The International Health Landscape of Cozumel Island, Mexico

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Abstract

Cozumel Island is the largest of Mexico's eastern islands. It is the Western Caribbean's most popular cruise destination, and is well-known for its crystalline waters and mosaic reefs that attract dive enthusiasts from around the globe. Joining the millions of international tourists that set foot upon the island each year, Cozumel is also home to a significant community of lifestyle and retirement migrants. Recognising this conglomeration of global bodies, and that some will inevitably require medical assistance, this dissertation presents an exploratory case study of Cozumel Island's health landscape as an international phenomenon. It is driven by three primary objectives that seek to unpack the aesthetic nature of Cozumel Island's international care settings, determine the intersecting mobilities at play within the island's international health landscape, and understand both the provision and reception of care for international patients on Cozumel Island. Analysing field experiences, photographs, and semi-structed interviews with international lifestyle and retirement migrants, as well as health care providers working within the island's private hospitals and medical clinics, three discrete analyses provide insight into Cozumel Island's international health landscape. First, the aesthetics of pharmaceutical signage are explored and unpacked within the sociolinguistic framework of the linguistic landscape to consider how tourists visiting Cozumel Island might interpret such markers of medicinal merchandise, revealing imagery that positions pharmaceuticals as both souvenirs and suggestions of personal health autonomy. Second, international lifestyle and retirement migrants' perceptions and beliefs about Cozumel's pharmacy sector are analysed, revealing a number of concerns that exist in relation to participants' spatial mobilities. Finally, health care workers' experiences of treating international tourists are unpacked and found to entail multiple challenges that can preclude effective and safe treatment. When taken together, and as products of this dissertation's objectives, these analyses situate Cozumel Island's international health landscape as component within a complex archipelago of tourism, health and other mobilities, that produce it as connected, dynamic, and a continuously emergent setting of transnational health processes.

Keywords: Mexico, Cozumel Island, tourism, international lifestyle and retirement migration, health, pharmacy

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Chapter 1. Introduction

It is a warm, tropical Friday morning on Cozumel Island, Mexico, and I am enjoying an espresso in a breezy seaside restaurant upon the island's west-facing malecón. My company is a men's group; a friendly clique of locals and expatriates who meet each week for breakfast. I have joined the group to chat informally about my ongoing investigation into international health care on the island, and to recruit participants to include in my research. As we talk about the state of health care on the island, one of my new acquaintances brings my attention to the ocean view behind me, or that which remains of it. Through the broad west-facing windows, the view of the azure Yucatan Channel and shimmering vista of Mexico's Riviera Maya has been obstructed by an austere, hulking mass of steel and glass: the colossal hull of a Norwegian cruise liner that seems far too close to the shore for comfort. The framing of the windows, as they disguise both bow and stern, offers a perspective that reiterates the incredible scale of these seafaring cities. Faces peer from glass and gaze from galleries, reminding me that from the ship will soon descend several thousand cruisers eager for another day of shore-side frivolity. If I was to return for breakfast tomorrow, or even sit for a short while longer, my experience would most certainly be one of repetitive and rhythmic obstruction, watching as the tide swells Cozumel Island with tourists each day. With docking facilities for up to eight cruise liners on any given day (except Sundays), it is not difficult to understand that this touristic injection is the lifeline fueling Cozumel's pulse. But like the tide, tourists to the island are an ebb and flow, leaving much of Cozumel Island to exist in a certain liminality between the substantial and the fleeting – unless, for some reason, you are unable to leave.

On a different date, I am being toured though one of Cozumei's four private hospitals, each constructed to treat those amongst the island's myriad tourists that require medical attention. Short, cramped hallway spaces with bleached tile floors and pastel walls offer an aesthetic of medical sterilization. At each stop, my guide – a neurosurgeon recently transplanted from Monterrey – describes the available amenities and technologies, design decisions and hospital procedures with admiration. His tone feels somewhat futurist as he assures me of plans to upgrade the facilities and obtain state of the art machinery. Between different departments, our connecting movement

feels overly-complicated, the spaces enclosed and nodulous: the labyrinthine atmosphere begets curiosity and I cannot help but glance through doors left ajar. Many rooms are empty, offering glimpses of spotless cots, flat screen televisions and lounge furniture for the comfort of patients' friends and family. In one room, I spot a young woman no older than twenty-five sitting up in bed, her head supported by an ensemble of plastic bracings. "That doesn't look fun," I motion to my guide. His response does not surprise me, and only reiterates a concerning narrative of tourism and health care that I will frequently encounter during my time on the island: an alcohol related motorbike collision has left this woman with a broken neck. He adds that her boyfriend is in similarly critical condition. They will not be returning to the ship.

This dissertation presents a case study of the relationships between health and place as they continue to unfold upon the popular tourist destination of Cozumel Island, Mexico. It is an exploration into the island's health care services, those who work within them, and those for whom they provide, seeking to uncover the spatial constructions, engagements and performances that contribute to the island's dynamic health landscape. As a project both prefixed and concerned with the playing-out of the international, this research focus is further complicated by notions of movement across and beyond borders; the mobility of bodies, resources and ideas that add turbulence to the coherence of place. With these exploratory goals in mind, it remains important to outline the disciplinary and conceptual tenets informing this dissertation. Within this introductory chapter, I will outline contemporary island studies, health geography and the mobilities turn in social science, while paying attention to the intersecting applications within this disciplinary trichotomy. Recognising that the goal of case study methodology is to explore a phenomenon within the context in which it occurs (Elger, 2010), I then provide a detailed description of Cozumel Island, Mexico, offering insight into core tenets of its development, including what is known about the island's historic and contemporary health landscape. Throughout, I contextualise this dissertation, showing how The International Health Landscape of Cozumel Island, Mexico is a project of mobility, island and health geographies, and how, in turn, it contributes to the continuing development each. Finally, I present the structure of my dissertation.

1.1. Island Studies

The allure of the island entertains an enduring legacy, with long established tropes aligning their bound and often secluded physicality with dreams of authentic culture and utopian space, of dystopia and of exile. As places of academic inquiry, islands have long been considered as *tabulae rasae*, or natural laboratories severed from outside influence (Baldacchino, 2006). As such, beliefs about the isolation, boundedness and insularity of islands are reflected within epistemic expectations across physical sciences, as well as the humanities and social sciences (Greenhough, 2006). However, such analogies assuming the "discrete essence of islands ... [are] often taken too far" (Baldacchino, 2004, p.272), reinforcing a certain placelessness of the island landscape, and allowing them to disappear through framing as the locus, rather than the focus of inquiry (Ronström, 2013).

Attempting to rectify a lineage of contradictory conception, Island Studies is an emerging field of inquiry heeding the call to investigate islands "on their own terms" (McCall, 1994, p.2), while remaining cognizant of the complex "openness and closure" (Baldacchino, 2004, p.278) through which such terms are negotiated within and beyond the island (Grydehøj, 2017). Baldacchino (2004) refers to this as the study of islandness, recognising that the island always exists beyond notions of the bounded laboratory or the secluded world-to-itself; he suggests that "islandness is an intervening variable that does not determine, but contours and conditions physical and social events in distinct, and distinctly relevant, ways" (p. 278). As such, scholars of island studies have begun to set new agendas for the destabilisation of the "fixity of island difference and particularity" (Stratford et al., 2011, p.114), offering fresh outlooks through which island geographies may be (re)examined. In recognition of this, this dissertation attends to Cozumel Island 'on its own terms', the dual lenses of health geography and mobility allowing for a novel focus upon the islandness of its health landscape, as it is unpacked as a place of contested and negotiated openings and closings, comings and goings.

1.2. Health geography

While investigation of the relationship between health and place is not considered a contemporary development within geography, the specific discipline of health geography remains comparatively young. A product of less than three decades of

development, health geography emerged in the 1990s as scholars sought to move beyond long-standing interests in disease ecology and the spatial distribution of medical services (Collins and Evans, 2017), then preoccupying the established field of medical geography. This involved a reconceptualisation of the discipline, and, paralleling the 'cultural turn' within the social sciences and elsewhere in human geography, insisted upon a more socio-spatial, de-medicalised exploration of the health-place relationship (Kearns and Moon, 2002). What emerged was a "post-medical geography of health" (Kearns, 1993, p.140): a reworking of health-place analysis that sought advanced engagement with humanist, behavioural and structural theorisation (Collins and Evans, 2017; Moon, 2009), as well as greater application of critical-social theory (Moon, 2009). This shift allowed for a more complex engagement with social and structural determinants affecting the health of populations and individuals, as well as offering increased insight into health as a subjective experience.

Through this refocusing lens, both health and place have undergone disciplinary redefinition: health, moving away from existing biomedical conceptualisations of the (ill) body towards a socioecological model that views health as contingent upon an intersection of environmental, social and institutional factors; place, following broader shifts in socio-cultural geographies, transitioned from an unproblematised container of activity towards that which is considered socially constructed, experiential, contested and malleable (Moon, 2009). Within this reconceptualization, health and place are considered mutually constituted and recursive. For example, place can be affected by health care provision and population health characteristics, while service provision and individual health can be similarly influenced by the physical, social and cultural qualities of place (Collins and Evans, 2017).

Undertaking this shift also meant a reevaluation of research methods that encouraged methodological pluralism with specific advancement to qualitative and more experimental approaches better tailored to investigation of the recursive nature of health and the social geographies of place (Collins and Evans, 2017). Heeding this call for a broadened set of methodological approaches, chapter 2 of this dissertation introduces to health geography the sociolinguistic framework of the linguistic landscape in order to explore Cozumel Island's pharmaceutical aesthetics. As I write this, chapter 2 remains health geography's sole application of the linguistic landscape framework, and one of

few studies to employ the framework in broader studies of health (for exceptions see: Fleitas, 2003; Martínez, 2014).

Contemporary health geography has followed broader human geography's "magpie-like tendencies" (Collins and Evans, 2017, p.3) in the adoption of ideas, theory and methods from other social sciences, resulting in a diverse range of research spaces, interests and approaches. This has produced a body of literature that, while continuing the tradition of studying the ecological and environmental determinants of health (e.g. Ayres-Sampaio et al., 2014; Guthman and Mansfield, 2013), has provided a diversity of insight into the intricate relationships between health and place across numerous populations (e.g. Boggs et al., 2017; Durkalec et al., 2015) and behaviours (e.g. Collins and Procter, 2011; Wells, 2017), and at a variety of spaces and scales including urban and rural locations, neighbourhoods, health care settings and home spaces (e.g. Christian et al., 2015; Ergler et al., 2017; Kolodinsky et al., 2017). Similarly diverse have been the tools of inquiry, with incorporation of myriad quantitative, qualitative and geographic information science (GIS) methods and methodologies, as well as mixedmethod approaches. Further, there remains bleed between subjects of research and associated approaches, with no one form of knowledge acquisition prioritised over another, and many research areas, such as food deserts or neighbourhood walkability, being explored with equal interest across quantitative, qualitative and GIS approaches (e.g. Beaulac et al., 2009; Grasser et al., 2013; Haynes-Maslow et al., 2013). This dissertation, however, continues the longstanding tradition of qualitative approaches in health geography, stationing case study inquiry across ad-hoc ethnographic-observation and semi-structured interviews with multiple participant groups. Within case study research, use of multiple data sources and methods is important as it enables multiple viewpoints, and allows for data and methodological triangulation that can enhance understanding of the phenomena under investigation (Evers and Van Staa, 2010).

Of broad interest to health geographers is the study of care settings, understood here as sites where care takes place (Conradson, 2003). This work typically explores how social meanings and the material elements of specific sites of care both produce, and are produced by, the experiences and relationships of care within them (Bowlby, 2012), as well as external influences such as policy frameworks (Andrews et al., 2012). Exploratory and analytical approaches to care settings remain diverse, with noteworthy contributions including political economic, gendered, and ethical perspectives (Yantzi

and Skinner, 2009). Following deinstitutionalising shifts, significant attention has been paid to care within community welfare spaces, such as the soup-kitchen or drop-incentre (Conradson, 2003; Johnsen et al. 2005), as well as how care plays out within homes and workplaces (Milligan, 2005; Tucker, 2010). Other work has focused more upon institutional settings, such as the hospital (Evans et al., 2009; Kearns et al., 2003) or nursing homes, while some has sought to understand settings of care that straddle multiple spaces, such as the community pharmacy or the street (Johnsen et al., 2005b; Thompson and Bidwell, 2015). Further work has explored less explicit settings of care, such as libraries (Hodgetts et al., 2008). However, within such work, settings of care tend to remain relatively bounded and discrete (e.g. the home, the doctor's office, a particular street block), with investigations often overlooking the multiple other spaces and broader contextual scales within which they are imbricated. While perhaps naively enterprising in its liberal and generalised focus on the site of Cozumel Island as a care setting, such a broad lens allows this dissertation to investigate explicit settings of care (the pharmacy or hospital), as well as the experiences of those within them, while paying attention to their position amongst wider networks that enable and constrain care provision on the island.

One significant approach to investigating sites of care in health geography has been to ascribe the metaphor of the landscape. Nestled within the discipline's tripartite of place-exploration approaches (next to multi-level modeling and locality studies), landscape studies are closest to Kearns' (1993) core reimagining of health geography. Employing the landscape metaphor has enabled health geographers to conduct "cultural, theoretical, and de-medicalised" (Moon, 2009, p.40) investigations of the physical, historic, cultural and politico-economic elements interwoven in the production of place and its associations with health (Collins and Evans, 2017; Moon, 2009). Landscapes are considered to be settings of everyday life that ascribe, foster and delineate identity, and can be read as a social document in the production and sustainment of meaning (Wakefield and McMullan, 2005). Expanding the metaphor, Conradson (2005) notes that landscapes of health are best understood as subjective, relational outcomes of ongoing dynamics between the human, non-human and material, paying attention to not only immediate experiences of landscape, but broader networks within which such experiences may be imbricated. This dissertation pays attention to the array of elements intersecting to create Cozumel Island's international health landscape.

By engaging with various sites and populations of interest, across multiple methods, it acknowledges the manifold elements that intersect to construct the island's health landscape, and, following Conradson (2005), remains cognizant of the relational interactions that ascribe meaning, paying special attention to dynamic interplay between people, things, and their spatio-temporal orientations.

Some scholars have argued for the use of the concept of "landscapes of care" to complicate the understanding of care settings (Milligan and Wiles, 2010). Using this term, attention is paid to the interactions across and between the plurality of spaces and scales at which care is influenced and occurs; to space-time trajectories of individual lifeworlds; to the emotions associated with care; to multi-scale complexities of governance and social arrangements that can affect the operation of care; and to the social norms and discourses that can shape decisions about care provision (Bowlby, 2012; Milligan and Wiles, 2010). While care settings can appear to be spatially bounded, the 'landscapes of care' framework constructs them as contingent upon movement, relationships and scale that exists beyond them. However, despite recognition of the complexities that 'landscapes of care' bring to the study of care settings, Bowlby (2012) notes that geographical research has shown little consideration of the linkages of spatial and temporal processes in the construction of care settings. While not an explicit deployment of the landscapes of care framework, this dissertation recognises the intersecting complexities of health landscapes as problematized by Milligan and Wiles (2010), and Bowlby's (2012) call for increased attention to the importance of spatiotemporal processes. Thus, multiple voices and settings are represented in order to grasp the convergent matter of Cozumel Island's health landscape, while thinking through the lens of mobility helps to scatter focus towards the chronological and itinerant processes affecting the island's health landscape.

1.2.1. Island health geographies

Islands have long been regarded as sites that can enable or constrain the health of those who visit, both in the imagination and in practice. They are places where one might go to find rejuvenation or good fortunes in health (Conlin and Baum, 1995). In the ancient Mayan world, it was believed that those who travelled to Cozumel Island would be assured providence for childbirth and medicine from the goddess Ix Chel (Scholes and Roys, 1948). Such beliefs about the paradisiacal nature of islands as sites of health

and rejuvenation also motivated early colonial explorers in their search for the bounded Garden of Eden (Connell, 2003). Later, accompanying his brother Lawrence, George Washington would travel to Barbados in search of a cure for tuberculosis (Ellis, 2005). Such ideas remain "burnt into the psyche of the denizens of the western world" (Royle, 2002, p.16), with no shortage of health and wellness spas situated on island locations (Kelly, 2010; Medina-Muñoz and Medina-Muñoz, 2013). Conversely, and famously described within More's Utopia (1516/1966) and Swift's Gulliver's Travels (1826), the absolute borders of islands are thought to enable those inside to set themselves apart from numerous forms of contamination found in the outside world (McMahon, 2003). In line with early 20th century treatment ideologies that favoured isolated and carceral spaces for the rehabilitation of medical and social maladies, islands offered physical restraint at the shoreline. Spatial separation ensured that patients could not escape and were at all times distanced from external harms (Baumohl, 1990; Kearns et al., 2014) the island would ensure a successful return to health. Island geographies have also enabled the containment of those thought contagious and incurable. While now mostly abandoned, island quarantine tactics have a long history, including the confinement of cholera-carrying migrants (Markel, 1995), and the establishment of leper colonies such as British Columbia's D'Arcy Island (Mawani, 2003). However, meaning remains mobile, and as such it is important to note that post-deinstitutionalisation, the health landscapes of many former islands of quarantine and confinement have been renegotiated, and are now viewed as sites of health promotion and healing (e.g. Kearns et al., 2014) as they become entangled within broader, contemporary visions of health and wellbeing.

Considering these historic and contemporary landscapes of health dependent on island geographies, it is surprising to note that in both Stratford's (2015) ten-year retrospective of island studies, and Grydehøj's (2017) musing on the future of the discipline, there is no mention of health. Elsewhere, islands as landscapes of health are explored through a relatively small set of conversations concerning the provision of care. Like rural landscapes, islands often have poor health infrastructure, and thus are well accounted for within academic literature in terms of hopes and challenges for ensuring tangible and effective public health policy (Binns et al., 2010; Person, 2014), provision of care (Gould and Moon, 2000), and the lived experience of accessing and providing health interventions (Mark, 2006). For example, ethnographic insight reveals the complexities of treating patients holding strong island identities (Moore, 2008), as well as

the increased autonomy and responsibility that providing health care on island locations can require (Jeffries, 2004). Gould and Moon (2000) highlight complications arising from dynamic population thresholds, noting that as popular tourist destinations, seasonal bias can problematise access to care, a factor which this dissertation takes into account in its exploration of Cozumel Island's health landscape. Some islands, including Barbados (Johnston et al., 2015), Phuket (Turner, 2010) and the Cayman Islands (Connell, 2013) have engaged with their popularity as tourist destinations to reconfigure their health landscapes as medical tourism destinations, where patients can easily access affordable, private medical care. Building upon this this literature at the nexus of islands and health, this dissertation offers knowledge development that can help to not only pull island studies out of its black-hole of health exploration, but also, through its detailed, qualitative case study, can offer a more in-depth understanding of the everyday experiences of health within modern island settings. Further, with Gould and Moon (2000) lamenting the lack of insight into the health complexities facing islands located in close proximity to mainlands, focusing research on the health landscape of Cozumel Island begins to directly address this gap in the literature.

1.3. Mobility

There is something to be gained by interrogating how landscape/landscaping is practised, emergent through mobile and material practices, and how mobilities animate landscapes and places, and are inseparable from particular materialities (Merriman et al., 2008).

As well as an investigation into Cozumel Island as a health landscape, this dissertation is also an exploration of the mobility of things, people and ideas involved in the production and experience of this space. As a discipline, geography has held a longstanding interest in mobility, with movement being both "framed as unfortunate, abnormal, and problematic, and as inevitable, normal, and productive" (Merriman, 2009, p.134). Of considerable worth has been work on migration, tourism and transport geographies, driven by a mostly quantitative focus on the spatial arrangements, or cause and effect of these different mobilities (Merriman, 2009). Other important work has addressed 'mobility gaps', focusing upon the individual, socio-structural and spatial determinants that affect mobility, such as income, social capital, gender, or neighbourhood characteristics and proximity to amenities (Wenglenski, 2017). However, while this research has provided investigation into the mobilities of things and people,

focus has tended to remain upon nodes and places of fixity within networks, rendering movement secondary to spatial structure (Cresswell and Merriman, 2011).

More recently, interdisciplinary interest in mobility has engaged geography in a project of re-centring movement within the discipline. While there has been debate as to whether geography ever disengaged with mobilities and movement (Cresswell and Merriman, 2011; Merriman, 2009), scholars have embraced what sociologists Sheller and Urry (2006) have defined as the 'new mobilities paradigm' or the 'mobilities turn', although not all explicitly locate themselves within it. Within this evolving space, Cresswell (2010) has identified a number of ways that 'new' research into mobilities transcends geography's previous engagements with the movement of things. Of importance is the multi-scalar approach that considers all types of movement, including embodied practices such as walking, experiences and use of transport assisted movement, and regional and transnational flows of capital and labour (Cresswell, 2010). Also important is interest in the variety of things that move, including people, material, ideas and information, as well as the entangled, affective capacity for one to enable or impede movement of another (Cresswell, 2010). These mobilities are also considered in relation to places and enablements of fixity, of stopping and immobility, and have provided a new focus for methodological innovation within the discipline (Cresswell, 2010; Evans and Jones, 2011). Substantial work in geography has engaged with this 'new mobilities paradigm', resulting in a profusion of research (see: Blunt, 2007) including landscape aesthetics (Merriman, 2006), immigration (Cresswell and Hoskins, 2006), and lifestyle (Cohen et al., 2013). Although not directly locating itself within the paradigm, other geographical work continues to contribute compelling accounts of movement in areas such as hiking (Wylie, 2005) and augmented reality gaming (Colley et al., 2017).

While less directly engaged with the 'new mobilities paradigm' or 'mobilities turn' (Gatrell, 2011), research in health geography has long-entertained interest in the relations between health and movement of various modalities, temporalities and scales. Within the journal *Health & Place* alone, numerous articles reveal health geographers' continuing engagement with movement, including exercise (e.g. Barratt, 2017; Blue, 2017), transport opportunities (e.g. Foster et al., 2014; Stewart et al., 2017), and migration (e.g. Lewis, 2014; Thomas, 2010). Of significant importance to health geographers are the mobilities involved in access to care (e.g. McNeil et al., 2015;

Migge and Gilmartin, 2011), with recent interest turning towards transnational movement across borders, including retirees searching for healthier lifestyles (e.g. Legido-Quigley and McKee, 2012; Van Dalen and Henkens, 2007), and patients engaging with medical tourism (e.g. Crooks et al., 2010; Crooks et al., 2011; Ormond and Sothern, 2012). Here, research is concerned with the implications of regional and transnational flows of information, capital, patients, and both material and human resources, for health care in both destination (Johnston et al., 2010) and home settings (Johnston et al., 2011). While health geography has entertained myriad engagements with mobilities and movement, Connell and Walton-Roberts (2016) note that little attention has been paid to human health resources within increasingly globalised health systems. Elsewhere, health geographers have engaged with mobility using innovative 'mobile-methods.' This has been especially common in the exploration of the therapeutic value of embodied movement, with researchers performing mobile methods such as the walking interview or participatory video ethnographies. This research has helped to advance geographical knowledges at the intersection of health and mobility through explorations into the material, embodied and social mobilities involved in therapeutic engagements with place (Doughty, 2013), as well as the importance of the embodied, somatic experiences of contact with the material landscape (Brown, 2017). This dissertation expands health geography's mobility engagement, paying attention to the numerous intersecting movements of people, things and information that make up Cozumel Island's health landscape. Remaining cognizant of such movements and mobilities allows for a more complex understanding of the island's health landscape as a produced outcome of multiscale linkages across space, and the subjectivities that enable and react to them.

1.3.1. Island mobilities

It is difficult to speak about islands without mentioning mobility. As Gillis notes, islands "are never enclosures only" (2003, p.33). Their survival often depends on what Scheyvens and Momsen term an "externally focused economy" (2008, p.503), allowing them to transcend the limits of scale through complex mobile linkages to other islands, mainlands, and further abroad (Baldacchino, 2005). This is commonly seen through the significant quantities of importation and exportation of goods and services, as well as population movements that span the globe (Scheyvens and Momsen, 2008). For many small islands, tourism mobilities continue to be their largest export earners (Shareef and

McAleer, 2005), while islanders who have migrated transnationally will often maintain strong links with 'home' through the maintenance of diasporic identities and the sending of remittances (Duval, 2003; Mills, 2007). Many will return home with skills attained abroad (Scheyvens and Momsen, 2008). Thus, Conway states that island societies are often "inextricably tied to the wider society, which would include the overseas, enclave sojourners, emigrant-relatives, and expatriates as essential functionaries" (Conway, 1997, p.22).

Despite the necessity of movements to sustain island life, scholars of islands have mostly failed to engage with social science's mobilities turn. As with health, Grydehøi's (2017) island studies manifesto makes no mention of mobilities, although he does lament that island studies' typically insular focus risks missing "the archipelago for the islands" (2017, p.8). Similarly, King (2009) joins Stratford (2015) in writing of the 'profound importance' of mobility for island studies, though she subsequently falls back upon a rigid definition of mobility tied to bodily and migratory movements. Where mobilities have been taken seriously lies within island studies' recent push to think with the archipelago in order to destabilise typical island tropes of insularity and boundedness, as well as binaries of ocean/island and mainland/island. As explained by Pugh, archipelagic thinking is not just about "a simple gathering of islands, but an emphasis upon how islands act in concert ... [drawing] attention to fluid cultural processes, sites of abstract and material relations of movement and rest, dependent upon changing conditions of articulation or connection" (2013, p.11). However, thinking about "islands acting in concert" (Pugh, 2013, p.11) may, too, not go distant enough, thus I agree with Rankin (2016) who suggests that archipelagic thinking must understand islands as emerging "from a broad set of elements with multi-scalar origins, ... complicat[ing] notions of 'near' and 'far' as well as 'past' and 'present'" (p. 208). My dissertation builds upon this theme, considering Cozumel's health landscape not in only terms of its socio-cultural heritage of inter-island connectedness and movement, but as part of a broader archipelago of movement, of sites, bodies and things near and far with the capacity to affect and be affected by the enactments, availabilities and performances of health on Cozumel Island.

