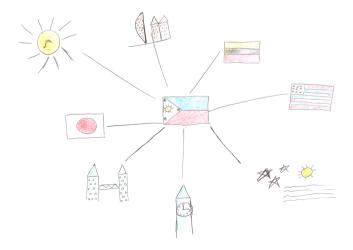


FIGURE 8 Tisha's mental map. Tisha has included places in the world Filipino nurses are most likely to be found. Starting from the sun in the top for the UAE, and going clockwise, she has represented Dubai through the Burg Khalif, Germany and the United States through flags, the Caribbean through the beach scene, the United Kingdom through Big Ben, Malaysia for the Petronas Towers, and Japan for its flag

to the Philippines to volunteer in the most deprived regions and uses her savings to donate medical supplies throughout the year. She also planned to return to the Philippines to retire and was open to further NAWEA destinations in her future, as she opposes the United States' military strategy in relation to China. Such a move would represent a 'sideward' migration. Her mental map (Figure 8) does not show her past and present movements but instead is intended to capture the migratory possibilities of Filipino nurses. Tisha included places on her map that "have lots of Filipinos here, if you go to Japan there are lots of Filipinos there, a lot of Filipinos in the Middle East, it's like 80% of the population is made up of Filipinos!" Here is further evident that Tisha's understanding of the world and the world of her fellow Filipino nurses is limited by the structural realities they face.

Thus, Ryugazaki and Tisha bring light to the multiple trips involved in multinational migrations, demonstrating the need to pay attention to more circular forms of movement. The maps by Nikki, Rose, and Ryugazaki also show the centrality of return migration in multinational plans. In relation to Ryugazaki—a student who has not yet engaged in serious preparations for migration, such as registering with a recruitment agency—this finding is illuminating and suggests that multinational migrations are planned and desired from the earliest stage of migration decision-making.

#### 6 | CONCLUSION

Using mental mapping as a method to elucidate the geographical imaginations of aspiring migrants makes it possible to gain a deeper understanding of the complexity involved in multinational migrations. Although participants produce hierarchies of places, these hierarchies are more fluid and dynamic than other accounts of steppingstone migration would suggest, as the desire to return to the Philippines disrupts the idea that the final destination is a place at the top of a hierarchy. Forms of circular or repeat migration are represented as desirable, whereas plans for multinational migration more broadly are common amongst participants. By identifying the nonlinearity and multiplicity of multinational migrations, it is clear that not all multinational migrations are taken for the purpose of moving upwards and onwards (Paul, 2017), and migrations 'downwards' and 'sidewards' are also represented as desirable migratory trajectories.

Mental maps and the geographical imaginations approaches have proven key to elucidating, interrogating, and analysing these multinational migrations. Their inherent flexibility provides participants with scope to represent their past, current, and planned/desired

migrations in visual forms, bringing attention to the complex and messy qualities of multinational migrations. They disrupt what are often linear presentations of migration that characterise much contemporary research, in which common migration pathways are researched rather than the multiplicity of available pathways. Adopting an approach sensitive to the geographical imaginations of migrants and aspiring migrants ensures that individuals' agency and desires, as well as their perceptions, imaginations, and understandings of the world remain central in analysis. It also draws attention to the ways in which these desires are structured by external forces. The geographical imaginations approach adopted is vital in bringing attention to how those facing similar structural pressures differently interpret and react to the influences exerted on their lives and futures, but it is only by employing mental mapping to elucidate these geographical imaginations that the full complexity of multinational migrations becomes visible.

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#### CONFLICT OF INTEREST

There are no conflicts of interest.

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#### **ENDNOTES**

- <sup>1</sup> Note that the 'step' terminology is also used to refer to migrants' improvement within a destination, such as 'stepping-up' a career ladder or a social status, or stepping from a student visa to a working one known as two-step migration (see, for example, Hawthorne, 2010).
- <sup>2</sup> Few participants used terms such as 'western world' or 'global north,' so I have avoided these terms.
- <sup>3</sup> The focus on home is entirely expected and is common in all applications of mental mapping—we orient ourselves from the place we know best.
- <sup>4</sup> This was Isabel, who has since migrated to the United Kingdom. Her 'map' was based on the 2013 film *Gravity* she had seen a few days previously. Accompanying text noted that she viewed people as being "scattered all over the globe like stars in the sky." Nonetheless, her map included movement and reference to other places, albeit in an abstract form.

