**ABSTRACT**

Insights from the social sciences, including geography, sociology, and anthropology, have long been incorporated into pre-registration nursing programmes. However, scholars have suggested that their inclusion has been sporadic and lacks clear theoretical rationale. In this paper we argue anew that the social sciences – and particularly, human geography – could be central to nurse education. Specifically, we recast the concept of ‘biogeography’ drawn from human geography that emphasises the interplay between life (bio) and place (geo) to propose pedagogy that theoretically justifies and practically enables the inclusion of the social sciences in nurse education. Biogeography can breathe new life into nursing curricula by animating our students through the cultivation of three ‘spirits of nursing’. First, a ‘spirit of empathy’ that can shatter patient-professional dualisms by facilitating person-centred and place-sensitive care. Second, a ‘spirit of engagement’ that situates practice in social structures awakening a desire to effect change by fomenting an acute sense of social justice. Third, a ‘spirit of enquiry’ that holds in critical tension the theory-practice gap by fostering continual questioning and pursuit of evidence. In so doing, biogeographical pedagogy releases the latent potential of the social sciences to revitalise nurse education, reinvigorate our students, and renew ourselves as nurse educators.

**Key words:** social science,pedagogy, biography, geography. **Introduction: Ambition**

This paper presents a radical re-vision of nurse education. Our premise is simple: by embracing the concept of biogeography – i.e., the inextricable link between people and place – nurse education can be revitalized, our students reinvigorated, and ourselves as educators renewed. Hence, this paper is designed to stimulate conversations among and between educators, students, practitioners and policy-makers about the future of nursing curricula and nursing academia.

Our proposal proceeds in three parts. First, we survey the work of scholars (largely based in the United Kingdom) who have called for the social sciences, including sociology and human geography, to play a greater part in nurse education and argue for a renewed appreciation of this insight. Second, we share the concept of biogeography drawn from human geography that we suggest has potential as a novel critical pedagogy in nursing. Third, we turn to the outworking of biogeographical pedagogy and sketch three ‘spirits of nursing’ this approach can inspire in our students: spirits of empathy, engagement, and enquiry.

**Social Science and Nurse Education**

We are not the first to argue for the elevation of the role of the social sciences in nurse education. For example, Rolfe (2011) has proposed that C. Wright Mills’ concept of the ‘Sociological Imagination’ – i.e., acute critical awareness of the interconnection between individual experience and society and an ability to see from alterative viewpoints – provides a platform for a more critically engaged discipline and hinted at the potential contribution that it might make to teaching care and compassion. Goodman (2011) further developed the idea as a tool to enable engagement in critical thinking for nursing students to encourage them to reflect on the socially embedded lives of their patients. MacPherson (2008: 655) too has similarly asserted that “sociology should form a central pillar of pre-registration nurse education”, while Holland (2004) has warned that sociological knowledge must not be taken for granted in nursing curricula to the extent that it is not explicitly debated by nurse educators.

Heeding this warning, we would argue that the same is true for knowledge derived from the social sciences in general. Despite engagement with the social sciences in nurse education, especially in the United Kingdom as a result of Project 2000 reforms that marked nurse education’s move into the Universities, engagement with the social sciences in nursing curricula in the UK remains variable in scope and scale, and the international picture is patchier still. Indeed, although teaching informed by the social sciences, such as sociology, geography, and anthropology, has been incorporated into undergraduate (pre-registration) nursing programmes in the UK, it has been noted that its inclusion has been far from consistent (MacPherson 2008) and lacks a clear theoretical rationale (Aranda and Law 2007, Edgley et al2009). Here we address this lack of clear theoretical rationale by arguing for a more prominent role for human geography in nursing curricula.

Neither are we the first to call for greater integration of geography in nurse education. Andrews (2006) has made a compelling case for the explicit use of geographical ideas and insights to encourage students to engage with the spatial patterning of health and health care delivery. In this paper, however, we tread new ground by borrowing the concept of biogeography as the basis of a critical nursing pedagogy. In doing so, we seize the opportunity to make a much more confident claim that human geography – and by implication the wider social sciences – can be central to, and explicit within, nurse education.

**Biogeography**

Biogeography, by its textbook definition, is a branch of geography concerned with the spatial distribution of plant and animal life and the interaction of this flora and fauna with its wider environment. Put baldly, biogeography is concerned with life in place.

But, biogeography has evolved. In an important editorial, Spencer and Whatmore (2001: 140) called for a different “bio-geography [that] invests attention in rather different assemblages of phenomena and modes of enquiry than those of the plant and animal geographies associated with the Hartshornian project of mapping patterns of spatial distribution and areal differentiation”. Part of this project of ‘putting life back into the discipline’ was a recalibration of the relationship between “human society’ and the ‘natural world’” (2001: 140). Later, in a seminal paper heralding ‘more-than-human’ approaches to understanding the world, Whatmore remarked that “the vital connection between *geo* (earth) and *bio* (life) [is] amongst the most enduring of geographical concerns” (2006: 601). Whatmore continued:

“The durability of these concerns bears the hallmark of geography’s history, which (like anthropology and archaeology) took shape before the division of academic labours into social and natural sciences became entrenched. It is a division with which these disciplines have never been entirely comfortable, and with which they continue to wrestle more self-consciously, and sometimes productively, than others.” (2006: 601)

Nursing too wrestles with this division. Even a quick sprint through nursing’s disciplinary history reveals that it has variously (and sometimes simultaneously) been positioned as a natural (*bio*-medical) science, found a home in the humanities or considered a social science. We contend that adaptation of the concept of biogeography provides a path – theoretically, and, perhaps more importantly, pedagogically – across an impasse that, we suggest, has hampered nursing’s emergence as a truly academic discipline. Taking our cue from Whatmore (2006) and building on Patchett et al’s (2008) “malleable use” of the term, we propose that the two constituent parts of biogeography – *bio-graphy* and *geo-graphy* – are both vitally connected and, combined, bring renewed vitality to nurse education.

Biography is inherent to nursing practice. Daily, nurses ‘take patient’s histories’, listening attentively, probing appropriately, jotting down significant events and circumstances in order to accurately re-tell the story of an individual’s illness or injury to colleagues, relatives, or, indeed, patients themselves.

Nurses are already *biographers*: authors of accounts of individuals’ lives, through, for example, stories related in nursing notes and handovers. However, rarely are they *biogeographers*: chroniclers of individuals’ lives in place. To be sure, the concept of lived experience looms large over nursing practice, research, and education. Students are encouraged to attune themselves to others’ lives as part of a process of attaining an empathetic understanding by *exploring* lived experience through their conversations, engagement with qualitative research, or, indeed, autobiographical accounts of living with illness. However, so often this exploration is *aspatial*; students’ sojourns into experience occur *on* a sanitized, tidy, almost abstracted and homogenised plane of reflection, rather than taking place at the nexus of the bio and geo *in*, what Whatmore calls, the “livingness of the world” (2006: 602).

Bio-geography can make the abstract tangible. At its simplest, recognition of the inseverable link between biography and geography brings scandals, such as the lottery of life expectancy at various geographical scales, sharply into view. That a child born in 2012 in the UK will have a life expectancy of 80 and a child born in Sierra Leone will likely live to just 45 (UNICEF 2014). That for every two stops travelled east on London’s Jubilee Underground line from Westminster to Canning Town, over one year of male life expectancy is lost (London Health Observatory, 2008). These are well-known and easily grasped observations, but they nevertheless highlight the inextricable interplay between people and place, and hence hold great import for nurses and other healthcare professionals caring for people.

But it is only by extending the concept of biogeography incrementally beyond this textbook (Hartshornian) understanding of the *spatial patterning* of individuals’ lives (and deaths) to fully embrace the ‘livingness of the world’ (Whatmore 2006: 602) that nurse education will be emancipated. Certainly, as Andrews (2006) also acknowledged, increasing awareness of areal differentiation in health *outcomes*, such as life expectancy, is a helpful pedagogical entry point. But putting the concept of biogeography in all its fullness centre-stage in nurse education enables student nurses to gain an appreciation of the crucial and complex ways through which place shapes individuals’ health *experiences*, *behaviours*, and *opportunities*, or lack thereof. In so doing, biogeography – as *critical* pedagogy (Freire 1968) – attunes students to others’ lives and simultaneously sharpens a radical edge to their nursing praxis.

This call for nurse education (and its educators) to forge radicalism and connect more explicitly with issues of social justice is also not new. Almost 20 years ago Jane Harden (1996), drawing on the writing of Habermas and Freire, called for a ‘peaceful revolution’ in nurse education that required educators to expose collusion with oppressive social structures to ensure nurse education became enlightening, empowering and emancipatory. As she succinctly noted: “It’s time to get radical” (Harden 1996: 36).

Two decades later, we struggle to find evidence of Harden’s ‘peaceful revolution’ in nurse education. Indeed, critical voices now talk of ‘killer elites’ more invested in protecting personal advancement (Thompson and Darbyshire 2013) than the professional concientisation for which Harden called. However, we believe that ‘the peaceful revolution’ remains a noble aim. The reasons such ideas – just as those of the social sciences more generally – have failed to take root time and again is because they are arguably rather abstract: we get as far as *why*, without full examination of *how*. Biogeography provides an answer to both questions providing a *practical* approach to push as far as Harden hoped (if students and educators so wish), while instilling (or perhaps distilling) equally vital and vitalizing qualities becoming of a nurse *en route*.

**Animation**

We believe that pedagogy built around the concept of biogeography can cultivate three spirits in our student nurses: spirits of empathy, engagement, and enquiry. ‘Spirit’ is not meant here in an ethereal, otherworldly sense, but rather – to trace the etymology of the term to its Latin root ‘breath’ – that which *animates* and is vital to life. Hence, we suggest that combined these inspire ‘spirited nursing’ among our students which, ultimately, reinvigorates and revitalizes nurse education.