1.4. Cozumel Island

Cozumel is a haven of transplanted residents from all over Mexico to as far away as Europe. Each comes hoping for a rebirth of sorts through connecting with the island's pristine climate, water and easy-going island lifestyle (Preble, 2014).

This dissertation uses case study methodology to explore the *case* of Cozumel Island's international health landscape. As case studies typically involve the comprehensive exploration of a phenomenon within the context that it occurs (Elger, 2010), the following provides an in-depth background to Cozumel Island, offering insight into the island's contemporary and historic engagements with health and mobility, in order to better set the scene for understanding the island's present-day international health landscape.

Isla Cozumel (Mayan Land of the Swallows), commonly known as Cozumel Island, breaches the surface of the Caribbean Sea sixteen kilometres beyond the eastern coast of Mexico's Yucatan Peninsula (Encyclopedia Britannica, 2014). The largest of Mexico's eastern islands (World Atlas, 2014a), spanning approximately 46 kilometres from north to south and 14 kilometres from east to west (Encyclopedia Britannica, 2014), much of Cozumel Island is covered by a dense, low-lying mangrove jungle that disguises the prostrate limestone slab upon which it sits (Prado and Chandler, 2017); the island's highest peak, almost subjacent in height, makes a paltry grasp for the heavens at a trivial ten metres above sea level (Cuarón, 2009). Encircling this planate landscape, the main attraction of the island lies at the ever-shifting liminal space of the coast, and beyond into the watery frontier of the Mesoamerican Reef (Prado and Chandler, 2017), with "towering walls that offer ... a fairytale seascape to explore" (FrommerMedia, 2014). The travel guide provides insight into a dichotomous variation in shoreline amenity: the rocky west coast sheltered by the Yucatan Peninsula that offers ideal conditions for safe play and commerce, while the east with its enticing white sand beaches is marked as an untamed ferocity and visitors are forewarned to play at their own risk (Davis, 2014a). It is at this shoreline that the Cozumel Island's economy revolves, with much of the island's population employed in enticing and providing for sun seeking vacationers and cruise tourists, as well as scuba divers who wish to experience the technicolour Mesoamerican Reef just offshore. Although Cozumel Island's tourism sector is a thriving economic entity, consistent pressure

remains to expand its scope, both spatially and economically, as developers and government alike perceive the island to be lagging behind regional competitors such as Cancun and the Riviera Maya (Bojórquez-Tapia and Eakin, 2012). This game of catchup has fostered rapid development of the island's accommodation and cruise infrastructure (Van Broeck and Dierckx, 2012), as well as the despatialisation of Cozumel Island's urban core as local amenities are increasingly replaced with tourist facing entities such as jewelry stores, handicraft stores and restaurants or bars, often owned by the cruise ship corporations brining tourists to the island (Palafox Muñoz et al., 2015; Preble, 2014).



Figure 1.1: Map of Cozumel Island and Southern Mexico

Although only 3% of Cozumel Island is developed, Mexico's Instituto Nacional de Estadística y Geografía (INEGI, 2015) establishes the island's population to be 86,415, however numerous other (non-official) sources estimate the figure to be closer to, or over 100,000 (e.g. Prado and Chandler, 2017; World Atlas, 2014b). Of this number, it is believed that approximately 1000 of Cozumel Island's residents originate from outside of

Mexico, with an almost even split between the United States (US) and further abroad (INEGI, 2010c). Again, anecdotal evidence (e.g. Haskins, n.d.) suggests a significantly larger expat or migrant population on Cozumel, however this remains unsubstantiated in any formal literature. For the vast majority of those living on Cozumel Island, home is the town of San Miguel on the island's west coast. San Miguel is Cozumel Island's largest town, and is the economic and political centre of the island (Cozumel is a municipality of the state of Quintana Roo), hosting the municipal offices alongside numerous accommodation, dining, shopping, entertainment and other amenities. A 30 minute ferry ride to Playa Del Carmen connects San Miguel to mainland Mexico, while Cozumel Island's international airport offers daily flights for those travelling further afield, including the US, Canada and elsewhere in Mexico.

The settlement of Cozumel Island by the Maya has been traced to the Late Preclassic period between 300 BC and 300 AD (Connor, 1983). In 1518, the island was captured by conquistador Juan de Grijalva as part of his involvement in the campaign for New Spain (Cuarón, 2009). The following year, in 1519, Cozumel was visited by Hernán Cortés, who, upon scouting the island, found evidence of a complex civilization in "well-built houses, books [of] elaborate drawings ... [and] a large pyramidal structure, a temple constructed of limestone masonry" (Levy, 2008, p.12). However, upon reaching the island's temple, Cortés was horrified at the sight of sacrificial remnants leading him to launch into a prophetic sermon that denounced the legitimacy of the islanders' long coveted religious and cultural practices as he ordered his men to destroy the temple's idols and erect a statue of Virgin Mary (Levy, 2008). Unfortunately, alongside the Christian word, Cortés and his men also introduced small pox to Cozumel Island (Hays, 2005), desecrating the local population. Barring the occasional fishing camp and infiltration of French and British piracy, the island remained virtually uninhabited for the next three centuries (Cuarón, 2009).

Cozumel Island was once again *discovered* in 1841 by archaeologists John Stephens and Frederick Catherwood, with Stephens later describing in Modern Traveller 'this desolate island' of which they had become the sole proprietors (Redclift, 2005). However, their archeological mission would not permit them to stay, and the island was once again uninhabited until it was repopulated by 22 families escaping the Yucatan Cast War in 1847-8 (Cuarón, 2009; Redclift, 2005). It would be almost a century later that the Yucatan coast encountered modern tourism, with Cozumel Island becoming one

of the first areas in the region to cater to 'pioneer tourists' with the construction of the Grand Hotel Louvre in the 1920s (Redclift, 2005). Two further hotels were constructed on the island between the late 1920s and the late 1940s, however Cozumel Island remained a short stop on the tourist trail for those pioneering down the Yucatan coast, following the explorations of Stephens and Catherwood in search of the ruins of Mayan prehistory (Redclift, 2005). Through the late 1940s and early 1950s, tourism development on Cozumel Island began to receive support from a number of wealthy Americans who constructed their own hotels and cabanas, enticing both friend and foreigner to come and visit the island (Redclift, 2005). By the 1960s, tourists were now flying into Cozumel Island's WWII airstrip, and the island had been featured in several popular travel magazines, as well as in a pioneering underwater documentary made by Mexican filmmaker René Cardona, who exposed the island's reefs to the world (Hajovsky, 2011a). It is interesting to note that while Cousteau did not film in the Yucatan region until the 1970s, an enduring myth suggesting he discovered the Mesoamerican Reef in the Yucatan Channel has ensured that his name remains synonymous with diving in the region and has contributed significantly to the growth of Cozumel Island's dive industry (Hajovsky, 2011b). In the early 1980s, Cozumel Island cemented its name as a tourism hotspot following the transformation of the island's airstrip into a fullyfledged commercial airport (Hecht and Vidgen, 2016).

The first cruise ship arrived at Cozumel Island in 1968, bringing with it approximately 800 passengers who were tendered to shore (Van Broeck and Dierckx, 2012). For over a decade, Cozumel Island would receive just two cruise ships per month (Chan Ventura, 2006) until, in 1980, the International Pier was constructed, with capacity to dock two cruise ships and a ferry for the movement of cargo and cars from the mainland (Van Broeck and Dierckx, 2012). As Cozumel Island's popularity on the Caribbean cruise circuit developed, the International Pier was soon outgrown, and with construction funded by Mexico's federal government and operations managed by Carnival Cruise Lines, Puerta Maya was opened in 1998 (Sorensen, 2006; Van Broeck and Dierckx, 2012). While there was no shortage of opposition to the development of these piers, with conservationists, including the son of Jacques Cousteau, warning of the damage they would do to the local Paradise Reef, development went ahead (Sorensen, 2006), to be followed soon after by the construction and inauguration of a third cruise terminal in 2002 (Van Broeck and Dierckx, 2012). Punta Langosta, with capacity for a

further three ships, is now Cozumel Island's most accessible cruise port, being located in the heart of San Miguel. In 2015, Carnival Corporation added a third berth to the Puerta Maya cruise terminal, allowing for the simultaneous mooring of three ships at a time, and ensuring that the most modern of the company's ships will be able to dock on Cozumel Island (Carnival Corporation, 2015).

With all of this infrastructure, Cozumel Island remains one of Mexico's most popular tourism destinations and continues to be the most popular cruise port in the Western Caribbean (CruisePortInsider, 2017b). High season runs from November to April, with approximately 20-30 cruise ships docking at one of the island's two cruise terminals each week, bringing with them between 70,000 and 80,000 visitors (Davis, 2014b) to spend an average of 7-10 hours on shore (Prado and Chandler, 2017). It is expected that Cozumel will entertain up to 3,566,700 passengers aboard 1,160 ships during 2017 (CruisePortInsider, 2017b), and in 2013 Cozumel was the second most visited cruise destination worldwide (Cruise Market Watch, 2013). Outside of cruise tourism, daily flights and ferries from Mexico's mainland and abroad deliver no shortage of overnight tourists to the island. In 2015, 575,055 air travelers touched down at San Miguel's international airport (SEDETUR, 2015), with many more arriving to San Miguel via one of the island's three ferry services (JS Tour & Travel, 2017).

1.4.1. Historical and contemporary health on Cozumel Island

While the contemporary history of Cozumel has been dominated by the development of tourism, at the heart of this dissertation is an exploration into the landscape of health and health care of Cozumel Island. As such, it is important to understand the health history of the island. While, like much of the island's history, it remains difficult to account with historical rigor the actual health practices and outcomes, it can be maintained that health history of this island is a history of mobility and movement.

In his 1556 publication *Relacion de las Cosas de Yucatan*, Diego de Landa (1941) described Cozumel Island prior to European contact. He wrote that the island had been known to the Maya as a spiritual therapeutic landscape; a sacred pilgrimage destination that was considered to offer women a guiding hand from the divine that would ensure good fortune in health (De Landa, 1941). He wrote that the island had

been held "in the same veneration as we have for the pilgrimages to Jerusalem and Rome" (De Landa, 1941, p.180, note 947). What De Landa had described as the "wicked sanctuary of ... Cozumel, where they sent an infinite number of poor wretches for sacrifice" (1941, p.109, note 500) was known to be a shrine to the goddess Ix Chel, associated with childbirth, medicine (Scholes and Roys, 1948), and divination (De Landa, 1941). It is understood that pilgrims, who had travelled to Cozumel Island from Yucatan and Tabasco, arrived with the belief that sacrifices of "blood, birds, dogs" (De Landa, 1941, p.109, note 500), as well as specially raised virgin girls (Scholes and Roys, 1948), to the goddess Ix Chel would provide fortuitous outcomes for health and (somewhat ironically) childbirth. Some scholars remain sceptical of this version of Cozumel Island's history, noting indication of temples of other deities but maintaining a lack of evidence for any for shrine to Ix Chel or pilgrimage to the island (Hajovsky, 2015). Whether true or not, pilgrimage to Ix Chel remains the popular historic narrative of Cozumel Island, and through continual repetition, as well as representation by events such as the annual Sacred Mayan Journey (Xcaret, 2017), the island continues to be known as a site of health mobility to the Mayan world.

However, history is not always kind, and it appears that Ix Chel was unprepared for the epidemic that was to accompany the conquistadors alongside their campaign for New Spain. One year after Cozumel had been discovered by Juan de Grijalva in 1518, the island was visited by convening military forces led by Hernán Cortés and Pánfilo de Narváez as they began the Spanish overthrow of the Aztec Empire (Hays, 2005). It was at this point, following his journey from Cuba that Pánfilo de Narváez managed to unintentionally transform the essentially isolated island of Cozumel into a vigorous foothold for the introduction of small pox into the Aztec Empire that incidentally became a crucial aspect of the Spanish conquest (Hays, 2005). Unsubstantiated historical documentation attributes the disease vector to a single African slave aboard Narváez's ship (Hopkins, 2002). Whatever the initial cause, the disease guickly became a pestilence and began infecting the local population faster than they could attend to it (if they even knew how), leaving a trail of death and destruction in its path, including entire houses pulled down upon deceased families in order to quell the stench of rotting corpses (Hopkins, 2002). While estimates of the desolation upon Cozumel Island's population are contentious, it is believed that this introduction of small pox led to the massacre of over 17,000 of the island's 20,000 inhabitants (Prado and Chandler, 2017).

It is difficult to ascertain a concise history of Cozumel Island's contemporary health landscape. Logging on to one of the island's numerous information websites aimed at tourists, it is understood that Cozumel Island boasts six hospitals, among many smaller private clinics (Enjoy Corporation, 2017). Of these, the Instituto Mexicano del Seguro Social (IMSS) and the Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE) hospitals deliver public health care to private sector and federal government employees, respectively (Doubova et al., 2009). Recently, with Cozumel Island's IMSS hospital having been long considered in a state of decline, lacking both facilities and medical staff (Palafox Muñoz and Anaya Ortiz, 2007), the federal government has committed part of a 300 million peso state health care initiative to an expansion of the hospital to be completed in 2018 (IMSS, 2017). The remaining four hospitals are private facilities and typically treat injured or ill tourists, but also will tend to privately paying Mexican citizens. They consist of Hospital Medica San Miguel de Cozumel (MSM), CostaMed Cozumel Medical Center (CMC), Cozumel International Hospital (CIH), and Amerimed Islamed Cozumel (AIC). The oldest of these hospitals is MSM, which was founded as a maternity clinic in 1962 and operated as the island's public hospital at the behest of the Mexican government until the IMSS obtained an independent location 1978 (Hospital Médica San Miguel, 2017). MSM remained the only private hospital on the island until 1987, when the CIH was opened to offer hyperbaric services to divers experiencing ailments such as decompression sickness (SIPSE, 2015; SSS Chamber Network, 2017). Following this, CMC began operating in 1998 (Health Travel Network, n.d.), and AIC opened its doors in 2014 (Hospital Amerimed Islamed Cozumel, 2015), both for the specific treatment of injured tourists. In 2015, CIH completed an extensive expansion of their facility, enabling them to triple their capacity (SIPSE, 2015). The websites of both CMC and MSM display affiliate badges linking them to health care groups in the United States, including Baptist Health South Florida and The Methodist Hospital in Houston (CostaMed Cozumel Medical Center, 2012; Hospital Médica San Miguel, 2017), while CIH is part of the international network of Subaquatic Safety Services and the Diver Emergency Assistance Network (SSS Chamber Network, 2017), each of these affiliations pointing towards the importance of mobility for treating patients on Cozumel Island. This is further exemplified with the websites of both CMC and AIH offering medical tourism services to prospective patients (CostaMed Cozumel Medical Center, 2012; Hospital Amerimed Islamed Cozumel, 2015).



Figure 1.2: Map of health care services in San Miguel, Cozumel Island. Source: author's observation.

Outside of hospital services, a cursory examination of health, beauty and dental facilities on Cozumel undertaken using Google Maps – sites identified using the search string 'dental/beauty/doctor/hospital near Cozumel' – reveal numerous dental, wellness and health clinics (including beauty and esthetic, and alternative and complementary medicine), as well as a number of doctor's offices and hospitals, alongside myriad pharmacies, most of which are located in (or around) San Miguel. However, not all health services have online representation; figure 1.2, which I constructed during field research, offers a significantly more comprehensive depiction of Cozumel Island's health amenities than can be discovered online.

1.5. Rationale and Structure

This dissertation presents an exploration into the international health landscape of Cozumel Island. It extends scholarship in both health geography and mobilities that explores settings of transnational health care provision. More specifically, it attends to a gap in this literature that fails to address transnational health care provision as a function beyond itself, such as that provided in tourist destinations and spaces of lifestyle and retirement migration. Further, as a landscape exploration, this dissertation addresses Cozumel Island as a care setting which has no representation within academic literature.

While both historical and contemporary information about health care on Cozumel Island can be ascertained, it remains sparse and often as an addendum to information provided within tourism guides. As such, there remain very few accounts of what it means to provide care to international populations on Cozumel Island, and for this mobile population to access and receive care. While the overall objective of this dissertation is to construct a comprehensive landscape study of Cozumel Island, Mexico as a setting for international health care, this research has been informed by three specific objectives. The first is to understand how settings of care on Cozumel Island present themselves aesthetically to international patients. As Cozumel Island is not known to be an established site of transnational health care provision, it is important to explore the materialities expressed by the island's care settings within its broader transnational landscape. This assists with understanding why international patients may or may not engage with the island's health services, as well as uncovering the discourses guiding those providing care. The second objective is to uncover the different mobilities at play within Cozumel Island's international health landscape. Paying attention to the people, things and information that move to, from and around Cozumel Island will help to build a broader understanding of the complex networks imbricated in the development, experiences and performances of the island's health landscape as an emergent, international space. Third, to understand the experiences of providing care for international patients, and how patients experience and understand care on Cozumel Island. I believe that obtaining situated perspectives of care from both providers and patients is important for constructing a comprehensive understanding of care provision within, as well as broader engagement with, Cozumel Island's international health care landscape. Similarly, it will help to explore the plurality of international factors that shape experiences and perspectives of the island's health landscape.

To meet my three objectives, I draw upon case study methodology. I was first introduced to Cozumel Island as a potential research site by my supervisor, Valorie Crooks, who had alighted there during a cruise holiday with her family. Noticing an agglomeration of health care providers within the island's downtown tourist core, she later approached me with the idea of exploring the breadth of the island's care provision, and what this might mean for Cozumel as an international destination. Because we had no prior knowledge of Cozumel Island's international health landscape, approaching this

research using a case study methodology allowed for an inductive perspective to investigating it as a phenomenon (Aaltio and Heilmann, 2010), rather than attempting to prove or disprove an hypothesis. An inductive perspective expects that knowledge of the phenomena under investigation will emerge as data is collected and analysis is undertaken, and helps to identify relationships that exist across and among different data (Genoe McLaren, 2010). The case study approach also allows for contextual bounding of the case under investigation (Elger, 2010). As such we can contextualise the research within this dissertation as focused upon experiences bounded by the physical nature of Cozumel Island as well as in the selection of participants, for whom their experiences of providing and receiving the island's health care is inherently *international*.

Case study methodology emphasises holistic richness, and holds expectation of in-depth exploration from multiple perspectives (Simons, 2009; Thomas and Myers, 2015). It is expected that a 'truer' picture of the case under investigation can be obtained through employing multiple methods, measurements and levels of analysis, as multiple sources of evidence help to improve rigour (Wolfram Cox and Hassard, 2010). In light of this, I have collected multiple sources of data, including the voices of international lifestyle and retirement migrants and health care practitioners living on Cozumel Island, first-hand tours of health care facilities, and photographic representation of the island's health care aesthetic. I used multiple data collection methods including mobile observations and semi-structured interviews. Furthermore, these data were collected while I stayed on Cozumel Island, allowing for my participation in the field and interaction with those who live and work in its international health landscape. On my first trip, I was accompanied by my supervisor and a research colleague in order to facilitate a triangulated approach to developing and refining my research focus and methods (Wolfram Cox and Hassard, 2010). Participation within the researched culture is known to be useful for obtaining and analysing data about people and their experiences, allowing for a deeper familiarity with the subject of investigation (Gambold, 2010). Within case studies, multi-method and -data source approaches ensure that an effective and accurate understanding of the phenomena under investigation may be developed through both data and methodological triangulation (Wolfram Cox and Hassard, 2010). With chapters 4 and 6 of this dissertation being written as multi-author manuscripts, such an approach further enables analysis triangulation to enhance the depth and breadth of data interpretation (Evers and Van Staa, 2010).

This dissertation is structured in accordance with the 'sandwich style' or paper-based model. It consists of three analyses, each involving a unique data set and analytic perspective. These analyses are represented in chapters 2, 4 and 6, each consisting of an individual paper intended for academic publication. Within each of these chapters I provide specific details regarding data collection and the analytic techniques I have employed. Chapters 2 and 4 are already published, while chapter 6 is currently under review. Short transition chapters are inserted between chapters 2, 4 and 6, and are included in order to maintain flow between the analyses while situating the next analysis within the research objectives and overall dissertation. Below, brief overviews of each analytic chapter are provided.

1.5.1. Chapter 2: Pharmaceuticals and tourist spaces: Encountering the medicinal in Cozumel's linguistic landscape

Chapter 2 is entitled *Pharmaceuticals and tourist spaces: Encountering the medicinal in Cozumel's linguistic landscape*, and appears as a peer reviewed publication in volume 16, issue 1 of *ACME: An International Journal for Critical Geographies*.

Focusing on the pharmaceutical landscape of Cozumel Island, *Pharmaceuticals and tourist spaces* explores and unpacks San Miguel's tourism core through the lens of the linguistic landscape, a conceptual framework attributed to sociolinguistics involving the analysis of linguistic and material signs present within diglossic communities. Historically employed to ascertain ethnolinguistic vitality, contemporary application of the linguistic landscapes framework has become entangled with semiotic analysis, allowing for a more critical approach to analysis that views signage as indexical of certain discourses and ideologies operating within public space. Following the ethnographic approach typical of much contemporary linguistic landscape literature, *Pharmaceuticals and tourist spaces* presents an observational analysis of pharmacy street and shop signage in San Miguel.

To accomplish this, I undertook extensive field observation of pharmacies and their signage in San Miguel's touristic core throughout my first trip to Cozumel Island during April-May 2015. Upon return, I engaged in collaborative dialogue with members of my research group to further unpack and analyse 35 photographs representing 17 pharmacies. Seeking to embody the typical visitor to San Miguel, *Pharmaceuticals and tourist spaces* transmutes the conventional author-orientated observational approach in

linguistic landscape literature, presenting the analytical output as a narrative of potential touristic encounter. As such, the narrative follows a hypothetical tourist upon a potential excursion around San Miguel's centre, unpacking and reflecting upon recurrent instances of pharmaceutical signage that may be encountered in the town's linguistic landscape. Through this, it deliberates upon the discursive and ideological origins of San Miguel's pharmaceutical aesthetic, and considers how observed signage may be interpreted by, and what this might mean for, the perceptive vacationer.

Subverting typical research methods within geography and socio-linguistics, this analysis builds upon existing knowledge of cross-border pharmaceutical purchasing in Mexico that is typically quantitative and subject-focused, poorly accounting for the places in which transactions occur. I believe the contributions made within this article are three-fold: first, the application of the linguistic landscapes conceptual framework introduces to health geography an additional approach for the exploration of health landscapes; two, this analysis expands the scope of cross-border pharmaceutical purchasing investigation away from Mexico's US border to account for how this phenomenon unfolds within places traditionally known as tourism destinations; three, it offers insight into the aesthetic production of San Miguel's prominent pharmaceutical landscape (and broader health landscapes) and what this might mean for those encountering it.

1.5.2. Chapter 4: Pills in paradise: Exploring international lifestyle and retirement migrants' perceptions of the pharmaceutical sector on Cozumel Island, Mexico

Chapter 4 is entitled *Pills in paradise: Exploring international lifestyle and retirement migrants' perceptions of the pharmaceutical sector on Cozumel Island, Mexico*, and appears as a peer reviewed publication in volume 47 of *Health & Place*. It is co-authored by my supervisor, Dr. Valorie Crooks, and Dr. Jeremy Snyder of Simon Fraser University's Faculty of Health Sciences. Broadly, *Pills in paradise* explores the experience of interacting with health care services and obtaining health care products for those who have chosen to transplant their lives into periphery spaces. As its focus, and as indicated by its title, *Pills in paradise* is an investigation into the perceptions of Cozumel Island's pharmaceutical sector, as held by international lifestyle and retirement migrants (ILRMs) living on the island.

This analysis is informed by 23 semi-structured interviews completed with 26 ILRMs living seasonally or permanently Cozumel Island, Mexico, conducted over two visits to the island during April-May 2015 and February-March 2016. While not included in the initial interview guide, questions pertaining to ILRMs' experiences of the island's pharmaceutical sector were added after initial interviews revealed its importance, and observation confirmed its extent (see: chapter 2). After review of the transcripts, and discussion between myself and my co-authors, the nuanced participant perspectives and experiences reveal that Cozumel Island's ILRM community hold concerns about their interactions with the island's pharmaceutical sector. They cite accessibility to pharmaceuticals, the quality of medications and service provision, and communication between themselves and sectorial workers as significant challenges for receiving appropriate care. Although many of these concerns mirror existing issues found in literature pertaining to transnational pharmaceutical purchasing at the US-Mexico border, this analysis represents the first data collected through qualitative engagement with ILRMs. We contend that Cozumel Island's ILRMs' beliefs and perceptions about the island's pharmaceutical sector are affected by previous engagements with health care in their home countries. As such, and searching for markers of quality, they engage in practices that modify their interactions with Cozumel Island's local pharmacy sector, both via bodily mobility and technology use. Contrasting these practices with existing literature, we caution that ILRMs must learn to critically evaluate their behaviours and the information they obtain in order to prevent harmful pharmaceutical outcomes.

Like chapter 2, this analysis builds upon knowledge of transnational pharmaceutical purchasing at the US-Mexico border, as well as the limited accounts of ILRM approaches to health care in destination countries. Generally, this analysis offers insight into how ILRM communities interact with pharmaceutical and broader health care sectors in destination settings. More specifically, it assists in unpacking the health landscape of Cozumel Island as an outcome of transnational mobilities and contested knowledges. With ILRM populations growing worldwide, such insight can help to better understand the specific health sector needs that parallel this transnational movement, as well as how ILRMs can best prepare for health care challenges occurring far from home.