- <sup>5</sup> Elsewhere, I examine the qualities of place that prompt participants to desire migration (Thompson, 2017).
- <sup>6</sup> Throughout interviews, ideas concerning the gendered expectations and performances of Filipino nurses and Filipino nurse migrants were raised, but except by Nikki, were not made visible on mental maps. There is insufficient data to discuss the impact of gender on migration decision-making, but with very few exceptions, gender dynamics of overseas destinations did not factor into participants' migratory plans and desires.
- <sup>7</sup> Her inclusion of the Caribbean is because 'most Filipinos in the US like to go to the Caribbean, not only most Filipinos, but most Filipino nurses.' I am unable to check the veracity of this claim.

#### REFERENCES

- Alpes, M. J. (2014). Imagining a future in 'bush': Migration aspirations at times of crisis in Anglophone Cameroon. *Identities.*, 21(3), 259–274. https://doi.org/10.1080/1070289X.2013.831350
- Bach, S. (2015). Nurses across borders: The international migration of health professionals. In B. Parry, B. Greenhough, T. Brown, & I. Dyck (Eds.), *Bodies across borders* (pp. 153–169).
  London: Ashgate.
- Bal, C. S., & Gerard, K. (2018). ASEAN's governance of migrant worker rights. *Third World Quarterly*, 39(4), 799–819. https://doi.org/10.1080/01436597.2017.1387478
- Ball, R. E. (2004). Divergent development, racialised rights: Globalised labour markets and the trade of nurses—The case of the Philippines. Women's Studies International Forum, 27(2 SPEC. ISS), 119–133.
- Battistella, G. (2014). Migration in Asia: In search of a theoretical framework. In G. Battistella (Ed.), *Global and Asian perspectives on international migration*. Global Migration Issues. [Online]. (pp. 1–25). London: Springer.
- Baxter, J., & Eyles, J. (1997). Evaluating qualitative research in social geography: Establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, 22(4), 505–525. https://doi.org/10.1111/j.0020-2754.1997.00505.x
- Ben-Ze'ev, E. (2015). Blurring the geo-body: Mental maps of Israel/-Palestine. *Middle East Journal.*, 69(2), 237–S30. https://doi.org/10.3751/69.2.14
- Bjørn, A., & Michael, J. (1987). Are all maps mental maps? Geo-Journal: An International Journal on Human Geography and Environmental Sciences., 14(4), 447–464. https://doi.org/10. 1007/BF02602720
- Boschmann, E., & Cubbon, E. (2014). Sketch maps and qualitative GIS: Using cartographies of individual spatial narratives in geographic research. *The Professional Geographer*, *66*(2), 236–248. https://doi.org/10.1080/00330124.2013.781490
- Brown, R. P. C. (1998). Comparative labor market performance of visaed and non-visaed migrants: Pacific islanders in Sydney. *Journal of Population Economics*, 11(3), 395–411. https://doi.org/10.1007/s001480050076
- Cai, F. (2011) The labour export policy: A case study of the Philippines. [Online]. Available from: http://www.e-ir.info/2011/08/24/the-labour-export-policy-a-case-study-of-the-philippines-2/(Accessed 2 October 2014).
- Campos-Delgado, A. (2017). A picture is worth a thousand words: Irregular transmigrants' journeys and mental mapping