Spirit of empathy

Empathy is “the art of stepping imaginatively into the shoes of another person, understanding their feelings and perspectives, and using that understanding to guide your actions” (Krznaric 2014). For students, this process starts by recognizing the way their own lives have been influenced by the interplay between where they have lived (*geo*) and opportunities presented through their life (*bio*) (Atherton and Kyle 2014a). In so doing, biogeographical pedagogy shatters the patient-nurse dualism and facilitates person-centred and place-sensitive care (Andrews 2002). As Rolfe (2014) observed:

“I care *about* my children because I love them and they are my children which motivates me to care *for* them. I care about strangers whom I encounter in hospital because I am able to imagine myself or my children in their situation. Without this empathic imagination, we have only our training and our duty to fall back on.” (Rolfe, 2014: 1459; original emphasis).

Challenging students to stand in their own shoes and trace their own biogeography opens their eyes to how and why their own experiences, attitudes – even their prejudices – have emerged (Atherton and Kyle, 2014b). Doing so is a critical act that starts a process of challenging those perceptions (however subconsciously held) but also enables imaginative leaps into the lives of others through recognition that similar influences may have shaped their patients’ attitudes and experiences. It is a cliché, but this encourages students to see patients as people, potentially shifting nursing back to a holistic sense of health and away from a bio-medical model that perpetually permeates nursing practice.

Spirit of engagement

By spotlighting the structural constraints on an individual’s health, biogeographical pedagogy can also spark a spirit of engagement (Atherton and Kyle, 2015a). By this we mean a desire to not only understand but to change the (nursing) world and the lives of those for whom nurses care so deeply *for* and *about* (Rolfe, 2014). Nurses are already advocates (NMC, 2015) and students’ idealism is a virtue and source of constant inspiration for educators, especially ourselves. But, recognition that social structures are not necessarily immutable encourages debate, reflection and ultimately engagement and activism born of a keen sense of social justice. This potential for engagement and activism is best expressed by one of our former students. In response to a disheartening placement experience that started with a staff nurse’s lament – “I don’t understand why anyone in their right mind would want to do nursing nowadays, all the paperwork, chronic understaffing, and poor pay” – Shewan (2014: 5) expressing Gandhian sentiments wrote ‘from the heart’ in the *RCN Bulletin*:

“As nursing students we can play a unique role in bringing positivity, freshness and enthusiasm into placements. By embracing this, expressing ourselves and speaking up, we may just empower others to be the change they want to see.”

Replace ‘students’ with ‘educators’ and ‘placements’ with ‘campuses’ and our job as nurse academics is exactly the same.

Spirit of enquiry

Biogeographical approaches also enable students to grapple with the tension between theory and practice in an accessible way (Atherton and Kyle, 2015b). Theory is challenging. But, rather than getting lost in technical detail or bamboozled by beguiling language, biogeographical pedagogy brings abstract concepts to life. For example, the connection between structure and individual agency at the heart of the biogeographical illuminates concepts such as the inverse care law (Hart 1971, Mercer and Watt 2007, Jones 2010). Reasons why those in living in marginalized circumstances are less likely to engage with health services are legion: lower literacy and health literacy rates; inability to negotiate increasingly bureaucratic systems; high levels of morbidity that place demands on finite appointment times, transportation, job, and childcare challenges, and so forth. Actions of individual nurses may unwittingly contribute to this wider structural malignancy. Biogeographical approaches potentially reveal to students that their role may be far from benign. Kindling a spirit of enquiry through this process inspires students to wrestle with ideas like the inverse care law – and indeed the theory-practice gap itself – and recognise the need to revisit and reappraise over time through personal reflection and pursuit of evidence. Releasing the spirit of enquiry excites our students to grapple with those ‘wicked’ issues within nursing for which there are no straightforward resolutions.

**Conclusion: Action**

In this paper we have argued that the concept of biogeography, borrowed from human geography, can provide the basis for critical nursing pedagogy that can breathe new life into nurse education by animating three ‘spirits of nursing’ in our students: spirits of empathy, engagement and enquiry. Each ‘spirit’ holds potential to enhance both nurse education and practice. First, the ‘spirit of empathy’ can shatter patient-professional dualisms by facilitating person-centred and place-sensitive care. Second, the ‘spirit of engagement’ situates practice in social structures awakening a desire to effect change by fomenting an acute sense of social justice. Third, the ‘spirit of enquiry’ holds in critical tension the theory-practice gap by fostering continual questioning and pursuit of evidence. To be sure, each spirit infuses the others and our demarcation is largely a descriptive device to enable accessible entry into these ideas. Yet, in practical terms, common to each is a starting point in students’ personal reflection at the nexus of the bio-graphical and the geo-graphical. Thus, in closing we call on nurse educators to embrace biogeography as a critical pedagogy that puts patients’ lives-in-place at the heart of classroom and clinical interactions by encouraging their students to become biogeographers of their own lives-in-place. And, perhaps, this could begin by educators chronicling the interplay between their own life (bio) and place (geo) as a starting point for students’ own explorations. By embracing biogeography as a critical pedagogy, we suggest that not only is the value of the social sciences (and specifically human geography) made tangible and explicit in nursing curricula but we can revitalise nurse education, reinvigorate our students, and renew ourselves as nurse educators.

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