1.5.3. Chapter 6: A challenging entanglement: Health care providers' perspectives on caring for ill and injured tourists on Cozumel Island, Mexico

Chapter 6 is entitled A challenging entanglement: Health care providers' perspectives on caring for ill and injured tourists on Cozumel Island, Mexico and has been submitted for potential publication in the International Journal of Qualitative Studies in Health & Well-being. It is co-authored by my supervisor, Dr. Valorie Crooks, and Dr. Jeremy Snyder of Simon Fraser University's Faculty of Health Sciences. Recognising that Cozumel Island continues to remain one of Mexico's most popular tourist destinations, a position which has led to the establishment of four private hospitals on the island, A challenging entanglement explores the challenges that local health care workers face in treating ill and injured tourists, while deliberating upon the broader implications of these challenges.

A challenging entanglement is informed by semi-structured interviews with 15 participants working across various sectors of Cozumel Island's health care landscape, all conducted during a research visit during February-March 2016. This analysis is contextualised around health care providers' experiences of treating international patients, including care practices, administrative procedures, challenges or difficulties encountered, and expectations for the future of Cozumel Island's health care landscape. Review of the transcripts, and subsequent discussion and consensus building identified three broad challenges to focus our analysis on: resource deficiencies, medical (mis)perceptions and remuneration complexities. Although few comparative studies are available, some findings reported within A challenging entanglement share similarities with concerns debated in tangential geographic, tourism and health care literature, while others appear to be unique to this analysis. Regardless of their comparative nature, this analysis shows how unique mitigation strategies are employed by Cozumel Island's health care providers in order to find solutions to challenges. Finally, deliberating upon both challenges and mitigatory solutions, we suggest that each can be contextualised within an entanglement between Cozumel Island's health care sector and the island's dominant tourism landscape.

Broadly, this analysis contributes to a significant body of literature dedicated to unpacking the nexus of health and travel that has, so far, failed to adequately consider

the perspectives of health care providers in destination countries. Challenges and mitigation strategies offered by Cozumel Island's health care providers offer are shown to exist within an entanglement between tourism and health care on the island, an outcome suggesting the influence that tourism can have upon the development of ancillary sectors in spaces of touristic dependence. Specifically, for this dissertation, chapter 6 has revealed the intersection of numerous local and transnational forces that contribute to the provision of care on the island, contributing to an increased understanding of Cozumel Island's international health landscape.

1.5.4. Chapter 7: Conclusion

In the concluding chapter I review the key findings of each of my analyses, and revisit my research objectives. Addressing each objective individually, I describe how they have been met across each of my three analyses, and identify cross cutting themes important to unpacking a broad understanding of Cozumel Island's international health landscape. In this chapter I discuss the *international* of Cozumel Island's international health landscape, demonstrating the importance of relational networks that extend far beyond the island, and exert significant influence over the production, perception, and experience of the island as a setting of care, for both providers and patients alike. Finally, I discuss the limitations of this research and provide a number of suggestions for future research both on Cozumel Island and further afar.

Chapter 2. Pharmaceuticals and tourist Spaces: Encountering the medicinal in Cozumel's linguistic landscape¹

2.1. Abstract

Cozumel Island is one of Mexico's most popular tourist destinations, boasting beautiful beaches and world class diving, amongst myriad activities and experiences. It is also home to a host of pharmaceutical merchants who have positioned themselves alongside the island's established tourism shops. Investigating the island as a linguistic landscape, this article constructs a landscape-focused narrative that analyses the linguistic and material signs of pharmaceutical shops as they may be experienced from a tourist's perspective. To undertake this, several recurrent features of the pharmaceutical landscape encountered by the tourist are investigated in order to ascertain the discourses and systems in which these medical signs operate, as well as how they may be interpreted by a visitor to the island. It is revealed that pharmaceutical signs operate within a wider touristic ideology that positions medicines as souvenirs striving for legitimacy while also acting as a reminder of a tourist's own historical and contemporary health and health care needs.

2.2. Introduction

Undertaking a close reading of the landscape is not a new approach in health geography. Since Kearns' (1993) formative criticism of medical geography, and subsequent appeal for enhanced use of narrative and metaphor in the analysis of health and health care spaces (1997), countless scholars have chosen to wield the creative mind in their explorations of myriad formal and informal spaces of health (Andrews and Kearns, 2005; Foley, 2011; Skinner and Masuda, 2014; Watkins and Jacoby, 2007). In undertaking these projects, the spaces considered and lenses applied have been diverse, but none-the-less valuable in complicating ideas concerning health, health care, and how they play out within and amongst individuals, space and place. This paper joins

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explorations seeking to generate new place knowledge(s) and treads new ground through the application of a novel lens in health-place analysis. Here, the space of inquiry is Mexico's eastern-most island of Cozumel – a location known for respite and adventure to an abundance of travelers and tourists but not commonly considered for the health or health care amenities available to these foreign populations. To construct an understanding of Cozumel's health care environment as it is experienced and interpreted by the excursionist, I investigate the island's pharmaceutical landscape, expanding previous inquiry into the phenomenon of foreign (typically US-Mexico) pharmaceutical purchasing. While motivations for these types of purchases include access to cheaper medication prices, relaxed prescription regulations, perceptions of increased efficacy, and a familiarity with the health care system (Calvillo and Lal, 2003; Casner and Guerra, 1992; Horton and Cole, 2011; Su et al., 2013), those participating in the practice of purchasing pharmaceuticals are generally considered to live close to the US-Mexico border, and to be low-income, uninsured, and of Hispanic descent with limited access to medical care (Homedes and Ugalde, 2012; Mainous et al., 2008). And while there is little doubt that Cozumel's tourist population represents a heterogeneous group of multiple and contested racial, able, sexual and gender diversities, the aforementioned cross-border pharmaceutical shopper does not represent the typical visitor to the island (Cruise Lines International Association, 2015). Meanwhile, awareness of the purchase of medicines abroad is gaining traction within traditional news media (e.g. D'Angelo, 2015; Duran, 2012; Ramirez, 2015; Wasu, 2012), as well upon as travel websites and message boards (e.g. Carnival, 2010; Cruise Critic, 2005; Cruise Mates, 2009; Eidell, 1999; Melville, n.d.; Trip Advisor, 2014b), including posts directly relating to Cozumel Island (e.g. Cruise Critic, 2012; Cruise Reviews, 2010; Trip Advisor, 2009).

While consumers may believe that pharmaceuticals in Mexico are stronger, lower cost or do not require a prescription (Calvillo and Lal, 2003; Homedes and Ugalde, 2013; Parietti et al., 1998), characterising Mexico as a place to easily access controlled substances and other pharmaceuticals, patrons still approach Mexican medications with caution (Sloane et al., 2013) and Mexican pharmacies do not escape broader conjecture aligning the country with corruption, violence and an inability to properly provide for its citizens (Dalstrom, 2012). Dalstrom (2012) suggests that to alleviate these perceptions, Mexican pharmacies operate as a shadow of their counterparts in the Global North,

mimicking the aesthetics, language and other aspects they believe best represent pharmaceutical quality while simultaneously promoting Mexican distinctions such as lower costs and higher accessibility.

Much of the literature concerned with premeditated pharmaceutical purchasing at the US-Mexico border pays little attention to this form of consumerism elsewhere in Mexico, including places typically known as tourism destinations. In consideration of this, I investigate the pharmaceutical landscape of Cozumel Island as a linguistic landscape, a concept attributed to sociolinguistics that enables a reader to grasp and index various signs and symbols within a landscape, considering the semiotic and discursive systems in which they might be active. I focus specifically on the signage and street advertising of pharmacies, constructing a narrative of potential touristic encounter to consider how and why vacationers might be led to purchase pharmaceutical products while travelling abroad. Through this analysis, a detailed and perceptive consideration of Cozumel's pharmaceutical landscape is presented – one seeking to expand specific knowledge pertaining to health care, place, movement and interaction on this small yet mosaic island. Before expanding on the linguistic landscapes conceptual framework, I first provide a brief introduction to Cozumel Island.

2.2.1. Cozumel Island

Cozumel Island (Mayan *Island of the Swallows*) lies 16km off the eastern coast of Mexico's Yucatan Peninsula and is the largest of the country's eastern islands at approximately 478 square kilometers (Encyclopedia Britannica, 2014). Urban Cozumel is home to a Westernized tourist landscape; low-lying and colourful stone and concrete buildings dominate the small town of San Miguel on the island's western coast. Within this town, the 2010 Mexican census found 77,236 of the island's total 79,535 residents in habitus (INEGI, 2010c). Numerating an international population, anecdotal evidence (e.g. Haskins, n.d.) points towards a large expatriate or migrant population on Cozumel, however their numbers remain unsubstantiated in any formal literature.

As a tourism destination, Cozumel is the most popular cruise port in the Western Caribbean (CruisePortInsider, 2017b). Between November and April, approximately 20-30 cruise ships dock in Cozumel each week, bringing with them between 70,000 and 80,000 visitors (Davis, 2014a). It is estimated that the island will host 3,566,700

passengers and 1,160 ships in 2017 alone (CruisePortInsider, 2017b); in 2013, Cozumel was the second most visited cruise destination worldwide, Nassau's aide-de-campe in securing the Caribbean as the dominant docking-ground in the cruising market (Cruise Market Watch, 2013). Outside of cruise tourism, Cozumel was visited by 575,055 tourists during 2015, decreasing 1.7% from the 2014 year (SEDETUR, 2015). While no data is available to ascertain the national origin of cruise tourists, the majority arriving at Cozumel's airport are found to be of US origin (Secretaría de Turismo, 2017).

Popular travel media reveals that the main attraction of Cozumel Island lies at the ever-shifting liminal space of the coast and beyond as divers glide through the island's watery frontier with "reefs ... creating towering walls that offer ... a fairytale seascape to explore" (FrommerMedia, 2014). Travel guides provide insight into a dichotomous variation in shoreline amenity: the west is sheltered by the Yucatan Peninsula and offers ideal conditions for revelry and commerce; the east is found in an untamed ferocity and visitors are forewarned to play at their own risk (Davis, 2014a). While tourists and other non-residents have no problems accessing information concerning adventure and enjoyment, the availability of data pertaining to health and health care for English and other non-Spanish speaking foreigners is difficult to obtain, with a near-complete lack of documentation outside of emergency care information. Even then, many guides fail to provide an instructional safety net for those vacationers who do find themselves in health-related predicaments. This said, there are two public and four private hospitals available to treat visitors, as well as numerous pharmacies, dentists and wellness centres, and a number of smaller private clinics including hyperbaric chambers for the treatment of diving related health complications such as decompression sickness (Enjoy Corporation, 2017; Trip Advisor, 2014a). A cursory exploration into health, beauty and dental facilities on Cozumel undertaken using Google Maps – sites identified using the search string 'dental/beauty/doctor/hospital near Cozumel' – reveals a similarly illdefined scenario with a considerate underrepresentation of the island's health and wellness operations available to tourists relative to my own first-hand observations.

2.2.2. Linguistic landscapes

The linguistic landscape as a conceptual analysis was initially suggested by Landry and Bourhis (1997) "as a way of measuring ethnolinguistic vitality in Canada and is today a thriving field of inquiry documenting various socio-cultural aspects regarding

languages in multilingual societies" (Lanza and Woldemariam, 2013, pp.491–2). Initially, the linguistic landscape was defined as the result of a combination of all language found upon public signs, private signs and advertising, as well as instances of street and other geographic place names which, through quantification, reveal both an informational and symbolic function (Landry and Bourhis, 1997). Subsequent cultivation of the concept has involved rigorous theoretical injections and an enhanced exploration into the ideological and discursive properties of language and landscape (Jaworski and Thurlow, 2010b; Shohamy and Gorter, 2009).

As an informational function, the visual structure of language instances is said to offer awareness of the linguistic and diglossic nature of a specific bi- or multi-lingual place, as well as uncover complex social frameworks between in- and out-group members, and their territorial language boundaries (Landry and Bourhis, 1997). The arrangement of several languages, or the dominance of a particular language or dialect may demarcate a social, cultural or ethnic space, while in a more complex fashion it reveals a necessary performance of language that is essential for effective communication and interaction within a given place. Further, linguistic pre-eminence, as well as the distinction between languages of top-down (official) and bottom-up (private) signage within public space is said to expose the power and status of specific linguistic communities, revealing the authoritative hierarchies of language groups involved in these spaces (Ben-Rafael et al., 2006; Landry and Bourhis, 1997). Symbolically, linguistic characteristics of landscape may function as a marker of social or ethnographic power structures, revealing in- or exclusion of particular language groups and providing clues about institutional control, acceptance of specific language modes, and the value of languages and their users (Landry and Bourhis, 1997). For speakers of the dominant language, visible inscription may offer reinforcement of esteem, worth and social identity, while a lack of visibility may serve to debase and devalue the language and its users (Landry and Bourhis, 1997). Leeman and Modan (2009) build on this, and, following a geographical approach that views landscape as a dynamic social construction, note that instances of language in the landscape not only symbolically represent group hierarchy and status, but are borne of self-interest, identity and inter-group power relations that privilege particular world views and materialities.

While earlier studies of the linguistic landscape have been concerned with quantifying language instances in order to discern informational and symbolic

functionality, contemporary reflection on the concept has ignited a qualitative spark that has engaged semiotic analysis (e.g. Jaworski and Thurlow, 2010b) and broader investigation into the discursive (e.g. Kallen, 2009) and ideological (e.g. Coupland, 2010) nature of space. Here, the linguistic landscape becomes inherently semiotic with linguistic signs and their materialities unable to be abstracted from one another or the wider discourses in which they exist and are interpreted. This reflects both an interest in the indexical nature of language in public space (the ability to point towards, or stand in for, another object or abstraction) and an importance in the multimodality of language (Jaworski and Thurlow, 2010a), as well as the significance of authorship and interpretation as performances of ideological and discursive negotiation (Dagenais et al., 2009).

In addressing the linguistic-material character of Cozumel's pharmaceutical landscape, analysing both the informational and symbolic functionalities, as well as the semiotic and discursive nature of tourist facing advertisements and insignia, I believe the linguistic landscape concept promises a novel interpretation of health care (within) tourism spaces. However, while the narrative below is borne of my research positionality as a white, English-speaking foreign body in Cozumel, a geopolitical identity I share with many of the island's vacationers (Cruise Lines International Association, 2015), it is important to acknowledge that the Cozumel tourist is not a homogeneous subject and may embody diverse, multiple and overlapping racial, abled, sexual and gender identities which will influence experiences and interpretations of linguistic and broader landscapes. With this in mind, and with acknowledgement of my interpretative position, I believe that the linguistic landscape framework allows for a nuanced understanding of touristic interpretation and experience within this public space, as well as an analysis of the (overlapping) discourses of sign production, adding to current knowledge concerning tourist encounters with the medical in wider spaces of tourist consumption.

While I must be aware of towards whom the signs under interpretation have their directive, their place within the wider landscape, and the assemblage of semiotic systems and discourses in which they may be active, the construction of a tourist narrative provides an active reminder that semiosis takes place within a sphere of active perception and interpretation from an implaced vantage (Chmeilewska, 2010) and within multiple embodiments. This enables one to avoid classical semiotic abstraction of the sign, failing to account for (the tourist's) dynamic engagement with places as well as

individual identities, corporeal contextualities and spatio-temporal histories that facilitate the interpretation of signs (see: Hult, 2009). Incorporation of this awareness into the present analysis of Cozumel's pharmaceutical landscape pushes me to focus upon the heterogeneous corporeality of the tourist as an active participant in the landscape, interpreting encountered signs through a perceived geopolitical identity and associated historicity. This approach provides a novel departure from existing linguistic and semiotic landscape scholarship which is often dominated (perhaps without greater thought) by the researcher's objective position.

2.2.3. Linguistic landscapes of Mexico and health care

As a maturing catalogue of research reveals, the linguistic landscape concept has been well utilised in the exploration and interpretation of numerous diglossic places. However, while the concept has been well deployed in the investigation of tourist areas (e.g. Kallen, 2009; Moriarty, 2012), it not been well applied to either the Mexican or health care contexts, with a few notable exceptions. Investigating the linguistic landscape of the Mexican border town of Reynosa, Martínez (2003) explored the changes in language structures found on commercial signage. He argues that processes of global consumerism in the town are "rapidly changing the linguistic landscape by introducing English structures into spaces not traditionally identified with English speaking consumers" (Martínez, 2003, p.59), as well as fuelling the creation of "innovative morphologies" (Martínez, 2003, p.64), in areas of higher capital. Jumping the border, but continuing his work within English-Spanish diglossic space, Martínez (2014) examined the linguistic landscapes of health care in Hidalgo County, Texas. Using photovoice as a participatory action research method, Martínez (2014) found that "it is evident that the [linguistic landscape] in [these] health care facilities is more than a mere backdrop to the experience of linguistic inequality that occurs within that space. The [linguistic landscape] is a spatial practice that constitutes unequal power relations in clinical spaces and that creates a subordinated position for Spanish speakers in these spaces" (2014, p.22).

Also focusing on health care, Schuster (2012) investigated multilingual signs and language accessibility within the linguistic landscape of Hadassah Hospital in Jerusalem, a facility which caters to Hebrew, Arabic and English speakers. This analysis revealed the hospital to be inconsistent in its representation of languages, with directive and

prohibitive signs being found in tri-lingual format, but others (especially older signs) lacking English or Arabic representation. While Martínez (2014) argued for what might be considered an ideological subordination of particular language speakers within the health care landscape, Schuster suggests that perhaps "non-accessibility is not a matter of deliberate power ideology against language minorities, but rather a concept that visitors could manage with Hebrew-only signs" (2012, 322).

While Martínez (2014) and Schuster (2012) have each offered an understanding of the internal linguistic landscapes of medical institutions, health care and health practices continue to exist outside of institutionalised space. This current analysis contributes to a broadening of knowledge concerning health care linguistic landscapes by expanding the area of analysis outside of the institution and into the public sphere. By analysing external pharmaceutical signage, this investigation vacates the aforementioned spaces, offering an insight into how medical and associated signage plays out within the public streetscape to draw those viewing it inside. With this in mind, the following illustrates my methodological process for exploring the linguistic landscape of pharmacies in San Miguel's central tourist enclave.

2.3. Methods

To undertake this analysis of Cozumel's pharmacies, which were selected for their ease of access, visibility and commercial nature, I visited the island for a period of one month during March 2015 as part of a wider data collection trip. During this time, and consistent with the dominant ethnographic approach in linguistic landscape studies, I observed and visited many of the health care establishments in San Miguel, including numerous pharmacies. To supplement my observation, I took extensive photographs of the interiors and exteriors of as many of these sites as possible, as well as any street signage such as sandwich boards. It is important to note that, because this interpretation of Cozumel's pharmaceutical landscape is positioned from the eye of the international visitor, pharmacies contributing to this analysis were limited to the area of San Miguel most frequented by visitors to the island (approximately one block south and ten blocks north of the Punta Langosta cruise ship terminal, and three blocks eastward from the water). While it feels somewhat remissive to ascribe such analytical-geographical limits to an openly porous space, this areal delineation places the landscape of analysis firmly

within San Miguel's public sphere (Habermas, 1989) and "central area" (Ben-Rafael, 2009, p.41) of socio-touristic activity.



Figure 2.1: Map showing Cozumel Island's main tourist area and pharmacy locations.

Upon returning from the field, my photographs were sorted and 35 images representing 17 individual pharmaceutical establishments were selected for analysis. These photos revealed only the exterior signage and storefronts of these establishments, which was intentionally established as the focus of analysis. To start the analytic process, I engaged in a consultative dialogue with six colleagues (two of whom had accompanied me to Cozumel) to co-identify themes and indexical references emerging from the images, as well as confirm interpretations. However, remembering Chmeilewska's (2010) reflection on the importance of the individual, corporeal body, its

implacement within the landscape of analysis, and subsequent dialectical realities of interpretation, I later decided to dismiss any original commentary from colleagues who had not spent time upon the island, relying on their insight only for reification of ideas. If I was to construct a reliable replica of the Cozumel touristic experience, stressing the importance of phenomenological engagement with the linguistic landscape, I wanted to be sure that my account was credible. Following this dialogue, I compiled its interpretive insight, alongside my observational fieldnotes and multiple readings and re-readings of the 35 images of Cozumel's pharmaceutical signage to construct an appropriate landscape analysis. The following section details an interpretation of Cozumel's pharmaceutical linguistic landscape through the analysis of a number of features found within San Miguel's touristic centre, as they can be observed, affect, and provide experience to, the foreign visitor.

2.4. San Miguel's pharmaceutical linguistic landscape



Figure 2.2: San Miguel's main tourist boulevard. Many stores are closed as no cruise ships were docked this day.

The town of San Miguel sits upon the western coast of Mexico's Cozumel Island, the main boulevard (Figure 2.2) looking out across the watery expanse towards the

Yucatan Peninsula and the growing tourist Mecca of Playa Del Carmen. Visitors to San Miguel are voluminous (SEDETUR, 2015): they arrive daily by ferry from Playa Del Carmen to take in the peaceful small town vibe, by aircraft to snorkel, dive and relax. and by cruise ship (Davis, 2014b) as one of many stops on a Caribbean vacation departing from Texas or Florida. The town's aesthetic provides a concrete middle-zone, somewhere between Mexico's bustling and built up metropolises and its dusty, halcyon towns. The main tourist quarter, home to the central ferry and cruise terminals, stretches roughly ten blocks along the western coastline from north to south, and three or four blocks east to west. It is not difficult to see that despatialising processes have been active here, market forces and global capital driving to separate the built environment from historically rooted space (Wood, 2000): Starbucks is not challenging to spot, nor Hooters restaurant or a plethora of enterprises owned by international investors and cruise lines such as Disney or Princess. Chmeilewska notes that establishments such as these within tourist landscapes "act as orientating markers, signposts that allow to create and negotiate ... space of familiarity within ... foreign territory" (2010, p.279). Like Martínez's (2003) Reynosa, English language is prominent within San Miguel's linguistic landscape, a participant in the hegemonic project which serves to elevate English as the dominant language of global capital. Hence, the perception of tourists as powerful economic agents drives linguistic landscape construction in places such as Cozumel, and local strategies of linguistic inclusion reveal the work of international tourism discourses that push to imbue such spaces with "values such as international orientation, modernity, success, sophistication [and] fun" (Cenoz and Gorter, 2009, p.57). Further, this privileging of English within the landscape reveals the power of tourist ideologies to actively subordinate and silence local linguistic identities in the pursuit of capital (Jaworski and Thurlow, 2010a).

Each day, as shiploads of new vacationers saunter around San Miguel's tourist area, their auditory and visual senses will encounter a bombardment of touristic signage and resonant merchants; glances and gazes flutter between shops and hawkers instilling awareness of the multitude of souvenirs and experiences which can be bought as a lasting memoir of their moment of respite. And within this landscape of aural, linguistic and visual artefacts, proffering sombreros, tequila and snorkelling excursions as material and experiential expressions of Cozumel, one may find the medical standing strong amongst the mementos.



Figure 2.3: A pharmacy in downtown San Miguel.

One of the more visible signs of the medical within San Miguel's tourist landscape are the plenitude of boutiques espousing themselves as a 'drugstore' or 'pharmacy' (Figure 2.3). The somewhat epithetic 'farmacia' (sometimes 'multifarmacia'), one of the more striking instances of Spanish in the pharmaceutical (and wider tourist) landscape, often sits floridly above its English counterpart. Typically, this duplex-title does not denote an official store name but offers a statement of the establishment's retail 'genre' (Bex, 1993), 719). However, this linguistic parallel can be understood as more than a categorical position. Prior to its association with medicine, this bilingual sign offers the tourist "an immediate sense of transcendence from the mundane, and a token of authenticity in the new surroundings ... [while] simultaneously providing the tourist with a comprehensible linguistic experience" (Kallen, 2009, p.271), 271). Further, the positioning of Spanish text above English may act to elevate the former to an idealised status - a reification of the exotic for visitors as well as a nod towards local culture and identity (Coupland, 2010; Van Leeuwen, 2005). Very few pharmacies within San Miguel's tourist area fail to conform to this dual naming convention. It is obvious, however, that the English denomination is prioritised as it is found bold in contrast to the signs of surrounding merchants. This ubiquitous presence of English among the island's pharmacies signals these stores are deeply engrained in an history and culture of

globalised tourism – one in which the tourist has become the primary consumer and the ability to ensnare their business can lead to make or break. For visitors, there are no complexities involved in deciphering the nature of these establishments. This distinct and direct use of English signage indexes both a known entity and a familiar service, as well as offering an indication of the ability to conduct business in English (Landry and Bourhis, 1997), although this should not always be assumed (Sebba, 2010). While this may be enough to coerce the traveller into medical purchasing, in concert, it is the accompanying Spanish that may help to pique a curiosity about purchasing pharmaceuticals in Mexico. Here, the tourist encounters a complex interpretative moment in which the fundamental meaning behind the sign (this is a pharmacy) becomes intertwined within a weave of discursive meaning, media and myth of Mexico, fuelling an inquisitiveness about the availability and legitimacy of that which might be purchased inside.