- methodology. *International Migration*, 55(6), 184–199. https://doi.org/10.1111/imig.12369
- Carling, J., & Collins, F. (2018). Aspiration, desire and drivers of migration. *Journal of Ethnic and Migration Studies*, 44(6), 909–926. https://doi.org/10.1080/1369183X.2017.1384134
- Choi, S., & Lyons, L. (2012). Gender, citizenship, and women's "unskilled" labour: The experience of Filipino migrant nurses in Singapore. *Canadian Journal of Women and the Law*, 24, 1–26. https://doi.org/10.3138/cjwl.24.1.001
- Constant, A. F., & Zimmermann, K. F. (2011). Circular and repeat migration: Counts of exits and years away from the host country. *Population Research and Policy Review*, *30*(4), 495–515. https://doi.org/10.1007/s11113-010-9198-6
- Crang, M. (2003). The hair in the gate: Visuality and geographical knowledge. *Antipode*, 35(2), 238–243. https://doi.org/10.1111/1467-8330.00321
- da Vinha, L. (2012). Charting geographic mental maps in foreign policy analysis: A literature review. *HUMAN GEOGRAPHIES Journal of Studies and Research in Human Geography*, 6(1), 5–17. https://doi.org/10.5719/hgeo.2012.61.5
- De Clerck, H.M.-L., Willems, R. & Jolivet, D. (2012) Part I, in: EUMAGINE (Ed.), Project paper 13: Cross-country analyses and theoretical conclusions, imagining Europe from the outside. University of Antwerp and International Migration Institute.
- Didelon-Loiseau, C., de Ruffray, S., & Lambert, N. (2018). Mental maps of global regions: Identifying and characterizing "hard" and "soft" regions. *Journal of Cultural Geography*, *35*(2), 210–229. https://doi.org/10.1080/08873631.2018.1426950
- Dowling, R., Lloyd, K., & Suchet-Pearson, S. (2016). Qualitative methods 1: Enriching the interview. *Progress in Human Geography*, 40(5), 679–686. https://doi.org/10.1177/03091325 15596880
- Espiritu, Y. (2005). Gender, migration, and work: Filipina health care professionals to the United States. *Revue Européenne des Migrations Internationales*, 21(May), 2–18.
- Fuller, G., & Chapman, M. (1974). On the role of mental maps in migration research. *International Migration Review*, 8(4), 491–506. https://doi.org/10.1177/019791837400800401
- Ghosh, S. (2013). A passage to Canada: The differential migrations of South Asian skilled workers to Toronto. *Journal of International Migration and Integration*, 15(4), 715–735.
- Gökten, C., & Südaş, İ. (2014). The image of Australia: A case study on the mental maps of Turkish immigrants in Sydney. *Journal of Geography and Geology*, 6(2), 82–92. https://doi.org/10.5539/jgg.v6n2p82
- Golledge, R. G. (1980). A behavioral view of mobility and migration research. *The Professional Geographer*, *32*(1), 14–21. https://doi.org/10.1111/j.0033-0124.1980.00014.x
- Götz, N., & Holmén, J. (2018). Introduction to the theme issue: "Mental maps: Geographical and historical perspectives" Janne. Journal of Cultural Geography, 35(2), 157–161. https://doi.org/ 10.1080/08873631.2018.1426953
- Gould, P., & White, R. (1974). *Mental maps*. Middlesex: Penguin Books. https://doi.org/10.4324/9780203163757
- Guevarra, R. A. (2006). Managing "vulnerabilities" and "empowering" migrant Filipina workers: The Philippines' overseas employment program. *Social Identities*, *12*(5), 523–541. https://doi.org/10.1080/13504630600920118

- Guevarra, R. A. (2010). Marketing dreams, manufacturing heroes the transnational labor brokering of Filipino workers. New Brunswick: Rutgers University Press.
- Hannes, E., Kusumastuti, D., Espinosa, M. L., Janssens, D., Vanhoof, K., & Wets, G. (2012). Mental maps and travel behaviour: Meanings and models. *Journal of Geographical Systems*, 14(2), 143–165. https://doi.org/10.1007/s10109-010-0144-2
- Hawthorne, L. (2010). How valuable is "two-step migration"? Labor market outcomes for international student migrants to Australia. *Asian and Pacific Migration Journal*, 19(1), 5–36. https://doi.org/10.1177/011719681001900102
- Haynes, R. M. (1980). Geographical images and mental maps. Aspects of geography. Hampshire: Macmillan Education.
- Holmén, J. (2018). Changing mental maps of the Baltic Sea and Mediterranean regions. *Journal of Cultural Geography*, 35(2), 230–250. https://doi.org/10.1080/08873631.2017.1401405
- Jung, H. (2014). Let their voices be seen: Exploring mental mapping as a feminist visual methodology for the study of migrant women. *International Journal of Urban and Regional Research*, 38(3), 985–1002. https://doi.org/10.1111/1468-2427.12004
- Keats, P. A. (2009). Multiple text analysis in narrative research: Visual, written, and spoken stories of experience. *Qualitative Research*, *9*(2), 181–195.
- Kofman, E. (2014). Reviewing theories of gender and migration: Perspectives from Europe and North America. In G. Battistella (Ed.), Global and Asian perspectives on international migration, Global Migration Issues (pp. 119–137). London: Springer. https://doi.org/10.1007/978-3-319-08317-9\_6
- Madaleno, I. M. (2010). How do remote Southern Hemisphere residents perceive the world? Mental maps drawn by East Timorese and Mozambican islanders. *Scottish Geographical Journal*, 126(2), 112–136. https://doi.org/10.1080/14702541003712895
- Marcus, A. P. (2010). Back to Goiás and Minas Gerais: Returnees, geographical imaginations and its discontents. *Tempo e Argumento*, 2(2), 121–134. https://doi.org/10.5965/21751803020 22010121
- Matsuno, A. (2009) Nurse migration: The Asian perspective. International Labor Organization. Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms:160629.pdf
- Morris, D. (2016). "Gone to work to America": Irish step-migration through south Wales in the 1860s and 1870s. *Immigrants & Minorities*, 34(3), 297–313. https://doi.org/10.1080/02619288. 2015.1066676
- Nawyn, S. J. (2010). Gender and migration: Integrating feminist theory into migration studies. *Sociology Compass*, 4(9), 749–765. https://doi.org/10.1111/j.1751-9020.2010.00318.x
- National Database of Selected Human Resources for Health. (2017) RP0001B—Distribution of selected health providers according to sex. http://www.ndhrhis.com/RPA0001.php
- Ortiga, Y. Y. (2014). Professional problems: The burden of producing the "global" Filipino nurse. *Social Science and Medicine*, 115(Aug), 64–71. https://doi.org/10.1016/j.socscimed.2014. 06.012
- Parreñas, R. S. (2010). Homeward bound: The circular migration of entertainers between Japan and the Philippines. *Global Networks*, 10(3), 301–323. https://doi.org/10.1111/j.1471-0374. 2010.00288.x