As the visitor navigates the short blocks of San Miguel, they may observe that the typographic nature of drugstore signage appears to be in mimicry: red or blue capital letters, bold in font, transcribed overhead or upon storefront glass panels. While the signs' typographic design underscores a middle ground of modern professionalism, their low-technology inscription indexes the classical Mexican rótulos, hand painted signs that emanate the jaunty and festive nature of the island while simultaneously offering themselves as an authentic cultural artefact. Viewed side-by-side in retrospective photographic form, it is easy to see the small discrepancies between singular instances of these typographic instances. But for the tourist, as their movements throughout the landscape offer inquisitive yet fleeting glances in all directions, these discrepancies in the text may not be become apparent. This perceived repetition of drugstore signage may not only serve to elevate awareness of pharmaceutical establishments within the tourist's spatial consciousness, but also create the appearance that establishments branded in such a way belong to a larger, and perhaps more legitimate and quality franchise. Following Goffman's (1963; 1981; in Ben-Rafael, 2009) principle of 'presentation of self', this repetition qua legitimacy of storefront signage indicates the proprietors' participation in a 'collective identity', both with each other and with potential customers. Here, sign repetition enables commercial actors to present advantageous images of the self in order to attract clients. By closely mimicking the composition of fellow pharmaceutical establishments, this motif aids in espousing the (collective)

legitimacy of practice in opposition to their more informally presented competition, as well as attempting to identify with the tourist's expectation of acceptable health care through the use of modern design and typefaces.



Figure 2.4: A list of medications available at a pharmacy.

Alongside these eye-catching signs (sandwich boards, windows and walls, and tethered canvas sheets) there exists another common feature of Cozumel's pharmaceutical landscape: lists of medications which may be procured from the vendors inside the displaying establishments (Figure 2.4). These lists are often arranged alongside promotion for casual souvenirs, confusing previously known realities of the pharmaceutical with cultural and economic expectations of the Mexican tourist landscape. Specific types of medication appear to have been highlighted in

consideration of Cozumel's expected touristic reality – of obvious demography and wanton pornography. Pharmacy walls and windows are prolifically marked with the names of medications that are both difficult to obtain as well as those that are recognisable and sought-after as the result of direct-to-consumer-advertising in the United States (Frosch et al., 2010). This medley of medical availability suggests that Cozumel's pharmaceutical vendors are active participants in the characterisation of Mexico as a place to access controlled substances, and simultaneously cognizant of specific consumer demands for pharmaceuticals amongst foreign populations. This is further acknowledged by consistent referral to medications by their popular brand name, despite the fact that the proprietor may only sell the generic form, revealing an understanding that generic pharmaceuticals often suffer from negative perceptions concerning safety and efficacy (Hassali et al., 2009). Almost all pharmaceutical establishments within San Miguel's tourist landscape displaying drug lists do so in the form of hand-painted rótulos or the output of low technology printing, techniques which allow for easy alteration as market trends ebb and flow. Further, this production technique enables vendors to consort with the wider tourist community and affiliate with its values (Backhaus, 2006), revealing a casual- and/or playful-ness which portrays medical purchases as a normalised part of the whimsical tourist experience, offering the tourist a chance to become a conscious consumer in control of their own health care priorities, just as they are in their recreation.

Like the primary signage above, recognition of these familiar medications may engender curiosity within the visitor. Can these low technology or more simplistic representations of pharmaceuticals, which often play an important part in peoples' lives, really be promoting the authentic product? Myth and media often remind the consumer to be wary of Mexican medication (Food and Drug Administration, 2016; Melville, n.d.; Weber, 1999). The discursive expectations of holidays abroad enable vacationers to believe that touristic souvenirs often come in the form of kitsch accessories: "cheap, mass-produced, and crudely made" (Lasusa, 2007, p.274); a position which may produce an initial doubt regarding the legitimacy of these seemingly easily available medications. However, this representation of internationally regarded pharmaceutical brands may also construct a moment which encourages the tourist to discover whether these medications might be offered, not as underwhelming replicas, but as products with authenticity and legitimacy. Branding, here, affords a moment of colliding discursive

knowledge, an offer of more than that which it signals (Kallen, 2009); not only does the promotion of branded medication help to associate the vendor with a professionalism and authority located within the realm of international medicine, but it may provide for the tourist a recognition of routine familiarity, home life and the realities of medicated living. It is this perception of the familiar that may lead the tourist towards an exploration of legitimacy and to discover an ability to fulfil their needs.



Figure 2.5: Imagery representing the medications and other items which may be purchased in store.

Elsewhere, increased production value finds pharmaceutical lists transfigured into window decals imitative of the medical products available for purchase inside (Figure 2.5). While only found on two of the pharmacies in San Miguel's tourist area, it is an interesting micro-phenomenon reinforcing the belief that visitors to Cozumel have a desire to purchase pharmaceuticals. At face value, these images (and the text contained in them) reveal a presentation of self in line with San Miguel's broader pharmaceutical identity, yet their higher production standards serve to set these vendors apart from their competition. While the inscription of a brand name on competing pharmacies might provide a familiar sign for the glancing tourist, an image of the product is not only a more familiar icon that indexes visitors' medical histories, but may also work towards a more

promising legitimacy – what you see is what you get. Here, assurance of the product's legitimacy is offered through its association with a familiar object from home. By revealing to prospective clientele imagery of pharmaceuticals as they may be intimately known to them, these innovative vendors compress the space between holiday and habitat, reminding potential customers of the health care complications of everyday life while simultaneously providing a potential for a small part of their Cozumel respite to become part of daily routine. Representative and reminding of the complexity of medicated lives, these imitative decals become indexical of more than the medication depicted: accessibility, scheduling and effect. Here, the familiar blister-pack, bottle or box nudges at complex spatio-temporal histories, playing upon individuals' specific interactions with, and narratives of medication. For some, this moment may provide a legitimate alternative to the potentially difficult, embarrassing or expensive experience of obtaining pharmaceuticals in the visitor's own health system: an offer of increased agency and control over one's own prescriptive course of action.

For those establishments that do not offer linguistic or pictorial representations of well-known pharmaceuticals, an attempt to draw in the casual tourist may be found in the repetition of specific terms or phrases not typically associated with the pharmaceutical industry. While the surrounding souvenir emporiums rely almost wholly upon cultural and consumptive exclusivity to move holiday mementos, some pharmaceutical signage provides a novel departure from this, offering to the potential customer promises of value or discount medications (Figure 2.6). This labelling, at the surface, offers that pharmaceutical purchasers will encounter lower product costs; a juxtaposition with typical Western health care establishments, which, from the position of many of Cozumel's visitors, may provide pharmaceutical goods and services that are far from discounted or value orientated (Briesacher et al., 2007; Klein et al., 2004). However, these exclamations of value or discount are an apt reality of the multiplicity of discourses in which these signs are constructed and interpreted. While such statements may have been devised in order to proffer cost saving that can provide real day-to-day economic relief, the function of this push towards frugality is multi-connotative. Here, words such as value and discount appear to communicate parsimonious sentiment, but can concurrently serve to devalue the products sold in store as certain discursive knowledges may find customers associating the claim of cheaper products with lower

quality (Dodds and Monroe, 1985), thus revealing an issue of compatibility in attempting to market health care as simultaneously low cost and high quality (Crooks et al., 2011).



Figure 2.6: A pharmacy positioning itself as "value".

Another familiar statement within the pharmaceutical landscape of San Miguel, tourists may find themselves questioning the phrase "prescription and not prescription" as it stands out upon many signs (Figure 2.7). A unique maxim, this phrasing is repeated myriad times upon the signs and windows of pharmacies, offering to potential customers a confusion in interpretation. Ascribing vendor intent, this phrase may simply extend the qualification that inside the establishment, patrons may purchase pharmaceuticals that both do, and do not, require a prescription – a simple statement of medication availability. And this may certainly be the case for some vacationers as they absorb the environment around them. But, following Chmeilewska (2010), we know the implaced tourist perceives the signs around them through the lens and embodiment of time, history and context. Here, existing discursive imaginaries which may produce Mexico as a space associated with corruption (Transparency International, 2013), in which regulations are shirked and rules may be broken sans consequence, suggest the possibility that "prescription and not prescription" signals to the visitor an ability to purchase any pharmaceutical one requires or desires, possessing prescription or not.

Similar to interpretations above, the signage may advance notions of opportunity and choice, begetting the tourist a new health care autonomy, an opportunity to make personal choices about the pharmaceuticals they wish to medicate themselves with, in a mind-set which enables escape from the prejudice or judgemental eye of the familiar physician or pharmacist. This conjures to mind images of a similar scenario found within medical tourism research – the long-suffering patient who makes the individual choice to travel abroad to seek surgical respite despite advice or lack-lustre support from doctors at home (Crooks et al., 2010).



Figure 2.7: A sandwich board stating "prescription and not prescription".

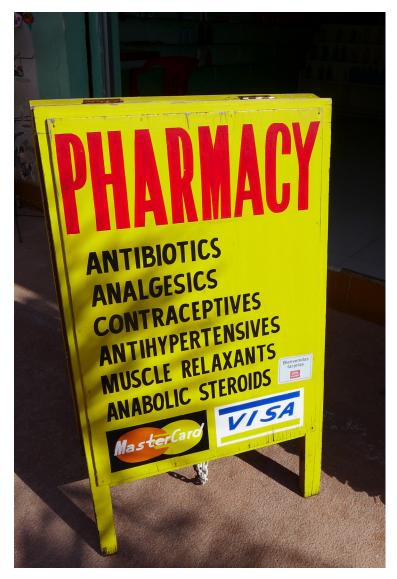


Figure 2.8: A sandwich board showing hand painted MasterCard and Visa logos.

A further attempt to foster interest in pharmacies as spaces of consumption finds the mainstream alongside the pharmaceutical. This comes in the form of internationally recognizable logos or symbols which "depend on the construction of myths and fantasies for the consumption of fleeting masses of tourists" (Jaworski and Thurlow, 2010a, p.18). Recognisable brands such as Coca-Cola and Heartbrand ice cream are oft-represented alongside hand painted and printed indications that purchases may be completed using Visa or Mastercard (Figure 2.8), each helping to organise tourists' "gaze around well defined and well-recognizable markers of space" (Jaworski and Thurlow, 2010a, p.18), 18). Like the aforementioned banners denoting the farmacia/drugstore, this branding offers to the tourist a familiar entity while the production techniques accommodate a

desire for the exotic (Jaworski and Thurlow, 2010a; Spolsky, 2009). However, unlike primary signage suggestive of participation in a collective-identity, these global symbols appear to be employed as an advocate in enhancing the authenticity (Leeman and Modan, 2009), status and legitimacy of those establishments brandishing them (Ben-Rafael, 2009); they are symbolically constructing themselves as entangled and participatory in the globalised world (Jaworski and Thurlow, 2010a). This display of recognisable international brands promotes for the pharmacy a conjoined legitimacy in which the medical product gains validity through association with a trusted international brand such as Cola-Cola. These signs offer to the viewer and chance to see these boutiques, and the products they sell, as *more-than-Mexico*, to relate to them as a global entity within which international standards will be met and held onto.



Figure 2.9: An example of the information displayed on the front of some of San Miguel's pharmacies.

A similar yet more esoteric index of accountability is the public display of information that may include the establishment's pharmacist, the university at which they undertook their study and their professional certification number (Figure 2.9), although these features are not ubiquitous among Cozumel's pharmaceutical establishments. Standard practice dictates that health care professionals in Mexico must display these

credentials, and in Cozumei's pharmaceutical landscape this feature enables one to determine those pharmacies that employ trained pharmacists capable of recommending and administering medications, a practice which is not essential to operating a pharmacy in Mexico (Homedes and Ugalde, 2013). However, without prior knowledge, the tourist may find these features to be an undecipherable marking upon the storefront. But while the translation (both alphabetic and numeric) may be unclear, their face value appearance suggests a marking of 'top-down' origin revealing a degree of public regulation (Landry and Bourhis, 1997), and in turn offering qualification of legitimacy, authenticity, safety and quality. The mere appearance of these mysterious qualifiers may connote an assurance of professionalism, an affordance of accountability and a recognition that the displaying vendor acknowledges and meets a specific set of authoritative standards. For viewers, the sight of these regulatory signs may serve to contradict previously constructed ideas about the liberal nature of pharmaceutical regulations in Mexico, and in turn the perceived dangers of Mexican pharmaceuticals. Further, the inclusion of this official script may serve to construct a binary between those establishments who do and do not display this information, however, it is unlikely that the casual tourist will notice this discrepancy until they attempt to purchase controlled substances (Homedes and Ugalde, 2012).



Figure 2.10: Drugs & Deli pharmacy in Punta Langosta.

As the end of the day approaches, tourists scattered amongst the various spaces of San Miguel, as well as the wider landscape of Cozumel, find themselves at the conclusion of their ambulatory excursion. While some retreat to their hotels, apartments or the cross-channel ferry, many will return to their cruise ship through the shopping mall-like linearity of Cozumel's Punta Langosta cruise terminal. A return to Punta Langosta signals a transitionary return to the ship; the landscape morphing from the colonial, chaotic and colourful towards a stark and systematic minimalism. As the cruiser heads from the lower floor of the complex towards the upper level from which they can board the ship, they may perceive the pharmaceutical landscape morph from the nostalgic charm of small town Americana into a white space aligned with the austere chastity of sterilized health care and the playfulness of seafaring modernity. Here, San Miguel reveals its penultimate push towards pharmaceutical consumption. As the cruise tourist takes a final glance around Punta Langosta's lower level, pharmacy signage plays upon an imagined past, a sign indexing a nostalgia for simpler times in the United States. Suggesting this nostalgic charm is the *Drugs & Deli* pharmacy (Figure 2.10), the only medical retailer in San Miguel's tourist zone to circumvent the aesthetic and simplistic naming conventions of its commercial peers mentioned above. Ornamented above the door hangs a large sign displaying the name Drugs & Deli which has been fabricated to replicate the design aesthetic of a mid-20th century American drugstore, albeit the product of high technology materials and machinery. Again, the familiar is the agent. For tourists encountering this establishment, the aesthetic of the sign explicates an alignment with values often associated with bygone times while its material and production standards connote quality. Thus, within a discursive fabrication of nostalgia, this sign "exiles [the viewer] from the present as it brings the imagined past" (Hutcheon and Valdés, 1998, p.20), pushing to align this pharmacy with a trustworthiness and quality that are believed to have disappeared from contemporary life while simultaneously suggesting that these vanished qualities may exist inside.



Figure 2.11: Pharmacy in Punta Langosta at San Miguel's cruise port.

Continuing upwards into the terminal, visitors will note that Punta Langosta's upper level embraces modern American materialism: an aesthetic revealing a white, sea-sculpted bizzaro reflection of the ship from which they disembarked earlier, as well as a final chance for the purchase of physical memories of time on shore. Unlike the colourful and fancifully decorated stores that line the streets of San Miguel's tourist area, the boutiques in the upper level of Punta Langosta are of a more professional and stark aesthetic. Here, there is an attempt to reference the tourist's recent spatio-historic encounter of the cruise ship in which frivolity and unfettered play encourage consumption without risk – a discursive re-establishment of the laissez faire experience of the cruise holiday prior to actual immersion in the space of the ship. The hope here is that the tourist, for whom the cruising experience has equipped with a spirited enthusiasm for shameless and undiscerning consumptive practices, may be reintroduced into this mind-set as they take their final steps on Cozumel through Punta Langosta. Taking advantage of this carnivalesque inversion of the boat, the cruiser's final encounter with commerce on the island is (unsurprisingly) the chance to make a crowning pharmaceutical purchase from a drugstore which appears in opposition to all others (Figure 2.11). In keeping with the aforementioned minimalism of Punta

Langosta's upper deck, this store offers an aesthetic indexical of the high-quality production values of the international cruise industry and the sterile environs of hightech, high-cost and high-quality health care. Labelled simply as "pharmacy", the lack of a primary Spanish equivalent reveals the store's commitment to English speaking tourists and an attempt to align with the international standards and professionalism of the contemporary cruise industry. This signage, in modern, blue, professionally constructed letters lacks the more bombastic storefront regalia of its competition, such as pronounced medication advertising or alignment with global brands. It chooses only to rely on a catchphrase (unseen on any other establishments) that simply states: "the one you can trust". This statement, like other signs in San Miguel's pharmaceutical landscape, is indexical of mythologies concerning legitimacy and safety in Mexico. However, while other stores within the landscape are attempting to define themselves as legitimate in the face of cultural perceptions, the catchphrase and aesthetic of this pharmacy work differently. Dually, they serve to construct a legitimacy and trust binary that pushes to divorce from and delegitimise the local competition, while offering an identity built upon intertwining discourses of contemporary American medicine and modern cruising. The desire of this signage and aesthetic is to be indicative of higher and better standards and practice, seeking to show that they provide a safe and superior product (duplicate to what one might expect at home). However, whether or not this binary of values and ideals, and final reminder of the redress of real-life, is attractive enough to persuade the cruiser to purchase medications is an avenue for further research.

2.5. Conclusion

This article, via a narrative of the holiday excursionist, has analysed the pharmaceutical landscape of San Miguel on Mexico's Cozumel Island through an examination of 35 photos representing 17 pharmacies. At face value, the pharmaceutical features of San Miguel's tourism precinct appear to be enmeshed within discourses that facilitate broader touristic landscape construction as well as expected consumptive practices within the town. Here, approaches to linguistic and material presentation of storefront signage index conventional touristic desires for respite and relaxation, enjoyment and excitement. Simultaneously, this signage also plays upon cultural beliefs that position Mexico as a destination offering consumers a frivolity in their spending

through enhanced product accessibility and reduced costs. Further, insignia that gives identity to pharmacies, and helps advertise the products available inside, appears to blend and engage with the surrounding tourism activity, promoting medicinal goods as a kind of souvenir alongside myriad gifts and trinkets symbolic and self-affirming of the tourist experience (Lin and Wang, 2012). In this light, the medical becomes part of the tourist landscape, a consumer experience which presses to offer tourists that which might not be available at home and/or a memento of their trip abroad.

Experience of landscape is complex, however, and following the tourist has provided a novel lens in understanding how the pharmaceutical features of San Miguel might be encountered and comprehended as more than a memento of respite. Cognizant that individuals' spatio-temporal histories act as modifiers of their contemporary experience, the tourist narrative suggests that while the pharmaceutical is presented as a souvenir, the symbolic interpretations of these medical expressions are not static. While the souvenir acts as an exciting reference for static memories of spatial experience, the tourist may find that signs of the medicinal symbolise more than a holiday abroad or a product to purchase. They can offer visions of a particular future: visions that are reliant upon individual identities, embodiments and histories, as well as notions of familiarity, home and health, and the construction of an autonomous, curious actor. However, although it has been revealed that San Miguel's pharmaceutical landscape may offer burgeoning control over one's medicative practices, how this may play out is entangled between individuals and their beliefs about legitimacy and trust in Mexico and of the products that are on offer. If legitimising practices are accepted, visitors to San Miguel may find themselves able to produce new forms of agency and power over personal health and health care access, while extending new trajectories for individual health outcomes.

Pharmaceutical and other health care establishments that operate within established tourism destinations fill an interesting space within the tourist landscape. This article, through an analysis of the linguistic landscape of pharmacies in San Miguel, has provided an introduction for understanding how health care consumerism operates within places more commonly known for their tourism appeal. However, while offering transferability through contextuality, this exploration sits firmly within my own interpretative imagination and does not serve to speak for the multiplicity of distinctive identities and bodies welcomed onto Cozumel Island each day. Thus, space is left for

future research to expand upon my observations through empirical engagement with a less hypothetical visitor (of myriad embodied, contested and overlapping racialized, abled, gendered and sexualised realities) as well as with those who own and work within these myriad pharmaceutical establishments.

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Chapter 3. Customer engagement

Thus far, I have begun to unpack the health geographies of Cozumel Island, with explicit attention to this dissertation's first objective of understanding how settings of care on Cozumel Island present themselves aesthetically to international patients. With consideration paid to the island's pharmacy aesthetics, I have deployed an ad-hoc ethnographic approach, in which I myself act as reciprocal tourist-cum-narrator. This has enabled a view of Cozumel Island's pharmaceutical landscape as a space of emergent and potentially transformative health geographies for those visiting the island with short temporal itineraries. Approaching this engagement with Cozumel's pharmaceutical aesthetic from the perspective of the tourist emphasises the complexity that mobility adds to place. It pursues a drawing-out of the island's more-than archipelagic nature. suggesting a collusion of complex, multi-scalar connectivities and mobilities "near' and 'far' as well as 'past' and 'present'" (Rankin, 2016, 208) that allow Cozumel Island's international health landscape to emerge. Here, I am suggesting that the pharmaceutical landscape of Cozumel Island works as an intentionally international phenomenon, as aesthetic features strive to engage with tourists' as 'near' and wholly 'present' transnational individuals by invoking connectivities with 'far' and 'past' lifeworlds of medicine. Like other islands (e.g. Kearns et al., 2014), Cozumel Island can be read as presenting visitors with space and time for renegotiation of meaning through real and referential archipelagic topologies; the trope of island health becomes strengthened not through boundedness and seclusion, but through mobility and connection.

However, I will continue to concede that although chapter 2 offers insight into the mobilities and experiences that collide to inform and interpret Cozumel Island's pharmaceutical landscape as an international phenomenon, its analysis remains an interpretation intrinsic to my personal imagination and thus lacks an empirical engagement with those for whom the island functions as a site of care. Acknowledging the importance of multiple viewpoints in case study research (Wolfram Cox and Hassard, 2010), chapter 4 continues the preceding analysis of Cozumel's pharmaceutical landscape but expands breadth of inquiry towards the empirical experience of this setting of care. With data collection difficulties precluding me from from accessing Cozumel Island's cruise tourists, here I gain insight from the island's local ILRMs, investigating how they interpret and experience the island's pharmacy

services. Shifting focus towards the island's ILRM community not only offers acquisition of empirical data, but also allows for better engagement with the objectives of this dissertation, especially objective three which is concerned with international patients' experiences and understandings of care on the island.

Further, engagement with Cozumel Island's ILRM community allows for an understanding of how the island's health landscape functions for real international patients. It enables insight into the subjectivities and relationalities that construct dynamic landscape experiences (Conradson, 2005) while paying attention to the multiscale, spatio-temporal complexities outlined by Milligan and Wiles (2010) and Bowlby (2012) that define landscapes/settings of care. Especially, such viewpoints allow exploration of mobilities inherent in the international experience of care, grasping at what it means to choose a lifestyle that prioritises mobilities and trajectories both near and far, as well as the freedoms and constraints associated with the various openings and closures afforded by Cozumel as an island setting. Thus, this next chapter examines the beliefs, perceptions and experiences held by Cozumel Island's ILRM community as they encounter the island's pharmacy sector, paying attention to the various sociostructural and mobile components that affect their care as patients. Specifically, I find that Cozumel's ILRM community hold concerns for quality, accessibility and communication when interacting with the island's pharmacy sector, and suggest that such concerns arise, and personal medical practices are augmented, via complex spatio-temporal geographies of knowledge as well as the mobilities both near and far within which they are embedded.

Chapter 4. Pills in paradise: Exploring international lifestyle and retirement migrants' perceptions of the pharmaceutical sector on Cozumel Island, Mexico²

4.1. Abstract

International lifestyle and retirement migration is a growing phenomenon, yet little is known about migrants' experiences of health care in destination countries. This includes use of and access to pharmaceutical selling establishments. This article explores international lifestyle and retirement migrants' experiences and perceptions of the local pharmaceutical sector on Cozumel Island, Mexico. Qualitative data, collected through semi-structured interviews (n=26), finds that participants are concerned with accessibility, quality and communication within the island's pharmaceutical sector. Subsequent analysis suggests that these concerns arise through comparison with previous health care environments and that migrants attempt to remedy them by spatially reorganising their pharmacy engagements through practices which may contribute to adverse health outcomes.

4.2. Introduction

International migration for lifestyle and retirement purposes has experienced substantial growth in recent decades (Torkington, 2012). This migratory phenomenon involves people, typically of relative affluence, undertaking permanent or seasonal relocation from the Global North towards economically peripheral spaces where they may begin to renegotiate existing lifestyles (Benson and O'Reilly, 2009). Driven by rapidly aging populations and facilitated by growth in communication technologies and low cost transportation options (Croucher, 2010), lifestyle and retirement migration have become increasingly viable options for those who are "search[ing] for the good life" (Benson and O'Reilly, 2009, p.610) – understood as people transitioning to better climates, a more relaxed pace of life and lower costs of living (Sloane et al., 2013) while

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escaping rising health care costs and potentially insecure economic futures in their home countries (Croucher, 2010). In the Americas, international movement generally consists of American and Canadian citizens shifting southward into Latin American and Caribbean countries such as Ecuador, Belize, Dominican Republic, Jamaica, Costa Rica, Panama and Mexico (Rodríguez-Rodríguez, 2015).

For health geography and the broader social sciences, engagement with the mobilities turn has resulted in an escalation of research at the nexus of international migration and health. This has enabled an increasingly robust grasp of health and its determinants for mobile populations within existing and novel spatial arrangements. This research has commonly focused upon the experiences (e.g. Lebrun, 2012; Sime, 2014), accessibilities (e.g. Asanin and Wilson, 2008; Vargas Bustamante et al., 2010) and various determinants of health (e.g. Hordyk et al., 2015; Malmusi et al., 2010) for migrants shifting from lesser- to more-developed global or regional spaces. While this research continues to grow, as evidenced by the establishment of journals such as Mobilities and the International Journal of Migration, Health and Social Care, there appears to be sparse interest in the health needs and outcomes of migrants of relative affluence engaging in international lifestyle and retirement migration. A few investigations of international lifestyle and retirement migrants' (ILRMs) access to and use of local health care and residential care options (Amin and Ingman, 2010; Hardill et al., 2005; La Parra and Mateo, 2008) or health as a determinant of migratory ability (Van Dalen and Henkens, 2007; Williams et al., 1997) have been published. Otherwise, health engagements within ILRM literature tend to focus upon desires for health promoting lifestyles and landscapes as part of migration decision making processes (Benson and O'Reilly, 2009; Legido-Quigley and McKee, 2012; O'Reilly and Benson, 2009). Furthermore, while international lifestyle and retirement migration is a growing phenomenon within the Americas (Dixon et al., 2006), the majority of research into these mobile populations has been geographically focused on the movements of people within Western Europe or to Asian nations.

Historical census data provided by Mexico's Instituto Nacional de Estadística y Geografía shows that between 1960 and 2015 Mexico's migrant population grew substantially from 223,468, with United States (US) citizens making up approximately 44% (97,902) (INEGI, n.d.), to 1,007,063, with US citizens making up approximately 73% (739,168) (INEGI, 2016). Of significance is the 114% increase in US-born citizens

residing in Mexico between 2000 and 2010 (INEGI, 2013a; INEGI, 2013b). Further, the US Department of State propose a larger count, stating that the number of American citizens living in Mexico amounts to over one million (United States Department of State, 2016), offering truth to the claim of a large undocumented cohort of US migrants in Mexico (Taylor, 2014). It is believed that Mexico's US migrant population is likely to increase significantly in coming decades as the American population ages (Sunil et al., 2007). One reason that some Americans relocate to Mexico is to engage in lifestyle and retirement migration (Croucher, 2010). The same is true for some Canadians and other residents of the Global North (Croucher, 2012). While substantial literature has addressed a wide variety of lifestyle factors that drive and affect ILRM populations in Mexico (Dixon et al., 2006; Rojas et al., 2013; Schafran and Monkkonen, 2011), very little has been concerned with management of health and health care (for exceptions see: Amin and Ingman, 2010; Kiy and McEnany, 2010; Sloane et al., 2013; Warner and Jahnke, 2001). For many ILRMs, due to age and other factors, health care accessibility is an important factor in their lives abroad. This is especially pertinent considering typically minimal (if any) coverage from provincial public health insurers in Canada (Ontario Government, 2016) and Medicare in the United States (Kiy and McEnany, 2010) while abroad, as well as difficulties in obtaining travel insurance for older American and Canadian citizens, and private health insurance in Mexico for people over the age of 65 (Warner and Jahnke, 2001).

As noted, few investigations of lifestyle or retirement migration in Mexico are focused upon health care accessibility for ILRMs now living 'south of the border.' This scant literature tends to be broad in both scope and results, focusing on brief vignettes of care that position Mexico's private health care providers as affordable, personalised and caring, while offering a sense of nostalgic charm (Amin and Ingman, 2010; Sloane et al., 2013; Sunil et al., 2007). In northern Mexico, some ILRMs enter or return to the United States to access health care motivated by insurance arrangements and/or peace of mind about perceived care quality (Lardiés-Bosque, 2016; Lardiés-Bosque et al., 2015). While it is understood to be the most common form of health care engagement for those living abroad (Kiy and McEnany, 2010), few insights into ILRMs' use of and access to pharmaceutical selling establishments are available. In this article we examine this exact issue, exploring ILRMs' engagement with the pharmaceutical sector on Cozumel Island, Mexico.

Abutting Mexico's northern border there exist numerous towns with disproportionately large clusters of health care services, such as Ciudad Juárez (Homedes and Ugalde, 2013) and Los Algodones (Adams et al., 2017a), that target international patients. Although not focused upon ILRM engagement, there is an established body of contextually acquainted literature examining transnational health care within these borderland spaces. These investigations commonly examine spaces of care serving under- or un-insured US citizens who make day trips into mainland Mexico for dental care and physician visits (Byrd and Law, 2009; Escobedo and Cardenas, 2006; Su et al., 2013; Su and Wang, 2011), as well as Hispanic populations returning as a result of finding care in the US to be inaccessible and/or costly (De Jesus and Xiao, 2013; Reininger et al., 2012; Seid et al., 2003). While many such consumers are found to approach Mexican pharmaceuticals with caution (Sloane et al., 2013), even some US residents with health insurance regularly cross the border to purchase medications in Mexico they believe are stronger, lower cost or do not require a prescription (Calvillo and Lal, 2003; Homedes and Ugalde, 2013; Parietti et al., 1998). For example, it is estimated that almost 30% of US border residents (Warner and Jahnke, 2001) and over 50% of people wintering in Texas (Ghaddar and Simpson, 2008) purchase pharmaceuticals in Mexico. Online tourism guides aimed at American and Canadian travellers openly discuss purchasing low cost medications while abroad on holiday (Eidell, 1999), while media reports suggest Mexico has become the Las Vegas of pharmacies (Wasu, 2012) where lack of regulation and corruption has constructed a burgeoning frontier for those seeking (potentially unsafe) low cost or prescription medications (Lunday, 2001). Mexico is thus perceived as a place in which to access pharmaceuticals, and even moreso, it is characterized as a place to easily access controlled substances and other medicines, including for those without prescriptions (Dalstrom, 2012; Homedes and Ugalde, 2013; Millman, 2002). Despite this, we still know incredibly little about if and how ILRMs navigate such unrestricted or unregulated access to pharmaceuticals during their time in Mexico.

Pharmacies, among other health care establishments in Mexico, suffer from broadly held assumptions that position the country as a space of corruption, violence and inability to properly provide for its citizens (Dalstrom, 2012). These assumptions are used to construct the Mexican health care system as lacking in the advancements found elsewhere, as well as rife with out-dated equipment, and employees and professionals

who are not held to the high standards of US medical providers in particular (Dalstrom, 2012). In order to alter these assumptions, some Mexican health care establishments operate as a shadow of US biomedicine, copying those aspects that they believe best represent the quality of Global North medicine delivered elsewhere while simultaneously accentuating positive beliefs about Mexican culture such as low prices and ease of access (Dalstrom, 2012). For example, Dalstrom (2012) emphasises the concerns that US patrons in Mexico have about the legitimacy of the pharmaceuticals they are buying. He notes that to address this, pharmacies will mimic the aesthetics and use of English found within US pharmacies while actively promoting pharmaceutical brands familiar to US customers (Dalstrom, 2012). Meanwhile, there are no regulations that dictate who can own a pharmacy in Mexico, and clerks have no educational requirements past secondary education (Homedes and Ugalde, 2013). Pharmacies that sell controlled substances such as antibiotics are required by law to employ a trained chemist-pharmabiologist, but they are only mandated to be on site for limited hours per week for work that is primarily administrative (Homedes and Ugalde, 2012).

Far from the border that serves as the focus of much transnational health care research in Mexico, this analysis considers the pharmaceutical geographies of Mexico's Cozumel Island as they are navigated by American and Canadian ILRMs. Lying approximately 16 kilometres off the eastern coast of the Yucatan peninsula, Cozumel is eastern Mexico's largest island and the Western Caribbean's most popular cruise port (Cruise Market Watch, 2013), hosting approximately 500,000 long-stay tourists (SEDETUR, 2015) and 3 million cruise tourists per year (Cruise Port Insider, 2016). No formal statistics that document the magnitude of Cozumel's ILRM population exist. Data from the 2010 Mexican Census of Population and Housing reports the Cozumel is home to 1048 residents born outside of Mexico, 459 from the US and 589 from elsewhere (INEGI, 2010c). However, anecdotal evidence (e.g. Haskins, n.d.) suggests that the island's ILRM population is significantly larger than can be identified using census data. Considering this broad convergence of transitory and (semi-)permanent foreigners, as well as activity on popular tourism websites suggesting demand for low-cost medication on the island (Cruise Critic, 2016; Trip Advisor, 2016), it is not surprising that San Miguel, Cozumel's largest town, offers visitors numerous options for the purchase of pharmaceuticals. Our first-hand observations revealed no fewer than 17 pharmaceutical selling establishments in the ten-block radius of San Miguel's downtown, with myriad

more scattered throughout the wider urban landscape. This analysis augments established knowledges of pharmaceutical purchasing in Mexico's northern border region summarized above, which until now have served as our only insight into this burgeoning pharmaceutical frontier and have primarily focused on short-stay tourists or day visitors. As health care expenses in many countries rise and inbound migration to Mexico and other key destination countries for ILRMs remains a relatively low barrier, it becomes important to understand how health care plays out for those who choose to spatially reorganise their lives outside of established and existing medical geographies. In light of this, and considering the knowledge gaps noted above, this article presents the findings of interviews with ILRMs living permanently or seasonally on Cozumel Island, offering insight into their perceptions and experiences of local pharmaceutical accessibility and contributing to broader knowledges that consider the relationship between established and periphery geographies in the construction of health care experiences.

4.3. Methods

This analysis contributes to a broader study that aims to unravel the health care geographies of Cozumel Island in Mexico as they are interacted with and experienced by the island's permanent and transient international populations. While the broader study includes engagement with local health care workers and extensive observational fieldwork, here we specifically examine in-depth interviews conducted with Cozumel's seasonal and full-time ILRM population.

4.3.1. Data collection

Following ethics approval, the lead author made two research visits to Cozumel Island (in the first instance he was accompanied by the second author), the first during March/April 2015 and the second in January/February 2016, for face-to-face interview data collection. The goal was to recruit as many participants as possible during these periods, thus using a temporal cut-off for data collection. The majority of participants were contacted via an online post on *Cozumel 4 You*, a popular Facebook group among the local English speaking community; the remainder were identified as the result of snowball sampling. ILRMs who expressed interest in participating were sent an email

containing detailed study information as well as information about the ethics approval and their rights as a participant. They were also asked to confirm eligibility. As the goal was to learn about the experiences of ILRMs living and using health care services on the island (e.g. pharmaceutical, general and specialist medical services), eligible participants must have been born outside of Mexico, seasonally or permanently moved to Mexico, and must not have been employed full time in their country of origin at the time of the interview. Only ILRMs who relocated to Cozumel as an adult were selected for participation as this criterion ensures that migration was the participant's independent decision. Subsequent correspondence enabled participants to determine a place and time of their choosing to complete the interview. The recruitment phase continued throughout both field periods, yielding a total of 26 participants to complete 23 interviews (three were conducted in groups of two).

Semi-structured interviews were selected for data collection as they are useful technique for exploring topics of which little is known, allowing the researcher to examine the individual subjectivity of perceptions and enabling the querying of emergent themes (Corbin and Morse, 2003). The interviews were completed face-to-face as this enables the researcher to ask complex questions, clarify responses, and probe for further meaning (McLafferty, 2010) while averting data distortion from non-verbal, contextual and verbal communication (Novick, 2008). Interviews lasted between 50 minutes and 2.5 hours. Questions pertaining to pharmaceutical experiences and purchasing were added to the interview guide following our on-site observations of this local sector. These questions probed participants' perceptions and experiences of the island's pharmaceutical sector, including obtaining pharmaceuticals, interactions with pharmacy workers, and any difficulties or issues they encountered.

4.3.2. Data analysis

All interviews were transcribed verbatim by the lead author. Following transcription, each team member independently reviewed six transcripts. Through discussion and consensus building we identified and agreed upon three meta-themes that characterized the data pertaining to the focus of the current analysis: accessibility; quality; and communication. These themes were then used to structure a coding scheme that was developed through a process of investigator triangulation. Following this the lead author, using QSR NVivo, coded the transcripts according to this scheme, selecting

thematically appropriate extracts which were then shared in order to finalise agreement of the scope of each theme and interpretation of the data.

4.4. Results

Participants ranged in age between 25 and 71 with a mean of 63. Twenty-one women and five men were interviewed. Six were Canadian, 18 American, and the remaining two identified a different home country. Only five participants considered themselves to be 'snowbirds' or seasonal migrants, with the remaining 21 living on the island full-time. All participants considered themselves to be residents of Cozumel regardless of the time spent there on an annual basis. The longest had been a resident for 16 years and the shortest for one year. While the sociodemographic variables describing this sample reveal certain points of homogeneity across participants, its size does not warrant making meaningful distinctions across these variables and is therefore outside the scope of this work. Thus, in the remainder of this section we examine participants' perceptions of, and experiences with the pharmaceutical sector on Cozumel Island, organised by three meta-themes: accessibility, quality and communication. This enables our analysis to maintain a geographical focus upon Cozumel's pharmaceutical landscape, and provide meaningful distinctions as they arise naturally. Accessibility is defined as the ability to procure pharmaceutical products, both physician- and selfprescribed. Quality encompasses the perceived efficacy and safety of pharmaceuticals as well as standards of care provided by health professionals as they pertain to pharmaceuticals. Communication includes language as well as effective information transmission between medical professionals and patients.

4.4.1. Accessibility

Accessibility to, and availability of, pharmaceuticals was important for participants. With exceptions, such as specialist drugs to treat diabetes or thyroid disease, often obtained through existing insurance arrangements in countries of origin, medications that participants required were typically available and accessible on Cozumel, although not at all pharmacies. While they were quick to note the abundance of pharmacies on the island: "we've got enough pharmacies on this island, it just seems ridiculous," it was widely recognised that acquisition of exact doses or specific

medications was not always easy. One participant stated that she would "sometimes have to go from pharmacy to pharmacy [and] there are some times where [they'd say] 'we're out of this', 'I only have it in four milligrams and your prescription says two. You can just break the tablet in half'." Another participant explained that: "you don't go to the same pharmacy [as last time] because you might not be able to find it [medication]. You may have to go to five different pharmacies to find something." Additionally, participant country of origin could impact access to medications. For participants accustomed to discounted or otherwise subsidised medications at home, shopping between pharmacies often acted as a search for medication prices congruous to those in their countries of origin. A Canadian participant familiar with publicly subsidised medication noted that "you gotta run around and figure out which store's got it, which is the better price 'cause it's coming out of your pocket, which is kind of unusual for Canadians." Here, the expectation of obtaining pharmaceuticals at prices reflective of previous health care arrangements may create impediments to timely and necessary health management due to the reported 'running around' between stores.

Despite some struggles in acquiring pharmaceuticals, most participants felt that medications were too easily obtained – especially controlled substances such as narcotics or antibiotics. One participant states:

...the availability of the medicine is much more so than anywhere else... You can get things like antibiotics and major medical pills, pain pills ... that in the States you could never get without a prescription. So, depending on the pharmacy that you go to, you can get narcotics, you know?

Many believed that this was perpetuated by a local "drug industry which is more open and active," and was lacking appropriate safety mechanisms and regulations. In fact, most participants welcomed increased regulation for pharmaceuticals in Mexico and supported a recent policy enforcing an existing law that requires antibiotics be sold by prescription only (see: Dreser et al., 2012). As noted by one participant:

I'm glad that they restricted antibiotics, that's a new law ... where you cannot get an antibiotic without a prescription from the doctor. Because people were doing it on their own and ... don't use them properly and that's the problem.

This stance towards antibiotic regulation was popular amongst participants, many of whom believed that over- and/or self-prescription of antibiotics was a leading cause of increased bacterial resistance to antibiotics in Mexico.

However, while the antibiotic prescription policy enforced restrictions upon antibiotic sales, numerous participants felt that antibiotic and other pharmaceutical regulation was relatively ineffective at reducing access to controlled substances. Qualifying this, participants were eager to speak about *consultarios* that operate adjacent to many pharmacies: small consultation spaces where consumers could easily access a desired prescription from a medical professional for a nominal fee. One participant states:

It's funny here...if you need something here that requires a prescription, they have a little office next door [to the pharmacy] with a doctor, they call it a 'doc-in-a-box', we joke around about it. Just go in and see that doctor, tell the doctor what [medicines] you need and chances are they're gonna write you a prescription for whatever you want.

Further, numerous participants believed that the prescribing practices of physicians on the island encouraged and enabled unnecessary use of controlled substances, revealing that there is "a tendency to give you a pill for everything." As one participant noted, "you go in for anything and they wanna put you on an antibiotic. Maybe I don't need an antibiotic, but they are big to promote antibiotics down here." For participants, these prescribing practices were attributed to the culture of medical care in Mexico and a belief that "if you go to the doctor and you don't get something then … you are not being treated," agreeing that over-prescription of medication was common on the island.

4.4.2. Quality

Participants commonly expressed concern about the quality of medications and health care information provided in Cozumel's pharmacies. While many medications were available in various branded and generic forms, a common belief was that generic pharmaceuticals sold in Mexico lacked efficacy or contained unnecessary or unsafe ingredients, although this view was not shared by all. One participant stated: "I would say that, in general, the generic antibiotics are not always effective, as effective as brand names." Another notes that "I worry about the meds on the island, in Mexico. I've been told many times that … they're not as good as what we get in the US." However, others

were less sceptical about generic medications. One participant noted that "the drugs that you get here are the same, it's just a different name, it's just a generic drug, it's the same thing," while another questioned the beliefs that her cohort holds regarding generic medications. She revealed that "some people say 'oh they're not the right strength' and 'they're diluted' and all this other stuff. I'm not concerned. They're working." Regardless of beliefs about, or decisions to use generic drugs, the quality and efficacy of medications on Cozumel had been taken into consideration by most participants.

Issues of quality were not confined to medications themselves. In some cases, participants did not believe that pharmacy and *consultarios* workers were qualified to disburse and prescribe pharmaceuticals. A participant explained that "the pharmacies are simply pill distribution centres... [the clerks are] not qualified in dispensing medication other than 'oh, you want this? Great, here'." Participants further expressed apprehension towards the abilities of pharmacy clerks to provide accurate, reliable and trustworthy medical advice, and often remained sceptical of the information offered to them. One participant alleged that pharmacy clerks

...don't have a knowledge on conditions or drug interactions. I find that that is not of the same standard that we would have back home. Which is why you have to make sure to do your own research, or I consult a pharmacy or people back home, because...I don't completely trust that everything's taken care of because it's not done the same way.

Concerns about the quality of clerks' knowledge of pharmaceuticals as well as potential side effects and contraindications were shared among participants. One participant noted that this information could be difficult to obtain: "you really don't have that relationship where you can ask a pharmacist, you know? 'Can you tell me what the side effects [are], can you tell me this?" Others believed that clerks lacked the education to discuss pharmaceutical matters. One participant managing a chronic illness noted that "[the pharmacy clerks] don't have knowledge on conditions or drug interactions" while another stated that "the lack of education of the mix of medicines is huge ... There's never any talk about side effects, ...I have to ask. I think that's bad because most people are not gonna ask." Similarly, most participants avoided using the services of consultarios, questioning the abilities of the staff to accurately diagnose and prescribe medications. One participant stated that within these spaces the doctors are "not gonna do any tests on you, they're just gonna talk like this and give you the script...and I'm not

sure how I feel about that," revealing a hesitance in participating in this grey pharmaceutical economy.

Uncertainty towards the quality of medication and medical advice received in pharmacies left many participants feeling responsible for independently ensuring the quality, necessity and correct titration of the medications they have received. Cozumel's ILRMs regularly consulted the internet or their doctors in their home countries to determine if the medicines they have been prescribed are comparable to the brands they are familiar with: "we just go on the internet and key in, it might be some Mexican drug that's comparable to something else ... [we will] make sure [it's safe] before I take it." This was a common sentiment, and as noted by one participant, "you're responsible for your own well-being and diagnosis and follow through and medication," revealing the importance of autonomy in health care analysis, prescription and treatment on the island.

4.4.3. Communication

Good communication was important when interacting with members of the pharmaceutical sector on Cozumel Island. Participants revealed that they struggled with both interlingual language barriers and communication, with some expressing concerns that such struggles negatively affected their continuity of care. Often there was an expectation that pharmacy clerks should communicate in English and that their level of language competency could be a barrier to effective care. One participant stated: "I mean, it's their country and I should speak Spanish, but I don't. I think [there should be] more acceptable translators or someone that could at least understand you when you walked in and shared what is wrong with you." Others noted that the lack of written English could also be problematic. One participant offered a typical experience: "'Oh, you need this' [says the doctor], 'okay, how do I read it then, it's all in Spanish?' ... They will write a prescription in Spanish and you have no idea what it is, and when you get it at a pharmacy it's still in Spanish." In this scenario, the patient did not know what drug he was being given or how or find out its name. To overcome these language barriers, electronic translators were sometimes used by both the pharmacy staff and customers:

I've gone to a couple [of pharmacies] in the past and they don't speak really good English. So I've got my Google translator (laughs) everywhere, trying

to say, you know, what my symptoms and stuff are. And I've gotten drugs and I've gotten better.

The commonality of electronic translators indicated that patients and health care workers both viewed them as effective communication solutions.

Finally, participants expressed concern about the continuity of communication between themselves and medical professionals who prescribe and distribute medicine, especially in terms of record keeping. Numerous participants noted that unlike in their countries of origin, both physicians and pharmacy clerks did not keep any records of the medications they had prescribed or sold. One participant stated: "if you go to the doctor, ... they don't even keep records. I've had my doctor say to me, 'what [pharmaceutical] did I give you last time?" For participants, the keeping of pharmaceutical records suggested that medical professionals were organised and that the care they were providing was appropriate and consistent. Another participant noted that "I'm responsible for keeping all of my paperwork. [It] would be nice [if pharmacists kept records] because I'm not responsible when it comes to those types of things." Participants felt uncomfortable with what they perceive as a disconnect in expected communications between themselves and the island's medical community, including pharmacy workers, in ensuring continuity of quality care.

4.5. Discussion

This novel analysis has sought to explore the beliefs and perceptions that ILRMs living on Cozumel Island, Mexico hold towards the local pharmaceutical industry. It is the first study to specifically examine pharmaceutical purchasing by ILRMs living in Mexico, and the first to investigate non-native perceptions of the country's pharmacy sector outside of the northern border zone, a space where retailers widely offer mobile consumers access to desired pharmaceuticals at comparatively reduced costs (Dalstrom, 2012; Homedes and Ugalde, 2013; Homedes and Ugalde, 2012). We contend that creating this place-specific knowledge base is important because migration into Mexico from more developed countries is increasing (Lizárraga-Morales, 2008; Sunil et al., 2007) and these migrants will inevitably need to access health care services. Further, unlike in the country's northern states, ILRMs living in periphery locations such as Lake Chapala, San Miguel de Allende, Los Cabos (Morales, 2010; Rojas et al., 2013) or Cozumel Island cannot easily enter the United States to access health care that offers

"peace of mind" (Lardiés-Bosque, 2016), nor can they necessarily access daily flights to their home countries from the small local airports.

The findings shared above reveal that ILRMs living on Cozumel Island are concerned about accessibility to pharmaceuticals, the quality of medications and service provision, and communication between themselves and workers within the island's pharmaceutical sector. Many of these concerns are consistent with the existing literature concerning transnational pharmaceutical purchasing in Mexico. For example, beliefs that controlled medications are too easily accessed reflect the experiences of American day trippers and visitors sampled in the bordertowns of Ciudad Juárez (Homedes and Ugalde, 2012) and Nuevo Progresso (Dalstrom, 2012), while concern about over- or unnecessary-prescription within consultarios echoes observations of these establishments elsewhere in Mexico (Pérez-Cuevas et al., 2014). Our analysis shows that these concerns lead Cozumei's ILRMs to heavily abstain from interaction with consultarios and to question the necessity of the medications they receive from other establishments. Further, their uncertainty about the quality of some local pharmaceuticals are grounded in the realities of the widely-known counterfeit medication production in Mexico (Morris and Stevens, 2006). Similarly, concerns about the educational background and language competencies of pharmacy clerks, as well as their ability to counsel patients about pharmaceutical technicalities, are consistent with deficiencies in training and knowledge encountered within pharmacies at the border and elsewhere in Mexico, where it has been found that clerks are not required to undertake formal education and often lack necessary knowledge to offer safe and accurate advice (Amin and Ingman, 2010; Calvillo and Lal, 2003; Homedes and Ugalde, 2013; Homedes and Ugalde, 2012; Kroeger et al., 2001). This perception of poor or inaccurate advice leads Cozumel's ILRMs to externally validate information and medicines they have received, a practice that has been observed in customers shopping for pharmaceuticals in the bordertown of Nuevo Progresso (Calvillo and Lal, 2003).

Perceptions of the local pharmaceutical sector provided by Cozumel's ILRMs imply congruity between the island's pharmaceutical landscape and the landscapes characterized by international visitors to Mexico's bordertowns. However, while participants' concerns may parallel the findings of existing bordertown-focused literature summarized above, we believe our results invite a more comprehensive and nuanced sense of how Cozumel's ILRMs interact with and within this foreign pharmaceutical

landscape. From our findings, it is evident that ILRMs' opinions concerning Cozumel's pharmaceutical sector are modified by their mobility status and beliefs about the geographical nature of biomedicine. For example, concerns about access to controlled substances, proficiency of pharmacists, or the quality of certain medications appear to stem from geographically informed knowledge(s) arising from experience within a former sociocultural space of care constructed in the medical imaginary as the "epicentre of high tech medical treatment" (Miles, 2015, p.48). Thus, Cozumel's pharmaceutical landscape is perceived in a comparative manner as ILRMs attempt to locate familiar markers suggestive of high quality pharmaceutical care in their home countries. Further, their pharmaceutical rhetoric suggests a sense that Cozumel's ILRMs may believe themselves to be ambassadors of quality care by association with their home countries, considering their personal medical knowledge to be superior to that within the island's pharmaceutical sector. Encountering discrepancies in their expectations of care, we find Cozumel's ILRMs are augmenting their experience with the island's pharmaceutical landscape, spatially reorganising their knowledge(s) and interactions within and beyond the island in order to obtain more acceptable care. For example, within the island, Cozumel's ILRMs describe pharmaceutical shopping behaviours akin to those of pleasure shopping: navigating amongst a number of establishments in order to obtain pharmaceuticals at specific prices or of specific brands they associate with quality and safety, a practice which is not widely documented (Buurma et al., 2008) suggesting a specific set of perceptions may precipitate this behaviour. Transnationally, Cozumel's ILRMs use the internet and other communication technologies to overlay the island's pharmaceutical landscape with virtual spaces that connect them to home and elsewhere. Here, initiatives such as consulting the internet or physicians in their countries of origin enable ILRMs to fact check advice or obtain reassurance, to inject and infuse Cozumel's pharmaceutical landscape with familiar and reassuring care from elsewhere.