- Paul, A. M. (2011). Stepwise international migration: A multistage migration pattern for the aspiring migrant. *American Journal of Sociology*, 116(6), 1842–1886. https://doi.org/10.1086/659641
- Paul, A. M. (2017). Multinational maids: Stepwise migration in a Global Labor Market. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108120357
- Peñafiel, J. (2015). Regulating migration to Australia and back to the Philippines: Applying a 'diaspora strategies' framework. Singapore Journal of Tropical Geography, 36(2), 201–214. https://doi.org/10.1111/sjtg.12108
- Philippine Overseas Employment Administration. (2010) Philippine overseas employment administration OFW deployment by occupation, Country and Sex New Hires, Full Year 2010. http://www.poea.gov.ph/ofwstat/deppercountry/2010.pdf
- Philippine Overseas Employment Administration. (2015) Philippine overseas employment administration employment statistics: Deployed overseas Filipino workers 2014–2015. http://www.poea.gov.ph/ofwstat/compendium/2015.pdf
- Privarova, M., & Privara, A. (2016). Circular migration and its impacts in the current stage of globalization. *International Journal of Environmental and Science Education.*, 11(18), 12909–12917.
- Quiminal, C. & Blum le Coat, J.-Y. (2011) Migration and borders— Synthesis. halshs-00638245.
- Rédei, M., Kincses, A., & Jakobi, A. (2011). The world seen by Hungarian students: A mental map analysis. *Foldrajzi Ertesito/ Hungarian Geographical Bulletin*, 60(2), 135–159.
- Reuchamps, M., Kavadias, D., & Deschouwer, K. (2014). Drawing Belgium: Using mental maps to measure territorial conflict. *Territory, Politics, Governance*, 2(1), 30–51. https://doi.org/10. 1080/21622671.2013.814549
- Riaño, Y., & Baghdadi, N. (2007). «Je pensais que je pourraisavoir une relation plus égalitaireavec un Européen.» Le rôle du genre et des imaginaires géographiquesdans la migration des femmes. *Nouvelles Questions Féministes*, *26*(1), 38–53. https://doi.org/10.3917/nqf.261.0038
- Thiollet, H. (2016) Managing migrant labour in the Gulf: Transnational dynamics of migration politics since the 1930s. International Migration Institute Working Papers. Paper 131.

- Thompson, M. (2017). Migration decision-making: A geographical imaginations approach. *Area*, 49(1), 77–84. https://doi.org/10. 1111/area.12292
- Tigno, J. V. (2014). At the mercy of the market? State-enabled, market-oriented labor migration and women migrants from the Philippines. *Philippine Political Science Journal*, *35*, 19–36. https://doi.org/10.1080/01154451.2014.914999
- Tuckett, A. (2016). Moving on: Italy as a stepping stone in migrants' imaginaries. Focaal, 2016(76), 99–113. https://doi.org/10.3167/fcl.2016.760107
- Tyner, J. A. (2004). Made in the Philippines: Gendered discourses and the making of migrants. London: Routledge Curzon.
- Walton-Roberts, M., & Hennebry, J. (2012) Indirect pathways into practice: A comparative examination of Indian and Philippine internationally educated nurses and their entry into Ontario's nursing profession. CERIS-The Ontario Metropolis Centre.
- Williams, R. (2017) Why are there so few male nurses? The Guardian. (1 March). Available at: http://www.theguardian.com/healthcare-network/2017/mar/01/why-so-few-male-nurses
- Xiang, B. (2014). The return of return: Migration, Asia and theory. In G. Battistella (Ed.), Global and Asian perspectives on international migration. Global Migration Issues. [Online]. (pp. 167–182). London: Springer.
- Yeoh, B. S. A. (2014). Engendering International migration: Perspectives from within Asia. In G. Battistella (Ed.), *Global and Asian perspectives on international migration*. Global Migration Issues. [Online]. (pp. 139–152). London: Springer.

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