However, these forms of interaction with, and augmentation of Cozumel's pharmaceutical landscape that mediates accessibility to, quality of, and communication surrounding medications are not without potential consequences for those undertaking them; we now turn to existing evidence within health literature to contextualise and understand the implications of our findings. Within the island, engagement in pharmacy shopping behaviours may produce problems for continuity of care (Buurma et al., 2008) as ILRMs fail to establish ongoing relationships with pharmacists, a problem that may be

further compounded by the lack of record keeping and cooperative infrastructure within the island's medical sector. Discontinuities in pharmaceutical care and disrupted medical records are known to contribute towards unintentional problems including unwanted pharmaceutical interactions, pharmaceutical intolerance, the reception of duplicate medications, inadequate, incorrect or incompatible information, and confusion towards brands, generics and quantities (Buurma et al., 2008; Coleman et al., 2005; Tam et al., 2005). Further, distrust in Mexican pharmaceuticals and the knowledge of pharmacists, as has been found amongst participants, as well as confidence in personal pharmaceutical knowledges may lead patients to dangerous nonadherence (Piette et al., 2005; Unson et al., 2003; Wamala et al., 2007) or self-diagnosis or -medicating practices (Sawalha, 2008; Verma et al., 2010).

As revealed, perceptions of distrust in Mexican medicines and the advice of local pharmaceutical workers encourages Cozumel's ILRMs to transnationally augment their pharmaceutical experiences on the island by fact checking or obtaining supplementary advice online or from doctors at home. However, in similarity to pharmacy shopping practices above, undertaking these practices may lead to potentially harming scenarios. Reliance on telephone communication with health care professionals in the ILRM's country of origin may invite a number of problems similar to those found in telephone triage systems, where lack of non-verbal cues can create difficulties for effective communication and competent examination (Purc-Stephenson and Thrasher, 2010; Rowe, 2014), and has been found to lead, in some cases, to significant misdiagnosis (Allen-Davis et al., 2002; Deakin et al., 2016). When receiving pharmaceutical advice, communication or diagnosis issues may result in patients being mis- or incorrectly (self) treated. Further, reliance on the advice of out-of-country health care professionals, especially busy physicians, may potentially lead to delays in obtaining critical care, or the reception of conflicting or inaccurate information due to physicians' unfamiliarity with local pharmaceutical products. Similarly, acquisition and/or augmentation of pharmaceutical knowledge(s) from online sources pose comparable difficulties for obtaining quality care. With less than half the medical information available online having been reviewed by doctors (Fox et al., 2006), and many other online sources supplying incomplete, incorrect or false information (Freeman and Spyridakis, 2004), ILRMs who access the internet in order to supplement pharmaceutical knowledge or self-diagnose risk obtaining information which can lead to potentially harming pharmaceutical

behaviour. This may include receiving incorrect or conflicting information concerning pharmaceuticals, as well as failing to learn about potential contraindications or other complications that may arise given personal circumstances. This is especially important to be aware of as symptom checking websites have been found to diagnose medical conditions with less than 60% accuracy (Semigran et al., 2015), and users often lack the ability to critically evaluate health information they find online (Rennis et al., 2015), may misjudge information, or become confused by information-overload (Cline, 2001). Elsewhere, patients have been shown to trust distrust health care websites based on design cues, revealing potential issues for evaluating information online (Sillence et al., 2004).

Within this article we have constructed a particular understanding of how ILRMs living on Cozumel Island, Mexico perceive, and behave within, their local pharmaceutical sector. Of particular note is augmentation of their behaviour and knowledge(s) through various local and transnational communication techniques. It is difficult to know whether or not the results of this study carry forward to other ILRM populations living in Mexico, especially those living closer to the border with the US and other mainland locations. ILRMs, even those with similar origins, will differ across space and represent a heterogeneous group with diversity in their migration decisions. Further, Cozumel Island provides a unique landscape, both as a physical space which is severed from mainland Mexico, and as a highly-frequented tourist destination that is the island's dominant economic force. It is for this reason that we call for further research to be conducted on Mexico's pharmaceutical landscape from the perspective of multiple user groups, as the findings of continued research will enable others to better assess the transferrability of the findings we have reported here to other contexts. Furthermore, while international lifestyle and retirement migration inevitably reorientates the way in which ILRMs understand and access health care, investigation into the types of health outcomes experienced in destinations would be a welcome addition to future research as such knowledge can contextualise accounts of the pharmaceutical landscape and determine the reality of suggested implications.

4.6. Conclusion

This article has examined the beliefs and perceptions that ILRMs living on Cozumel Island, Mexico hold towards the island's pharmaceutical sector, contributing to

the scant existing literature examining ILRMs' use of health care services abroad. Analysing 26 face-to-face interviews conducted with members of Cozumei's ILRM community, we have shown that while some ILRMs are confident in local pharmaceutical products and services, the majority find issues in accessibility to certain medications as well as the ease of access to controlled substances, the perceived quality of both medications and education of those working within the industry, and the ability to communicate effectively in order to obtain safe and high-quality care. We suggest that these concerns arise through the inability for ILRMs to identify familiar markers that are redolent of health care in their more developed home countries that they implicitly saw as safer and of superior quality. Cozumel's ILRMs are unwilling to accept the trade-off in perceived quality and safety that they encounter in their local pharmaceutical environment. Thus, armed with pharmaceutical knowledges learned elsewhere, they exercise autonomous and consumerist health care behaviours that serve to locally and transnationally augment care within the pharmaceutical landscape, constructing for themselves a sense of control and peace of mind. However, we have highlighted that these augmenting activities undertaken to garner trust in the care they are receiving are not without potential implications, and may lead to pharmaceutical outcomes that can be harmful. This suggests that ILRMs who are engaging in these augmenting practices and behaviours must display caution and learn to critically and contextually reflect on the information they have received from outside sources. In a world of increasing international lifestyle and retirement migration from the Global North in particular, those seeking the good life across borders and oceans will inevitably find themselves enmeshed within novel health care landscapes. Understanding the existing perceptions and beliefs that existing ILRMs hold towards their local health care sectors will enable better preparation for interactions with health care abroad and likely better health outcomes for those seeking to engage in these new lifestyle mobilities.

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Chapter 5. Formalising care provision

In attending to the objectives of this thesis, the preceding two analyses have proceeded by outlining the aesthetic and experiential nature of Cozumel Island's pharmaceutical landscape, as it may be encountered by tourists visiting the island and by ILRMs living locally. Across each analysis, explicit attention has been paid to the archipelagic nature of Cozumel's island: to the mobility of people, things and ideas, as well as specific mobile practices and performances which contribute to the productive and experiential dimensions of Cozumel Island's health landscape as an international phenomenon. Specifically, each analysis outlines the numerous multi-scale (from local to transnational) and multi-temporal mobilities that allow those embedded within Cozumel's pharmaceutical landscape to interpret and (re)negotiate it as a setting of care. Here, individual subjectivities of landscape interpretation and engagement become contingent upon, and are affected by, the spatio-temporal trajectories of tourists and ILRMs (along with their knowledges) across multiple and contrasting socio-structural, discursive and regulatory geographies (Milligan and Wiles, 2010). Specifically, across each analysis I have suggested that it is imperative to consider the 'origin' locations of those engaging with Cozumel Island's health landscape, as evidence, such as branded aesthetics or pharmaceutical complications, point to the relational nature of interpretation of this landscape (Conradson, 2005) prioritising authentic or legitimate experience and knowledge as spatio-temporally external to the island. Thus, for those encountering Cozumel Island's pharmaceutical landscape, it is always interpreted in reference to knowledges and geographies of health gained and experienced elsewhere.

However, while exploration of Cozumel Island's pharmacies offers a glimpse of the island's international health landscape, pharmacy settings represent a form of care which remains inherently entangled with public spaces of tourism and everyday life on the island. This has been noted throughout both chapters 2 and 4 as the island's pharmacies, through exploration of aesthetics and experience, have been depicted with a sense of informality and a view towards explicit consumption. However, and as noted, within Cozumel Island's broader health landscape exist numerous more formal institutions of care such as doctors' and dental clinics and hospitals. As such and following case study methodology which presses for breadth of investigation in order to enhance rigour (Wolfram Cox and Hassard, 2010), to construct a well-rounded and

rigorous exploration of Cozumel Island's international health landscape it is imperative to consider further viewpoints that span formal institutions of care as well as those who work within them (and treat international patients).

In light of this, chapter 6 shifts focus away from Cozumel Island's pharmacies towards more formal settings of care, such as hospitals are other medical clinics. Further, this chapter shifts exploration away from engagement with those who might consume care on Cozumel Island towards those who are involved in the production and provision of care. Engagement from this perspective allows for insight into the contrasting or convergent experiences of care afforded by the archipelagic nature of Cozumel Island, including multiple mobilities, fixities (Creswell, 2010), openings and closures (Gillis, 2003). Further, engagement with Cozumel Island's health care workers helps to fill gaps within the literature pertaining to human health resources within increasingly mobile and globalised health systems (Connell and Walton-Roberts, 2016), while extending the currently scant scholarship focused on the complexities of treatment provision on islands (Gould and Moon, 2000; Moore, 2008), both 'near' and 'far' from mainlands. Considering this, chapter 6 expands investigation into Cozumel Island's international health landscape by exploring the challenges encountered, and mitigation strategies deployed, by health professionals in the treatment of international patients within the island's more formal health care settings. Specifically, chapter 6 reveals a number of care challenges which can be defined in light of Cozumel Island's health care sector's entanglement with its dominant tourism landscape, and the mobilities associated with the production of this global space.

Chapter 6. A challenging entanglement: Health care providers' perspectives on caring for ill and injured tourists on Cozumel Island, Mexico

6.1. Abstract

Traditionally concerned with recreation and rejuvenation, tourism is also replete with risks that may leave travellers ill or injured and in need of medical attention in unfamiliar, destination environments. However, little is known about the experience of providing this treatment. Drawing upon findings from 13 semi-structured interviews with health care providers working on Mexico's tourism-dependent Cozumel Island, this article thematically analyses the challenges faced in the everyday treatment of the island's ill and injured tourists. Our findings reveal that participants experience three key challenges for treatment provision: resource deficiencies, medical (mis)perceptions, and remuneration complexities. Health care providers employ unique strategies to mitigate these challenges. We then consider the complexity of these findings, suggesting that both challenges and mitigation strategies exist as part of a dynamic entanglement between the island's health care sector and its dominant tourism landscape. Finally, we call upon tangential tourism services such as cruise lines to take a larger role in ensuring the ease of access to, and provision of quality health care services for tourists on Cozumel Island.

6.2. Introduction

In the classic sense, tourism, as time and space apart from the everyday (Franklin, 2003), offers promises of rejuvenation and rehabilitation of mind and body (Richards, 1996). However, tourism is also replete with perceived and real risk (Williams and Baláž, 2014; Yang and Nair, 2014) that can lead to unfavourable health outcomes for those travelling abroad. Such consequences of travel are finely detailed within a wealth of travel medicine scholarship. Unfortunately, this body of literature offers sparse consideration of the health care services provided in destinations. This is especially true of tourists' engagement with health care professionals, for whom the everyday can involve caring for ill and injured travellers. This article begins to fill this gap by examining the perspectives of health care workers on Mexico's tourism-dependent Cozumel Island,

as they provide treatment for tourists in need of urgent medical attention. Specifically, we examine challenges faced by providers in delivering care, including resource deficiency, (mis)perception of the island's health care sector, and complexity regarding service remuneration. Finally, we contextualise these challenges as part of a complex interplay between the health care sector and touristic aspirations of Cozumel Island.

Pathologies of injury and illness on holiday are comprehensively documented. Typically, studies track specific spatio-temporal disease, illness and injury vectors that commonly affect tourist populations (e.g. Chen et al., 2014; Leshem et al., 2016; Ratnam et al., 2013), and discuss associated pathological concerns (e.g. Flores et al., 2015; Matteelli et al., 2016; Salazar-Austin et al., 2015). Comprehensive statistical data about tourists' use of health care abroad and their health outcomes is, however, mostly sparse and dated (Angelo et al., 2017). That which does exist suggests that tourists are at an elevated risk of injury, illness or death compared to both those who remain at home (Steffen et al., 2003) and local populations in tourist destinations (Bauer, Körmer, & Sector, 2005; Mitchell, Williamson, & Chung, 2011). Two reviews respectively state that 75% (Steffen et al., 2003) and 65% (Hill, 2006) of travellers to developing countries report a degree of health impairment while abroad. More recently, a study by Vilkman et al. (2016) revealed that health care was sought by 10% of overseas tourists and as many as 79% would go on to report that they fell ill while travelling. Further, in contrast with local populations, tourists are believed to be at higher risk of injury due to motor vehicle collision (McInnes et al., 2006), and across all types of unintentional injury, are likely to experience more severe injuries (McInnes et al., 2006; Steffen et al., 2003). While few reviews of cruise tourist morbidity exist, a 1991 review of 172 cruises found that visits to the ship infirmary were made by 3.6% of passengers, and of those visiting the infirmary, at least 2.8% were disembarked before the completion of the cruise (Peake et al., 1999). Although these data are dated, one can assume a substantial increase in contemporary demand for health care services considering that the global number of cruise passengers has grown over 550% between 1991 and 2016 (Cruise Market Watch, 2017).

Outside of epidemiological work, some existing literature considers the health risks of travel (e.g. Jackson and Abubakar, 2017; Lüthi and Schlagenhauf, 2015), pedagogical approaches to better inform and prepare tourists for such risks (e.g. Marchand et al., 2017; Seale et al., 2016), and outcomes of this education (e.g. Angelin

et al., 2014; Croughs et al., 2014). Such work aims to contextualise the assumption that a confluence of "appropriate pre-travel advice and patient compliance are ... key elements in ensuring that world travelers return home in good health" (McIntosh, 2015, p.143). However, there is no consensus as to the efficacy of pre-travel health advice (Angelin et al., 2014; Wieten et al., 2014), with some research reporting high rates of injury or illness despite visits to travel medicine clinics before departure (Santantonio et al., 2014). Researchers suggest this may be the outcome of inadequate training of health care professionals (Kogelman et al., 2014; Leder et al., 2015) or a lack of confidence in dispensing pre-travel advice (Bascom et al., 2015). Conversely, tourists may struggle to retain and recall information when needed (Angelin et al., 2014; Bauer, 2006) and can be non-compliant with or actively disregard advice received (LaRocque and Jentes, 2011; Schwartz et al., 2012). Further, data suggests that the majority of travellers do not actively seek out pre-travel health advice (Baer et al., 2014; Kogelman et al., 2014) and are often unaware of the health risks posed by travel destinations, a factor that can leave tourists unprepared for emergent health care complications.

Most existing research regarding tourists' health care use while in Mexico - the country of focus in this article – examines United States' (US) residents, typically of Hispanic origin (Wallace et al., 2009), who undertake short trips across the border for medical or pharmaceutical care (Byrd and Law, 2009; Su et al., 2013; Su and Wang, 2011). Reasons for this cross-border movement include lower priced products and services, easier access to care, and cultural familiarity (Horton and Cole, 2011; Su and Wang, 2011; Wallace et al., 2009). Although there are no in-depth qualitative studies to evaluate patient care, surveys do suggest high satisfaction with care among these populations (Byrd and Law, 2009). Elsewhere, a small collection of literature engaging with lifestyle and retirement migrants provides insight into how some non-Mexicans characterise health care they have accessed while in the country. Here, Mexico's private health care is typically characterised as lower priced, offering a diversity of quality services, as well as a sense of personalisation and empathy not found in international patients' home countries (Amin and Ingman, 2010; Hoffman et al., 2017; Sloane et al., 2013; Sunil et al., 2007). This literature also identifies challenges for patients, including concerns about the quality of products and services, inability to access certain technologies, complications in decision-making, and insufficient health insurance coverage (Hoffman et al., 2017; Sloane et al., 2013).

Cozumel Island is Mexico's largest island and is home to approximately 85,000 people (INEGI, 2015). Cozumel is expected to host 3,566,700 cruisers aboard 1,160 ships in 2017, making it the most popular cruise destination in the Western Caribbean (CruisePortInsider, 2017b). Outside of cruise tourism, approximately 500,000 long-stay tourists visit the island each year (SEDETUR, 2015). Unfortunately, the extent to which tourists access medical care on Cozumel is not known. However, the island does boast the presence of two public and four private hospitals, amongst numerous ancillary health care services such as dental offices, hyperbaric clinics (Enjoy Corporation, 2017; TripAdvisor, 2017), and pharmacies (Hoffman, 2017), the numbers of which suggest that there exists no shortage of injured and ill vacationers in need of medical attention. With the treatment needs of vacationers in mind, here we present the findings of semistructured interviews with health care workers on Cozumel who routinely treat these travellers at local hospitals, medical centres, and dental clinics. Drawing on the findings of our thematic analysis of interviews with local health care providers, we specifically identify the challenges they face in treating this short-stay, relatively mobile patient group. In doing so we contribute to the growing area of research situated at the nexus of tourism and health while also providing insights that can be used to identify meaningful interventions to assist with facilitating treatment of this patient group.

6.3. Methods

This analysis contributes towards a broader investigation of transnational health care on Cozumel Island, Mexico. While our broader study entails significant observational fieldwork and engagement with Cozumel Island's international lifestyle and retirement migrant population (see: Hoffman, 2017; Hoffman et al., 2017), this analysis focuses upon semi-structured interviews with professionals who provide medical care for ill and injured tourists on the island.

6.3.1. Data collection

Prior to data collection, we received ethics approval from the Simon Fraser University Office of Research Ethics. Two research visits to Cozumel Island were conducted by the first author: one from March-April 2015 (accompanied by the second author), and the other from January-February 2016, where face-to-face interviews were

carried out with health care providers. The goal was to recruit as many participants as possible, thus using a temporal cut-off for data collection. Various methods of participant recruitment were undertaken with the majority being recruited by email (obtained via establishment websites) or by approaching health care establishments; subsequent participants were identified when previous interviewees shared study information with potential ones. Those who expressed interest in participating were provided with detailed study information as well as information about participant rights and our ethics approval. While we did not limit participation to specific provider groups, we prioritized participation by senior administrators with clinical oversight and clinical staff directly involved in the treatment of tourists. Following initial contact, subsequent telephone or email communication enabled participants to select a time and place of their choice to complete the interview.

Data collection was conducted via semi-structured face-to-face interviews as they allow for a pragmatic approach towards the exploration of little known topics, offering flexible examination of participant subjectivities and the ability to query emergent themes (Corbin and Morse, 2003). Interviews ranged from 35 minutes to two hours in length, and followed an interview guide created in recursive collaboration. Questions investigated participants' experiences providing treatment for tourists and other international patients, including caring practices, administrative procedures, interacting with patients, and expectations for the future of health care on Cozumel.

6.3.2. Data analysis

All interviews were conducted in English and transcribed verbatim by the lead author. Following transcription, each author independently reviewed six transcripts. After several rounds of discussion and collaborative exploration, we identified the challenges of treating vacationers to be an important emerging issue that warranted investigation via thematic analysis. Following this, the lead author undertook multiple reads of the transcripts to identify a number of pertinent meta-themes, and, using QSR NVivo, coded the interviews thematically with input from the other investigators regarding the coding scheme and its interpretation. Coded extracts were then shared amongst the authors, allowing for investigator triangulation in confirming the emergent challenges and finalising the scope of each meta-theme, data interpretation, and determining inclusion in the final analysis.

6.4. Results

In total, 15 health care workers participated in 13 interviews (two were conducted in pairs). Those interviewed had collectively interacted with hundreds of tourist-patients and had thousands of hours of clinical and senior administrative experience between them. Participants, working across a range of health care professions, represented a number of establishments including private hospitals or clinics, dental offices, and medical authorities at port agencies. The duration of participants' employment within Cozumel's health care sector ranged from 2.5 months to over 32 years, with the majority having worked elsewhere in Mexico for numerous years prior to working on Cozumel.

Trauma and age-related morbidities were stated to be the principal reasons that tourists require medical attention on Cozumel. Motor vehicle collisions were said to account for most traumatic injuries, with risk heightened by inexperience with local roads and traffic, as well as indiscriminate alcohol consumption. As one participant explained, "people come from the cruise ships, they rent a moped or a motorcycle and they go around the island and they drink, so there's a lot of accidents, a lot!" Age-related morbidities were commonly attributed to older cruise ship passengers, and included trauma as well as managing exacerbations of existing chronic illness, outcomes of medication non-adherence, and most commonly, cardiac events. It was not uncommon for passengers to be admitted to health care facilities directly from cruise ships.

Although Cozumel's private hospitals and clinics specialise in addressing the health care needs of the large number of tourists who visit the island each year, the interviews revealed that this does not preclude numerous challenges in treating this patient group. In the remainder of this section we examine three key challenges identified by participants that emerged from thematic analysis: resource deficiencies, medical (mis)perceptions, and remuneration complexities. We also identify solutions or strategies to mitigate these challenges raised by the participants.

6.4.1. Resource deficiencies

Although the island does not suffer from a dearth of health care infrastructure, participants revealed that Cozumel's hospitals often lack specialist human resources or specific equipment to provide essential treatment for ill and injured visitors. As one

participant stated, "you have limitations [on Cozumel] because you only have basic specialties, there is no high speciality here." This is exacerbated by difficulties in attracting specialists to the island: "[one of] our challenges ... is bringing more doctors to the island, more specialities" such as oncologists, who are flown in as needed. Recruitment and retention of nursing staff was considered similarly frustrating: "[being an] island, [it] is very difficult to bring, for example, nurses, especially nurses ... we need to pay more because they don't want to be, to be [on] an island. They say ... [after] only almost three months [that], it's boring to live here," revealing the extent to which the realities of managing everyday life on a small island can influence Cozumel's health human resources pool.

There was also concern regarding deficiencies in needed material health resources, including medical technologies and consumables such as blood products, on the island. Participants agreed that while some hospitals are better equipped than others, as revealed in statements such as "CostaMed is the facility that is better equipped ... in Cozumel," the island's health care facilities typically lacked the medical technologies needed to perform more complicated diagnostic procedures and treatments. In comparison to Mexico's mainland, one participant noted that when considering "the equipment for ... very big surgery, some brain tumours or open surgery of the chest for the heart, very high procedures, it's a fact that in Cozumel we don't have that sort of equipment." For many, both financial constraints and available space were prohibiting factors for obtaining desired medical equipment. Further, participants commonly lamented the lack of a comprehensive biofluid facility with storage for blood and its component parts, as well as other essential bodily fluids. As a participant explained, while "fthe state hospital" have blood and they have plasma, that's all, you don't have platelets, you don't have ... any kind of blood compliments [sic] that help ... a patient survive." Generally, participants felt that with the closest facility being located on the mainland, time delays in obtaining necessary biofluids could elevate the risk of negative health outcomes for vacationers in need of medical attention.

While the above deficiencies in human and material resources within Cozumel's health care landscape reveal challenges for treating ill and injured vacationers, participants explained that these challenges can be met through collaborative efforts or circumvented entirely through patient evacuation. One participant stated that it is a legal requirement for each hospital to "have [a] liaison with some of the [other] hospitals. This

should be a contract, each hospital should have a contract with two other hospitals." For example, this participant noted that "[at] this moment I don't have a [specific diagnostic machine] so I bring the patient to [another clinic]" where that machine is available, revealing a collaborative effort in ensuring essential access to diagnostic resources. Resource pooling between hospitals was considered essential. One participant noted that informal collaborative agreements exist "between doctors ... if a patient is ill we call each other, even ... if he's working at another company, ... [and] sometimes we lend these hospitals, even the state hospital, equipment." Such resource sharing does not happen without concern. For example, a participant explained that there can be "differentiation [in] ... the safety measures in this hospital ... My practice needs to be very safe, and I know the other safety measures in other hospitals [and they are] ... not enough." Another way of coping with resource deficiencies is by evacuating patients to mainland Mexico or even the US. However, participants understood that even "a very well-equipped air ambulance [can present] difficult moments for the medical team, and obviously for the patient" who may remain in a vulnerable state. For this reason, evacuations are typically considered to be a last resort unless they are specific demands of patients' insurers or at the express wishes of the patient or their family.

6.4.2. Medical (mis)perceptions

Challenges can also arise due to patients' preconceived perceptions about the state of health care in Mexico, often aligning it with wider assumptions of danger, crime, and poor practice. Ill and injured vacationers can be reluctant to receive care, leaving health care professionals the task of legitimating Cozumel's health care facilities and services. Noted by one participant, tourists "don't trust in the ... medical expertise of our doctors, because it's Mexico, they have that ... thinking that Mexican medicine is not what [acceptable care] should be. But it is, it's really good." This belief may be perpetuated by stereotypes shared by the media or among friends:

When [the patients] are going home, they say "I am so sorry, I didn't know, you know? You always hear these horrible stories about Mexico, that a friend of a friend went to Tijuana and got their eyes out or they took their kidney." And that's what they think, that all the doctors in Mexico are the same and that's all they do, you know?

Patients may also consider Mexican health care competencies to be underdeveloped.

One participant stated that "when you're in [Mexico], you're afraid to get services there

because of what people say [about the country] ... You have a broken bone, you're gonna say 'oh, in Cozumel, they gonna kill me, they are like third world medical attention'." Similarly, patients may also "think that because they are out of the United States ... [in a] country of Latin America, ... [practitioners] do not have the resources to attend [patients] properly, or the water [or] food is contaminated and they reject ... the medical treatment." Further, health care does not escape broader issues regarding race; one participant noted that there are "even issues of nationalities: 'I don't want to be treated by Mexicans, I don't want to have [a] blood transfusion [from] Mexican people'," revealing the extent to which cultural prejudices and perceptions can create challenges for treatment.

Cultural biases and stereotypes also precipitate vacationers' expectations about the aesthetics of quality health care. Knowing this, one participant explained that it is important to "[show that] we can do the procedures, [that] we have all the equipment and materials ... the patients or the parents of the patients want to see it to prove that we have everything." Another participant noted that patients want to see specific visual details, comparable to health care spaces at home, that legitimise health care in Cozumel and reinforce its quality nature:

They're very worried about the facility. How do you see the bed, the blanket, the nurse, when they see the doctor, do you look like a doctor? ... You have to look like a doctor, your appearance is very important for the patient ... they are used to see[ing] the doctors with a gown, with a coat. They want see that it's a hospital, not a medical office.

The quotes above each demonstrate the extent to which care provision for tourists can be affected by practitioners' abilities to validate medical knowledge, practices and equipment within Cozumel's health care facilities.

Realising that culture shock and specific preconceptions may influence the ability to provide treatment for tourists, hospitals seek to mitigate this by offering familiar contact points. At least one hospital employs "people who are American who live here [on Cozumel] ... [people] who work in the clinic [and] are the first contact [for] the patients." Hospitals thus utilise employee cultural identity to offer reassurances of safety and quell fears. Communication may also be established with health care professionals in patients' home countries to assist in making care decisions and to provide assurances about standards of care on Cozumel. One participant stated that they will ask

vacationers: "you want to talk to your doctor back in the US, or back in Canada? Give us the phone number and we'll tell your doctor what's your treatment, what our plan [is] with you." Trusted medical professionals in the patient's country of origin are seen to help with demonstrating that medical care on Cozumel is professional and safe. For participants, engagement with the familiar is part of a broad commitment to "making [patients] feel safe, making them feel comfortable and making them feel that they'll receive the same treatment here as ... any other first world country."

6.4.3. Remuneration complexities

Another challenge when treating tourists is in obtaining payment for medical services, an issue of significance considering the for-profit nature of Cozumel's private health care facilities. Though participants stressed the importance of providing empathetic care, the island's facilities will typically halt treatment and relinquish responsibility if assurance of payment cannot be made: "[we will] assure the patient is stable, that his life is not at risk, and stop the medical attention." Typically, the "last thing [tourists] keep in mind when they start a trip on a cruise ship is to finish their vacation in a hospital," and thus some may not purchase travel health insurance or have a plan to deal with any medical expenses that arise in the course of their holiday. One participant stated, "we have patients that don't have insurance, they don't [have] money, they don't have anything! I don't know what they're doing on the ship but they don't have anything!" Another explained that, "patients from cruise ships [often ask] is the cruise ship paying for it?' That's something that they always ask, 'cause I pay for my ticket and they told me that everything's included'." This sentiment was broadly shared among participants, with others noting "when it becomes an issue is when they don't have insurance and they don't bring money", and "sometimes even there are people that have nothing to pay, they have no money for paying ... and don't have international [insurance] coverage." In such cases administrators will require clinicians to halt all treatment, which significantly challenges all those involved in providing and receiving care.

Collecting remuneration for medical services may be significantly complicated by insurance companies. One participant stated that "it's when the insurance company gets involved, that's the factor that adds turmoil into the whole case." Difficulties arise as facilities struggle to deal with the broadly disparate nature of insurance companies' practices and policies: "every case is different because, [for example] you can have Blue

Cross insurance, but in every state every policy is different." Even internal variation within companies may create difficulties for Cozumel's health care facilities to establish one-size-fits-all procedures for obtaining insurance payments. However, as one participant explained, remuneration difficulties do not always arise from complex factors around billing codes and treatment costs and can be as simple as working with the operational hours of the insurance company: "some [insurance] companies ... don't have personnel for emergencies during the weekend, so you have to wait until Monday to receive the guarantee of payment, ... [that's] a big risk." Thus, remuneration difficulties are not only a matter of accounting, but can potentially introduce unnecessary risks for patients as care beyond stabilisation is typically not performed until guarantee of payment is received.

Participants noted that often there is little they can do to meet challenges posed by seeking remuneration. While delays in communication with insurance companies are typically a matter of time, absence of insurance coverage or the ability to pay out-of-pocket have few remedies. In these scenarios, two processes are typically possible: asking a cruise line for assistance (which only applies to cruise passengers), or reaching out to the patient's home country consulate office in Mexico. While highly infrequent, participants do note that cruise lines may occasionally provide coverage for patients. Although noted above that medical care is not included a cruise passenger's ticket, one participant did state that in some cases:

[I] contact the cruise company and tell them "well, I have done what I have to do, which is stabilise this patient, and now you have to tell me what you wanna do with [them]. Do you want me to keep him here and you're gonna come and pick him up? Do you want me to give him the rest of the treatment, or what's gonna happen?" Most of the times the companies are really, really, good with tourist[s] and they take care of that.

However, many participants clearly explained that a patient who has been disembarked from a cruise ship for medical care is typically no longer the responsibility of the ship and this type of situation is rare. A more probable course of action is to contact the patient's consulate in Mexico: "You have to stay in the hospital, but you don't have money, you don't have anyone to call, you don't have any insurance, what do we do? [We] have to contact ... [the patient's] international consulate. [Then] someone from the consulate [will] come and say, 'you know what, we're going to do this'," although no participants expanded upon the remunerative strategies undertaken by consular officials.

6.4.4. Discussion

This analysis has explored the challenges associated with providing care for ill and injured tourists visiting Cozumel Island, Mexico, as understood by those working in the island's private health care sector. While existing studies suggest that health impairment is heightened among those traveling abroad (Bauer et al., 2005; Mitchell et al., 2011; Steffen et al., 2003), especially in developing countries (Hill, 2006; Steffen et al., 2003), there has been little discussion within travel medicine and tourism scholarship concerning health care provision in destination locations. Thus, as one of few investigations to specifically examine destination perspectives on providing medical care for ill or injured tourists, this analysis offers a novel addition to a limited body of literature. Further, this study provides insight into the ways in which health care provision is affected by, and intersects with, the tourism sector on Cozumel Island, a destination that continues to be economically dependent upon the daily movement of transnational consumers. Through our analysis of 13 semi-structured interviews with health care providers working on Cozumel, we have identified three key (overlapping) challenges faced when providing care for ill or injured tourists: resource deficiencies, medical (mis)perceptions, and remuneration complexities – and have revealed potential strategies employed in the mitigation of these challenges. Resource deficiencies are understood as challenges for recruiting and retaining specific human resources, as well as obtaining or accessing medical equipment and consumables; medical (mis)perceptions concern the challenge of legitimising Cozumei's care provision in light of contradictory views held by tourists who become patients; and, remuneration complexities are defined as challenges experienced in obtaining payment for care provision.

There are parallels between the challenges of caring for tourists in Cozumel identified in this analysis and findings in existing research. For example, existing studies show that hospitals and clinics located outside of major urban centres typically face equipment shortages (Weinhold and Gurtner, 2014) and that health worker shortages are also common due to providers' reluctance to work in isolating environments or those that lack social and cultural facilities (Kulig et al., 2015; Mbemba et al., 2016). This includes isolated and peripheral places in Mexico (Pelcastre-Villafuerte et al., 2016). Similarly, the cyclical nature of tourism seasonality affects a variety of destination market sectors, complicating access to resources, as well as recruitment and retention of

human resources (Terry, 2015; Turrión-Prats and Duro, 2016). Our findings mirror such challenges of equipment and resource access, as well as explanations for recruitment and retention of health care professionals on Cozumel Island. Cozumel Island's resource challenges also reflect known inequities in Mexico's health care distribution (Laurell, 2007), reinforcing the characterisation of private health care in the country as dominated by "small, badly equipped, and poorly staffed hospitals" (Laurell, 2007, p.519). Further, challenges in accessing blood products on the island reported by participants echo concern found across local news media (Holguin-Resch, 2017; Wilkinson, 2017) and online tourist communities (Cozumel Hotels, 2008; TripAdvisor, 2013) about the impacts this has on patient health. Existing research also acknowledges the potential for cultural tensions to emerge when accessing health care abroad (Hudson et al., 2016; Whittaker and Chee, 2015), and notes that both Mexico and Mexican people suffer from negative stereotypes of apathy, crime, corruption and underdevelopment (Correa-Cabrera and Garrett, 2014; Lasso and Esquivel, 2014) that have been used to define the Mexican medical system as substandard and dangerous (Dalstrom, 2012). As such, it is not unexpected to find that Cozumei's tourists corroborate such characterisations of health care in Mexico, believing the island to be a place where medical practice is imbricated with incompetence and underdevelopment, thereby complicating patient decisionmaking and challenging care providers. Medical tourism destinations can also suffer from similar challenges of perception (Han and Hyun, 2015; Khan et al., 2016), with literature revealing an emphasis on empathetic care practices and facility aesthetics in order to underscore quality and competence in light of potentially harmful perceptions (Cook, 2010; Liu and Chen, 2013; Solomon, 2011). Our study finds similar care and aesthetic decisions being made within Cozumel Island's health care facilities as a way to mitigate some of the challenges of treating tourist-patients, suggesting a certain transnational uniformity in the priorities of providing medical care for privately-paying foreign patients.

Participants noted that in an attempt to alleviate resource deficiency challenges faced by specific hospitals or clinics, there is some degree of resource sharing. While some existing research has emphasised the benefits of health care resource pooling in low-resource settings (Karsten et al., 2015; Pasin et al., 2002), applied examples of such sharing remain sparse and generally focus on macro-scale, cross-border care arrangements between public health systems (Galan et al., 2013; Glinos and Baeten,

2014). These cross-border care examples lack consideration of the competitive nature of private health care. As representatives of competing facilities on Cozumel Island, the resource sharing relationships noted by participants are reasonably unexpected considering the competitive nature of private health care, especially amongst clustered hospitals and clinics that are all vying for international patients (Snyder et al., 2016). Willingness to lend expertise and equipment to competing hospitals suggests that, for Cozumel Island, such networks of interdependence are of considerable importance for ensuring the practical delivery of appropriate and necessary medical care for tourists. Further, this type of cooperative competition can also aid in the homogenisation of care, helping to regulate and maintain the quality and external characterisation of the island's private health care sector. This resource sharing also aids in protecting the reputation of Cozumel as a safe place for tourists to access health services by providing a mechanism through which some equipment shortages can be addressed locally in order to facilitate quality care. Adams et al. (2017b) have shown the importance of clinics in tourismdependent Mexican communities undertaking collective strategies of reputational protection in order to counter tourists' likely harmful perceptions of health care as being corrupt and of inferior quality.

As we have shown, the challenges for providing health care for tourists on Cozumel Island, and their associated mitigation strategies, present both similar and unique features when contrasted with existing literature on health care provision in touristic spaces. However, it is important to contextualise these findings within the interplay between Cozumel Island's historic and contemporary health care sector and the island's dominant tourism landscape. With lateral development of contemporary health care services and tourism on the island (Hospital Médica San Miguel, 2017), we contend that the challenges presented by our participants can be understood as part of a continuing legacy of dynamic entanglement between these sectors. While above we have noted that the cyclical nature of tourism in some destinations can affect resource capability across numerous sectors, on Cozumel Island, the cruise industry creates a daily, in addition to seasonal (Pavón et al., 2017), transience that contributes to fluctuations in demand for more specialist medical equipment and resources. Further, the touristic cycle of Cozumel Island has been revealed to affect health human resources, with hospitals struggling to recruit and retain health workers against the fluctuations in service demand on Cozumel Island. For example, the island experiences

a fleeting excitement of tourism in the 'on season' by day that, at night, recedes with the cruise ships— creating a daily repetition and rhythm that may dissuade some health workers from practicing in Cozumel despite the potential of treating high paying tourists. Tourism is similarly implicated in the challenge of patient (mis)perception of Cozumel's health sector. Care providers recognise that their services are provided within a space that typically exists outside of Cozumel Island's tourist imaginary, namely in hospitals and clinics, meanwhile Mexico is largely portrayed as unsafe, criminal and underdeveloped. On Cozumel, health care providers are challenged to legitimise their practices as patients express fears built upon broader negative stereotypes of Mexico, while simultaneously protecting Cozumel Island's reputation as a safe tourist destination.

As with the provision of health care, the mitigation of health care provision challenges also exists within the entanglement between Cozumel Island's health care sectors and tourism sectors. Here we contend that as health care provision can never be fully extricated from the tourism landscape of Cozumel Island, tensions are created for providers that affect care as they must conceptualise both their patients and themselves across the expectations and goals of each sector. Patients remain as tourists, and health care workers simultaneously assume an ambassadorial role as they provide health care services within Cozumel Island's tourism landscape. Thus, it becomes essential for providers to perform care that provides necessary medical assistance while simultaneously assisting in maintaining the reputation of Cozumel Island as a tourism destination, thereby serving as another form of reputational protection in addition to what we discussed previously (Adams et al., 2017b). Practices such as resource sharing between competing hospitals, focusing upon personalised and empathetic patientcentred forms of care, providing culturally familiar communications that assist in the legitimation of practice, and offering familiar care aesthetics exist in part to ensure confidence in the island's quality and safety of care. However, it must be noted that the profit-driven nature of Cozumel Island's private health care cannot always align with reputational protection, which may be disrupted by complications such as the inability to remunerate services that require providers to stop treatment. For example, stabilizing and then discharging patients who are unable to pay is likely to operate counterintuitive to reputational maintenance or protection activities, thereby potentially creating or reinforcing negative perceptions about the island's quality of care, and broader reputation as a tourism destination.

We have suggested that providing medical care for tourists on Cozumel Island involves a number of challenges and mitigation strategies that exist as part of an inseparable entanglement between the island's private health care sector and its tourism landscape. There are implications of this entanglement for Cozumel Island as a tourism destination. Within ideas shared by the island's health care professionals there exists a cognizance of the patient's origin as tourist and a belief that although now requiring medical attention, patients remain as tourists. The island's private health care sector has become an ancillary tourism product, remaining necessary to sustain Cozumel Island's touristic economic livelihood. While an unforeseen health event will contribute to a tourist's admission to one of the island's private hospitals, their health care experience continues to be part of what happened on holiday, suggesting a power within the private health care sector to affect both the reputation of Cozumel Island as a tourism destination and of the cruise lines delivering tourists to the island each day. Thus, it is here that we suggest an imperative for tourism providers, such as cruise lines who each day unload the majority of Cozumel Island's soon-to-be foreign patients, to consider their accountability to this ancillary tourism sector contributing to the continued success of Cozumel Island as a popular port of call in the Western Caribbean and long-stay holiday destination. It is in the best interests of such providers to ensure that their customers are both aware of the level of care provided in Cozumel's hospitals, and are equipped with the necessary means to remunerate any services procured upon the island.

Within this article we have identified a number of challenges faced in providing health care for tourists on Mexico's Cozumel Island, as revealed by health workers in the island's private health care sector. While challenges are interwoven throughout issues of resource availability, medical (mis)perceptions, and remuneration complexities, of particular note is that such challenges exist within an entanglement between Cozumel Island's health care sector and the island's tourism landscape. With little literature to provide comparison, it remains difficult to ascertain if the entanglements and challenges within this study may accurately describe other tourism destinations. Similar research in other tourism-dependent areas is thus useful. Further, Cozumel Island offers unique geographies of (in)accessibility not found in similarly energetic tourism areas given its distance from mainland Mexico. Thus, a number of future research avenues are worth mentioning. To assess transferability of the findings reported here, it is important to investigate health care in other similarly tourism-dependent destinations, especially

those dominated by the cruise industry. Research should continue to uncover what it means to practice within a health care sector reliant on tourism, and, critically, include focus on the patient experience to provide an alternative perspective of engagement with health care on holiday. Finally, with manifold literature reminding us of tourism's penchant for unfavourable outcomes, we broadly call for researchers to pay significantly more attention to the nexus of health care and tourism within destination locations.

6.5. Conclusion

This article has examined the challenges faced, and mitigation strategies employed, by health care workers on Cozumel Island, Mexico, as they provide medical treatment to ill and injured tourists. Analysing the findings of semi-structured interviews conducted with 15 health care providers on Cozumel, we have identified three key challenges for care provision: resource deficiencies, (mis)perception of the island's health care sector, and complexities for remuneration. We have also shown that participants employ specific strategies in the mitigation of these challenges, including the sharing of both human and material resources, as well as a focus on providing empathetic care and culturally familiar interactions and environments for tourists. Complicating our findings, we suggest that both the challenges faced, and the mitigation practices employed, exist within an entanglement between Cozumel Island's health care sector and the island's broader touristic landscape. Within this entanglement, tensions for conceptualising both patients and providers exist, leading to health care provision that simultaneously seeks to provide medical attention for tourists while maintaining the reputation of Cozumel Island as a tourism destination. Understanding the importance of Cozumel Island's health care sector to its touristic aspirations, we believe it is important for tangential tourism providers, such as the cruise lines which service the island, to take a larger role in the mitigation of challenges for health care provision on Cozumel Island.

6.6. Acknowledgements

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Chapter 7. Conclusion

In this dissertation, I have presented three unique analyses that contribute toward a case study of the international health landscape of Cozumel Island, Mexico. While inherently exploratory, this dissertation is guided by three overarching objectives, which are to: 1) understand how settings of care on Cozumel Island present themselves aesthetically to international patients; 2) uncover the different mobilities at play within Cozumel Island's international health landscape, and; 3) understand the experiences of providing care for international patients, and how patients experience and understand care on Cozumel Island. Addressing these objectives via the analyses presented here has assisted in producing knowledge that explores Cozumel Island "on its own terms" (McCall, 1994, p.2) while simultaneously recognising islands as "hybrid, glocal, shifting, defiantly unstable, and inherently undefinable" (Baldacchino, 2008, p.50) spaces. In the remainder of this chapter, I will provide an overview of the key findings from these three analyses. I will address the objectives of my dissertation, highlighting themes found across my three analytic chapters. Concluding, I will consider the limitations of my research and suggest relevant avenues for future research.

7.1. Key findings

My exploration into the international health landscape of Cozumel Island, Mexico, consists of three relatively discrete analyses, each informed by a distinct set of data. In the following section, the key findings of each analytical chapter will be summarised.

Chapter 2 is entitled *Pharmaceuticals and tourist spaces: Encountering the medicinal in Cozumel's linguistic landscape*. Its analysis extends health geography's legacy of landscape studies while introducing to the discipline (and to island studies) a novel conceptual framework. Engaging with the sociolinguistic conceptual framework of the linguistic landscape, this chapter uses observation and photograph analysis to construct and unpack a hypothetical narrative of tourist encounter with Cozumel Island's many pharmaceutical establishments. Within this analysis, I suggest a number of motivations for the aesthetic decision-making behind pharmaceutical store frontage and signage, as well as a variety of ways through which these features of Cozumel's health landscape may be interpreted by tourists visiting the island. I consider the island's

pharmaceutical aesthetic as embedded within broader touristic discourse, with linguistic and pictorial representation, such as the use of English and hand-painted rótulos, coupling the purchase of medications with conventional touristic expectations of the Mexican tourist landscape. Here, pharmaceutical purchasing is normalised as part of the tourist experience and can be considered akin to the souvenir. The ubiquity of English, along with the representation of familiar pharmaceuticals, is understood as necessary to both pique the interest of tourists, as well as signal legitimacy through an affiliation with global medicine. Conversely, low technology and whimsical production values continue to invoke imaginaries of Mexico as a place of unregulated pharmaceuticals that may be obtained at low cost. However, such aesthetic practices can be read as more than attempts to legitimise Cozumei's pharmaceuticals as a normalised, low cost tourism product. I propose that for tourists encountering Cozumei's pharmaceutical aesthetic, a moment of colliding discourse is afforded, where beliefs and questions about increased access, lower cost, and the legitimacy of Mexican medications may be considered in relation to the realities of medicated lifestyles, replete with everyday pharmaceutical needs, barriers and complexities. Here, the encounter with Cozumel Island's pharmaceutical landscape can be read as more than a touristic experience; with an aesthetic aiming to reinforce its product as both low cost and legitimate, the island's pharmaceutical landscape may become a space of agency and increased control over one's personal pharmaceutical needs – a souvenir of substantial implication.

Departing from the more creative method employed in chapter 2, chapter 4, entitled *Pills in paradise: Exploring international lifestyle and retirement migrants'* perceptions of the pharmaceutical sector on Cozumel Island, Mexico, explores – as its title indicates – the perceptions that international lifestyle and retirement migrants (ILRMs) living on Cozumel Island hold towards the local pharmaceutical sector. This chapter addresses shortages in existing lifestyle and retirement migration literature, especially in Mexico, concerning access to, and experience of health care for those choosing to relocate their life abroad. Our findings reveal that ILRMs living on Cozumel hold concerns about the accessibility of pharmaceuticals, in terms of both ease of access to drugs they believed should be regulated, and the ability to find medication of particular brand, dosage and price. Cozumel's ILRMs held mixed opinions about the quality of medications available, however, most issues of quality concerned the qualifications held by pharmaceutical clerks and their perceived lack of knowledge about

drugs as well as potential side-effects and interactions. Communication was similarly a concern for participants, with many finding navigating the Spanish-dominated pharmaceutical sector to be problematic, as well as taking issue with the lack of communication between pharmacists and other health care providers on the island. We found that many of these concerns could be attributed to ILRMs' inability to locate familiar features and experiences of pharmaceutical care found in their countries of origin. As distance creates difficulties for ILRMs to return home for care, we found that they would engage in behaviours that respatialise their pharmaceutical care, including shopping around for specific pharmaceutical brands, prices, dosages or experiences, as well as conferring with professionals and other sources of information outside of Mexico, via communication technologies such as telephones or the internet.

Like chapter 4, chapter 6 draws upon semi-structured interviews with 15 participants to undertake analysis. Entitled A challenging entanglement: Health care providers' perspectives on caring for ill and injured tourists on Cozumel Island, Mexico, this chapter addresses a gap in the travel medicine literature concerning experiences of health care workers in destination locations. Specifically, it explores the challenges that health care providers on Cozumel Island face in administering urgent medical care for ill and injured foreign tourists, and provides insight into strategies employed for mitigating these challenges. Undertaking thematic analysis across 13 semi-structured interviews with 15 participants working in the health care sector, three significant challenges emerged. The first concerned accessing or obtaining necessary material health resources, such as equipment or consumables, and recruiting and retaining health human resources, especially specialists and nurses. To mitigate these deficiencies, we found that both material and human resources could be shared among competing private hospitals on the island. The second challenge involved the management of patients holding incorrect or negative perceptions of the island's (or Mexico's) health care, often equating it with underdeveloped or unsafe practices. To emend fears, patients are offered communication with culturally familiar local expatriates, or specialists in their home countries. Providers also ensure that patients are kept well informed about procedures and equipment, and medical spaces are specifically designed to reflect health care locations in the Global North. The third challenge concerns remuneration, including obtaining service payments and handling situations where payments cannot be made. Patients often lack necessary insurance or funds to cover medical care, while

diversity among insurance policies can complicate the collection or timeliness of service payments, with little that can be managed by destination facilities. We suggest that both the challenges and their mitigation strategies exist as factors of entanglement between Cozumel Island's health care and tourism sectors, situating its health landscape, and the practices and experiences within, as simultaneously practices and experiences of tourism: patients remain as tourists, while practitioners assume roles as tourism ambassadors.

7.2. Revisiting my research objectives

7.2.1. Objective 1: to understand how settings of care on Cozumel Island present themselves aesthetically to international patients.

As described in the introductory chapter, of considerable importance for studies of health geography that employ the landscape metaphor is a focus on the physical nature of place and its associations with health (Collins and Evans, 2017; Moon, 2009). Within this work, material places and objects are considered significant entities, imbued with cultural and symbolic meanings that exist within, and influence the production, maintenance and perception of everyday worlds (Conradson, 2005; Kearns and Barnett, 1997). Myriad literature in health geography has shown that beliefs ascribed to the material can influence perceptions and experiences of place as health affirming or denying, and can affect the health opportunities and behaviours of those are found within them (Evans et al., 2009; Wakefield and McMullan, 2005). Chapter 2 has provided a comprehensive discussion of the aesthetic production of health on Cozumel Island, focusing on material signs within the island's public facing pharmacy sector – an analysis which is joined, to a lesser extent, by findings in chapter 6 as it explores more formal settings of care.

Within this case study, chapter 2 responds to objective 1 by specifically exploring the material aspects of pharmaceutical store frontage and signage within Cozumel Island's international health landscape. Introducing the sociolinguistic conceptual framework of the linguistic landscape to health geography, chapter 2 offers a hypothetical narrative of tourist encounter, unpacking the production of pharmacy aesthetics on Cozumel Island and considering how such material features of the health

landscape might be interpreted by its visitors. Importantly, it has discussed how much of Cozumel Island's pharmaceutical aesthetic can be understood as produced in expectation of, and for the tourist, with linguistic and pictorial signs specifically employed to pique curiosity among visitors. Aesthetic features, such as dual English-Spanish naming practices, hand painted rótulos signage, and promotion of the discount or value gained in the purchase of medication, enmesh the island's pharmaceutical retailers within the discursive nature of Mexican beach tourism, normalising the purchase of pharmaceuticals as part of the whimsy and frivolity of the tourist encounter. As such, I argue that the specific production of Cozumel Island's pharmaceutical landscape serves to redefine medications as souvenirs symbolic of the tourist experience. However, while paying attention to Cozumel's broader touristic intentions, I note that aesthetic features such as lists and pictorial representations of pharmaceuticals that adorn shop fronts and signs tend to portray specific medications that may appeal to Cozumel's tourist demographic, as well as emphasising the island as a place where pharmaceuticals are lower cost and easier to access than in tourists' home countries. Thus, I further argue that these, and other pharmaceutical aesthetics are placed with the intention of evoking, for tourists, the everyday seriousness of pharmaceutical needs, and work to produce Cozumel Island's international health landscape as a space of agency that might allow one to side-step some of the complexities involved with medicated living.

Across both chapters 2 and 6, I argue that a number of the aesthetic features found within Cozumel Island's international health landscape exist in order to legitimise the island's products and services, especially in light of existing negative perceptions of Mexico that construct the country's health amenities as unsafe or dangerous (Dalstrom, 2012). For example, in chapter 2 I suggest a number of aesthetic features that Cozumel Island's pharmaceutical vendors employ in order to legitimise of their products. These include the repetitive composition of primary signage across competing pharmacies as expressions of collective identity, and linguistic and pictorial representations of pharmaceuticals that portray familiar products associated with safety and quality. In chapter 6, health care workers are shown to make specific aesthetic decisions in attempt to legitimise the care they provide, and ensure that patients feel confident about the quality and safety of care within Cozumel Island's private health facilities. Such decisions include the construction of hospital interiors that emulate care settings recognisable to

patients, and ensuring that staff dress in a way that patients identify and associate with quality health care.

Further, both chapters 2 and 6 suggest that many of the aesthetic features found within Cozumel Island's health landscape reference beliefs that quality health care lies beyond Mexico. In chapter 2, I argue that the prioritisation of English text, the depiction of brand names and pharmaceuticals familiar to US consumers, and the display of recognisable transnational corporate symbols help to legitimise the pharmaceutical products sold on Cozumel as high quality and safe by symbolically aligning them with US pharmaceutical settings and globalised practices of medicine. Similarly, in chapter 6, findings show that legitimacy is pursued through aesthetic means as health care providers implement policy initiatives and design principles that seek to align Cozumel's medical spaces with familiar health care environments in the US. However, reading across chapters 2 and 6 it can be seen that the different care settings of the pharmacy and the hospital or clinic employ distinctively different aesthetic methodologies for constructing themselves as legitimate. While the formal care setting strives to produce legitimacy through a mostly indistinguishable emulation of counterpart settings in the US, pharmaceutical aesthetics can be understood as a dual play upon both the strengths and weaknesses of the US pharmaceutical industry. Here, pharmaceuticals are afforded legitimacy though representations of the familiar that suggests safety and quality, while other aesthetic features continue to remind the consumer of the barriers faced in pharmaceutical access in the US that the purchase of pharmaceuticals in Mexico may enable one to sidestep. For both chapters, these findings are consistent with research exploring intentional cross-border movement for medical products and services (Cook, 2010; Liu and Chen, 2013), including at the US-Mexico border, where Mexican health care providers have been found to employ specific aesthetic features they feel best represent the positive qualities of US health care that will help to legitimise their businesses (Dalstrom, 2012).

By focusing on material features and associated decision making within these analyses, I have addressed the objective of understanding how care settings on Cozumel Island present themselves aesthetically to international patients and patrons. I believe that such a perspective is important when undertaking a landscape study within health geography, as it allows for an unbundling of symbolism and meaning from the physicality of place, and helps reveal the affective capacities that engagement with the

material might offer for the health of those experiencing them. Importantly, I have shown that the aesthetic of Cozumel Island's international health landscape can offer those visiting the island a sense of agency over their personal pharmaceutical needs, but in order to do must entertain continual reference to care elsewhere in order to identify as a legitimate product, an aesthetic strategy that is shared by more formal settings of care on the island as they endeavour to demonstrate the competency of their practice.

7.2.2. Objective 2: to uncover the different mobilities at play within Cozumel Island's international health landscape.

To address the international of Cozumel Island's health landscape is to recognise its existence as a fluctuating collision of expected and unexpected movement and immobility, at numerous scales and across multiple entities of people, things, and ideas. Thus, this objective involves an uncovering of those mobilities that enable Cozumel Island's international health landscape to emerge. While not explicit investigations of mobility, the three analytic chapters included in this dissertation reveal several intersecting mobilities, across various modes and spatial and temporal scales, that contribute to Cozumel Island's international health landscape. In chapter 2, the aesthetic development and perception of the island's pharmaceutical landscape is understood as a relational outcome of the transnational movement of tourist bodies, as well as their histories and capital that accompany them to Cozumel Island. In chapter 4, ILRMs' perceptions of Cozumei's pharmaceutical care are shown to be associated with mobile knowledges of care that have travelled with them to the island from abroad. Further, this analysis reveals that by engaging with knowledge mobilities afforded by technology, Cozumel's ILRMs are able to augment their local pharmaceutical experiences by engaging in real time with health knowledges from abroad. In chapter 6, challenges for the delivery of medical assistance within formal care settings, and the deployment of associated mitigation strategies, are shown to be entangled within multiple transnational and local mobilities and immobilities associated with Cozumel's primary touristic intentions.

As suggested in the introductory chapter, the health landscape of Cozumel Island has, throughout history, been intimately linked with movement toward the island. To the Maya, Cozumel had been known as a site of communion with Ix Chel, a spiritual landscape where one could appeal to the god in search of good fortune in childbirth and

medicine (Scholes and Roys, 1948). This landscape of health, however, could only be known by those brave enough to cross the treacherous Yucatan Channel; bodily mobility thus becoming essential for the pilgrim's desires to be realised. In the 16th century, the mobilities of Spain's colonisation project would turn Cozumel from a therapeutic landscape, into one of pestilence, as smallpox followed their movements throughout the Caribbean Sea (Hays, 2005; Hopkins, 2002). Later, in the mid 20th century, tourism mobilities spawned from Cozumei's development as a travel destination produced the need for formal sites of care on the island (MSM, 2017), the growth of which continues as Cozumel remains a popular setting for recreational tourism. Both chapters 2 and 6 provide insight into the way in which Cozumel Island's health landscape continues to exist as an outcome of tourism mobilities. In chapter 2, I address the material and aesthetic configuration of pharmaceutical establishments found within Cozumel Island's central tourist area, arguing that both the linguistic and pictorial elements found upon store fronts and signage are employed to engage with properties believed intrinsically associated with specific tourism mobilities. I suggest pluralistic motivations. The design and implementation of pharmaceutical aesthetics can be read as strategically associated with the surrounding features of Cozumel Island's broader tourist landscape, where tourist mobilities and associated discursive expectations exert significant influence upon the island's materiality. Here, medications are transferred meaning from the tourism products exhibited alongside them, assigned the status of memento or souvenir – a mobile representation of the Cozumel experience. However, the production of pharmaceutical aesthetics also directly references certain expectations of health cultures external to both Cozumel Island and Mexico, and remains reliant upon the mobility of associated encultured bodies (tourists) to engage with its outputs appropriately. As such, I suggest that these representations can act as prompts, bringing to the fore the identities and everyday realities of tourists' medicated lives which inevitably travel alongside the body, and can offer, for those engaging with them, the potential for increased agency over their everyday health care needs.

Correspondingly, chapter 6 reveals how challenges for health care providers working in Cozumel Island's private facilities are also intimately entangled with the island's tourism mobilities. For example, difficulties for recruiting and retaining health human resources are caught within the mobile nature of tourism that shifts tourist bodies to and from the island as part of daily and seasonal cycles. Such shifting temporalities

disrupt the ability to establish ongoing social and cultural facilities, leaving potential health professionals reluctant to live and work on the island. Cozumel's health care providers also note that like tourists encountering the island's pharmaceutical establishments, those requiring medical attention travel from abroad as encultured, mobile bodies, replete with established beliefs and perceptions about the nature of health care in Mexico. These perceptions, often negative, not only inform tourists of how they should interpret Cozumel's health landscape, but also provide prompts that influence the priorities and performances of health care providers, as they must intercept misperceived knowledges and attempt to refocus patients' interpretations of the island's health care landscape.

Examining the perspectives of multiple participant groups, the findings of this research demonstrate how perspectives of Cozumel Island's health landscape can be modified via real-time knowledge mobilities. Chapters 4 and 6, respectively, highlight the perspectives and experiences of care access for Cozumel Island's international lifestyle and retirement, and the practitioners who provide care for this group and other international patients. Within each analysis, findings show that patient perceptions and experiences of Cozumel's health landscape can be augmented in real-time via technologies that enable the immediate mobility of knowledge. This is specifically addressed within the discussion of chapter 4, showing that to overcome perceived challenges of accessing acceptable pharmaceutical care, ILRMs will contact trusted medical professionals in their countries of origin, or undertake internet-based research to gain medical knowledge that originates outside of Mexico. This communication acts as means of knowledge mobility through which information from trusted settings of expertise outside of Mexico can now be known in real-time and in situ, enabling ILRMs to reconfigure, or respatialise their perception and experience of Cozumel Island's pharmaceutical landscape. This allows ILRMs to make culturally contingent decisions about their individual health care that they believe to be better informed, and will provide them with safer and higher quality pharmaceutical experiences. In chapter 6, health care providers in Cozumel Island's private hospitals that mostly cater to ill and injured tourists describe the challenge of delivering necessary medical care to international patients who may believe health care in Mexico to be underdeveloped or unsafe. Like chapter 4's ILRMs, providers facilitate knowledge mobilities by establishing patient communication with trusted and/or specialist health care personnel in their countries of origin, thus

enabling a real-time flow of dependable information that may alter patients' perceptions of Cozumel Island's health landscape and help to facilitate the provision of care.

Within this case study, not all mobilities with capacity to affect the perception or playing out of Cozumel Island's international health landscape are explicitly international. Across the three analyses, the island's health landscape has also been shown as perceived and experienced, as well as reconfigured, through mobilities that remain internal to the island. Discussing their experiences with Cozumel's health landscape, the island's ILRM population in chapter 4 reveal that internal mobility is employed as a strategy to ensure that they are receiving pharmaceutical care that they deem to be acceptable. Here, ILRMs describe embodied movement between pharmaceutical establishments as they search for products that meet their specific pricing, branding and dosage needs, a movement that operates as a form of renegotiation, or respatialisation of the island's health landscape. Chapter 2 describes similar mobilities among tourists who visit Cozumel Island. I suggest that bodily movement, accompanied by an evershifting gaze within Cozumel's tourist landscape, enables vacationers to recognise the island's myriad pharmaceutical establishments. Here, movement and gaze creates both real- and pseudo-repetitive encounters that can not only highlight the pharmaceutical among the island's tourism vendors, but may also assist in establishing legitimacy through perceptions of collective identity, and recognition of medications that, for tourists, may be culturally or personally familiar. In chapter 6, health care providers describe practices for the mitigation of resource deficiencies within Cozumel's health landscape. Specifically, they enact mobilities that enable the movement of both human and material resources between competing facilities in order to ensure that appropriate care is easily available. We suggest that these internal resource mobilities not only achieve a material reconfiguration of Cozumel's health landscape, but also can be read as motivated by goals of reputational maintenance, ensuring that both the island as a tourist destination, and as a place where health care is delivered, are positively perceived by tourists. Further, it is important to recognise that while reputational maintenance can be conceived of as an outcome of internal resource mobilities, tourist populations remain internationally mobile and, as such, reputations pertaining to Cozumel Island will inevitably become internationally mobile themselves.

As a place defined by movement that ensures a plethora of comings and goings across multiple scales, that which is immobile can similarly affect the perception and

experience of Cozumel's health landscape, as is revealed across chapters 4 and 6. For the ILRM participants in chapter 4, one concern that impacted their experience of Cozumel's health landscape was the immobility of individual health data among care settings on the island. For them, the immobility of medical records and other health information between pharmacies and other health care professionals was perceived as problematic – an issue of care continuity that further defined the island's health landscape as comparatively inadequate. In chapter 6, health providers revealed that lack of mobility could lead to challenges for the delivery of care, in this case, mobilities of both knowledge and capital. This was specifically noted in the inability to obtain necessary information and remuneration from insurance companies that would enable practitioners to provide necessary care to ill and injured tourists.

Reading across the three analytical chapters, it becomes evident that the international health landscape of Cozumel Island can be understood as constructed, perceived and experienced at an intersection of multiple mobilities, continually negotiated within and beyond the "openness and closure" (Baldacchino, 2004, p.278) intrinsic to island environments (Grydehøj, 2017). Thinking with the archipelago, Cozumel becomes a setting of care that is a collided, fluctuating and relational outcome of numerous historic and contemporary mobilities of multiple people, things and knowledges that are moving toward, within and away from the island at a number of scales. I have shown that perception and experience of the island's health landscape is affected by the divergent movement of bodies from near and far, as well as the complex knowledges that travel with, or are shifted by them. Finally, I have shown how both embodied and knowledge mobilities may be enacted in order to renegotiate, reconceptualise or respatialise the perceptions and engagements with Cozumel's international health landscape across multiple populations within it.

7.2.3. Objective 3: to understand the experiences of providing care for international patients, and how patients experience and understand care on Cozumel Island.

Building upon the previous two objectives that have sought to explore the numerous mobilities and associated aesthetic specificities involved in the emergence of Cozumel Island's international health landscape, this objective is concerned with how care is experienced by patients and providers entangled within this island setting. The

experiences of care on the Cozumel Island were explicitly addressed across chapters 4 and 6. Chapter 4 explored the experiences of Cozumel Island's ILRM community as they interact with the island's pharmaceutical sector. Reversing this, chapter 6 investigated the experience of Cozumel Island's health care providers, as they work to dispense necessary medical care to ill and injured tourists on the island.

For those in need of care on Cozumel Island, findings across chapters 4 and 6 reveal that their experiences are inherently relational. Here, the health landscape of Cozumel Island is experienced as part of a contextual relationship, with experiences of care being continually mediated via knowledges and experiences of care elsewhere that are often regarded as the zenith of medicine. This is specifically outlined in chapter 4 where it was found that ILRMs on Cozumel Island mediate their experiences of the island's pharmacy sector by defining features of Cozumel's health landscape in comparative relation to those in their countries of origin that they may deem to be superior. In chapter 6, health care providers note that the way in which international patients perceive and react to the need for care, as well as actual care experiences on Cozumel Island, is often in relation to expectations of care in their countries of origin, as well as broader cultural knowledges that construct Mexico and its health care competencies as underdeveloped and unsafe. Further, in both chapters, findings show that by engaging with the external settings of relational comparison, patients within Cozumel's health landscape can renegotiate or augment their perceptions and experiences of the island's health care settings. For example, health care providers in chapter 6 note that by initiating patient communication with others who represent the external spaces with which Cozumel's health amenities are compared, as well as those of relatable cultural identity (e.g. by telephoning trusted professionals in patients' home countries, or introducing patients to culturally familiar locals), they can reduce the relational discrepancy between care on the island, and that of home, enabling Cozumel Island's health landscape to become significantly more relatable to care settings that represent safe and quality health care provision.

Across this research, several moments reveal the experience of Cozumel Island's health landscape to involve a number of challenges for both providing and receiving care. When approaching this case study, uncovering the challenges of engaging with health care on the island was not an explicit priority; however, I found that this theme emerged naturally across the collective interviews conducted with both

participant groups. Reflecting known complexities of island health care provision (Gould and Moon, 2000; Moore, 2008), of importance emerges the shared experience of encountering and overcoming resource challenges. For example, health care providers in chapter 6 discuss challenges for access to diagnostic medical equipment and consumable products, as well as health human resources, that are often necessary for the effective treatment of patients. Correspondingly, in chapter 4, ILRMs' experiences with the island's pharmaceutical sector involves multiple access challenges, including access to specific pharmaceuticals, as well as to medical advice they believe to both quality and accurate. Further, as noted in objective 2, both Cozumel's ILRMs and the island's health care providers attempt to mitigate the challenges experienced within Cozumel's health care landscape by executing internal island mobilities that shift bodies and resources across space locally, reconfiguring the island's health landscape through resilient practice (Pelling and Uitto, 2001).

Throughout this case study, it has been shown that the international health landscape of Cozumel Island does not exist in independent distinction, but must be understood as part of an inseparable entanglement with the island's touristic aspirations and dominant tourism landscape. Thus, it similarly remains that the experience of Cozumel's health landscape cannot be extricated from the island's broader touristic intentions. For example, in chapter 2 I have suggested that the aesthetic composition of Cozumel's pharmaceutical store front and signs have been specifically implemented to promote pharmaceutical products as a frivolous touristic purchase. Here, the experience of pharmaceutical purchasing becomes embedded within expected touristic practices of Cozumel, and while the tourist may return home with a medication purchased abroad, I suggest that such a purchase may also exist as souvenir, and a reminder for the tourist of their Cozumel experience. This sectorial entanglement is more explicitly addressed in chapter 6, where challenges experienced by the island's health care providers, including the deficiency of resources, (mis)perceptions of medical services, and complications for remuneration on the island are understood to be directly embedded within broader realities of Cozumel's economic dependence on tourism. Further, this chapter advances the idea that both providers and patients within Cozumel Island's health care sector cannot be conceptualised within a single capacity; patients, although injured or ill, will continue to remain tourists, while providers must simultaneously adopt positions as ambassadors of the islands dominant economic and cultural interest. Thus, for both

providers and patients, the experience of Cozumel Island's international health care landscape must be understood as simultaneously one of health care provision, and as a continuing engagement with the island's broader tourist landscape.

Across the three analytical chapters, both findings and discussion contribute to achieving objective three, which is to understand the experiences of providing care for international patients, and how patients experience and understand care on Cozumel Island. Of interest is that the experiences of both those providing care, as well as those accessing or receiving it, can be understood in relatively similar terms, with the experiences of both participant groups found to be relational, challenging, and intimately entangled with the island's dominant tourist landscape. Such findings serve to complicate existing knowledges of health care within both tourism and island spaces, that typically consider singular participant groups, and thus portray provider and patient as relatively distinct actors.

7.3. Limitations

Communication proved to be a limiting factor for some parts of this research. For recruiting and interviewing participants within the island's the international lifestyle and migrant community, my Spanish abilities did not provide hindrance, as English is by-far the most commonly-spoken language among this population. Recruitment and interviewing of the island's health care workers was more complicated. Welch and Piekkari (2006) note that use of local language in research is important for "opening doors" and "establishing trust", and refer to it as the "access language" in gaining access to participants. While private health care providers in Mexico typically conduct external business communication in English, and health care support staff have the highest rate of English language education of any industry in the country (British Council, 2015), in a number of situations my inability to communicate in Spanish prevented me from recruiting potential participants. This was most problematic when speaking with pharmacy workers, or when approaching smaller clinics, where specialists were often represented by Spanish speaking receptionists who could not communicate in English. In some circumstances I was able to overcome this barrier by using Google Translate to provide an interpretation, informing the person with whom I was speaking of my intentions. In others, I was able to bypass the Spanish language barrier by contacting the health care specialist directly if their email was available.

Where interviews with native Spanish speakers were conducted in English, complications arose in the ability for participants to both understand and express higherlevel concepts. As such, some interviews became repetitive or stagnant as participants lacked the English competency to answer questions. In some instances, participants' English language abilities were dominated by clinical and administrative vocabularies, complicating probes for individual expression as participants would fall back on medical jargon and policy terminology (Welch and Piekkari, 2006). Even when interviewing participants with high-level English language competency, it was noticeable when language was hindering expression (Drew, 2014). Further, Marshall and While (1994) note that even when language is not perceived to be a barrier, communication with participants who think and speak in the context of a different language and culture can lead to conceptual misinterpretation. While I had considered the possibility of a language barrier and altered my interview questions as I saw appropriate, there may have been potential benefits of further simplifying my vocabulary in order to mitigate "concealed assumptions" about words and concepts (Marshall and While, 1994), while helping the participant feel more comfortable (Drew, 2014). This remains important to consider in future research with participants in diglossic spaces.

Further, in undertaking this study, I encountered high levels of reluctance or hesitation among potential participants, leading to a smaller data set than I would have liked. As I should have expected (Namageyo-Funa et al, 2014), people were hesitant to speak about their health experiences on Cozumel Island. Recruiting to interview members of Cozumel's ILRM community, it quickly became apparent that the word 'health' is particularly connotative for many people, and is typically associated with the sensitive, intimate and often private details of personal life. As such, it was difficult to communicate to hesitant participants that interviews would not be concerned with intimate details of personal health status, or broach sensitive topics. Even when I engaged in rapport building strategies (Dickson-Swift et al, 2006) with a number of potential participants who were on the fence, I often left empty handed. While interviews with a number of people who expressed initial interest did not eventuate, I eventually managed to find success by asking participants who had completed interviews to describe the experience to their peers. This proved to be an effective recruitment strategy and, consistent with literature that cites word-of-mouth as an effective recruitment method when the reduction of anxiety in potential participants (Hooks et al,

1988; Jones et al, 2009) is necessary, I found exponential growth in the number of interviews arranged with ILRMS.

A final limitation worth mentioning concerns the gender-bias among participant voices represented in chapter 4. As noted, of the ILRMs interviewed for chapter 4's analysis, twenty-one identified as female, while only five identified as male – a significant imbalance considering the gender distribution among Cozumel's international population is split relatively evenly (INEGI, 2010c). Literature reveals that gender roles and identities contribute to the way that health care is perceived and experienced, as well as accessibility and expectations (Noone and Stephens, 2008; Pittman, 1999). Thus, the over-representation of women within this data set may have biased interpretation of Cozumel Island's health landscape in favour of specific gendered experiences of care.

7.4. Future research directions

There are many directions for future research that could be implemented following my explorations in this dissertation, both specific to interrogation of the health landscapes of Cozumel Island, and in terms of expanding the scope of investigation towards other island, migrant and touristic landscapes. Continuing research into Cozumel Island's international health landscape, research should include some of the voices left out of this dissertation, such as pharmaceutical vendors and tourists. While chapter 2 provided an in-depth discussion of Cozumel Island's pharmaceutical aesthetics as they are produced for, and perceived by tourists visiting the island, it is acknowledged that the knowledge presented within the analysis remains my individual interpretation. As such, future research should address the empirical experience of Cozumel Island's pharmacy sector, with specific advancement to perspectives of the owners of, and vendors working within pharmacies, as well as engagement with tourists who have purchased pharmaceuticals. Because language is a limiting factor in accessing pharmacy workers, the ability to administer Spanish-language interviews should be considered essential for conducting research with this group (Andrews, 1995; Tsang, 1998).

Future research on Cozumel Island should also continue to address the health care experiences of the island's ILRMs. While chapter 4 has explored the perceptions and experiences of Cozumel's ILRM population as they interact with the island's pharmacy

sector, expanding this line of inquiry across multiple settings of care will enable broader insight into how Cozumel's international health care landscape is perceived and experienced. This is important because different settings of care address divergent needs, and involve varying spatio-temporal engagements. As such, the experience of one type of care setting (e.g. the pharmacy) is unlikely to be wholly representative of another (e.g. the dental clinic or hospital). Further, my data suggests that expanded exploration should include ILRMs' perceptions and experiences of alternative forms of medicine on the island, including spiritual and traditional therapeutic settings. Investigation into non-biomedical forms of care (e.g. natural medicine or shamanistic ritual) would provide an alternative perspective concerning treatment practices on the island. Broadly, expanded inquiry will enable researchers to contrast ILRMs' experiences across multiple care settings, provide insight into the way in which health knowledges and beliefs can exist in dynamic spatial relation among multiple settings and cultures of care, and contribute towards a more holistic view of Cozumel Island's international health landscape.

Future research on Cozumel Island should also investigate the experiences of tourists who are engaging with the island's health care settings. Across chapters 2 and 6 of this case study, Cozumel Island's health care landscape has been shown to be fundamentally interwoven with the island's broader touristic landscape, however, the voices of tourists have not been represented. Researching the experiences of tourists, including those purchasing pharmaceuticals or receiving necessary medical care, will offer empirical, international perspectives that can contextualise my reading of Cozumel's pharmaceutical aesthetics and provide a more rigorous understanding of how health care on holiday plays out within the island's more formal international care settings. Following my suggestions above, such perspectives can provide insight into the differences and similarities of the international care experience across multiple modalities and spatio-temporalities of island engagement (Moreira, 2007), and contribute to better knowledge(s) of the subjective and relational nature of Cozumel's international health landscape (Conradson, 2005).

To assess the transferability of this case study, future research should also consider alternative health landscapes that bear similarities to Cozumel Island. For example, a cursory examination of alternative cruise destinations in Mexico, including Los Cabos, Puerto Vallarta and Mazatlán, reveals that while these destinations entertain

fewer cruise tourists than Cozumel (CruisePortInsider, 2017a; CruisePortInsider, 2017c; CruisePortInsider, 2017d), they are home to significantly larger ILRM populations (INEGI, 2010a; INEGI, 2010b) as well as similar proportions of health care amenities (e.g. Tyson Promotions, 2017). As such, exploration of these sites can help to build a fuller understanding of the interaction between tourism and health, and the ways in which internationally mobile patients, including tourists and ILRMs, perceive, access and experience care in Mexico. Further, considering noted research gaps (e.g. Gould and Moon, 2000), research should continue to investigate both the production and consumption of health landscapes, and the experiences of international populations engaging with such settings, upon islands that are economically dependent on tourism. This work would enable researchers to better understand the entanglements between health and tourism within such geographically bounded and isolated environments.

7.5. Conclusion

At the intersection of health, tourism and place, this dissertation has provided an exploratory case study of the international health landscape of Cozumel Island, Mexico, an island typically encountered as a popular diving or cruise destination, but one not typically considered for its health landscape. Across three analyses, I have offered eclectic insight into the production of the island's international health landscape, and the experiences of providing and receiving care within it. Through explorations of the island's pharmaceutical aesthetics, provider challenges for the delivery of medical care to tourists, and Cozumel's ILRMs' experiences of pharmaceutical care, this dissertation situates Cozumel Island's international health landscape as a dynamic and continuingly emergent space, produced amidst a complex archipelago of tourism and health mobilities with which it remains inextricably intertwined.

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