

SPACE:

moving beyond spatial science to engage Australian students with Asian geography

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Space is one of the more important geographical ideas. It is a highly complex term that is used and understood in a variety of ways (Crang & Thrift, 2000, 1). It is most commonly thought of as a great expanse extending in all directions, a vast canvas on which geographers work to describe the earth, and an expanse that extends from personal space to the global¹. Within this vast space, or over portions of it, all material objects are located. This is the space of explorers, map makers, fieldstudy, and of Geographical Information System analysis. This is the patchwork quilt of landscapes, remotely-sensed city lights shimmering in the evening sky and the ever more complex communication networks that intertwine global space. This is the geographer's palette where they work on the assumption that where things are located in space has some significance².

Space and place are often merged together in the geographical imagination but space is more abstract than place. We begin with undifferentiated expanses of space and then we identify with certain parts of space, get to know them better endow them with value, then name and identify them as places³. It is people that form place. Space is a locale⁴ that is made into a place⁵ by human intent. A place is given its personality by human relationships across space. It is produced through connections to the rest of the world, particularly the movement of people but also commodities and ideas (Massey, 1991, Cresswell, 2004).

¹ Haggett's (1990, 23) geographical space lay 'equidistant from the stars and the atoms ... from highly localised studies (say, of a small atoll, an individual settlement or a small river basin) ... through to worldwide studies'

² Maude, (2011), personal communication

³ Tuan (1977, 6) 'What begins as undifferentiated space becomes place as we get to know it better and endow it with value'

⁴ Sociologist Giddens referred to a locales as not just places but settings of interaction

⁵ (Routledge, 1997, 70) 'Different social groups endow space with amalgams of different meanings, uses and values. ... Particular places frequently become sites of conflict where the social structures and the relations power, knowledge, domination and resistance intersect.'

Massey (1994) pointed out that industrial restructuring plays out differently in places, as, for example, in Toyota City, Shanghai or Gurgaon. Effectively she identified places as relational portions of space. Such places do not have single identities but multiple ones. They are not frozen in time, they are processes, that involve the imprint of people, and, paradoxically, such places are not enclosures with a clear inside and outside, they rather link to flows and interconnections. Some places can 'dissolve' from space. Others can be subject to 'perpetual perishing'. They are contingent on the processes across space that create, sustain and dissolve them (Harvey, 1996, 261).

Absolute space

Absolute space⁶, space as the great container of things leads us to study the reasons for the location of phenomena, examining site and situation, spatial analysis using numerical ideas to explain location, spatial interactions that examine the interrelationships between people and place, and, spatial patterns that involve the abstract geometries of movements, flows of behaviour, networks, nodes and hierarchies spread out across space.

Subordinate concepts: absolute space, spatial patterns, location, spatial association, spatial interaction, movement, network, nodes, hierarchies

Berry and Marble (1968) expressed the goal of spatial science as 'building accurate generalizations with predictive power by precise quantitative description of spatial distributions, spatial structure and organization, and spatial relationships': Nystuen (1968) claimed that such generalizations could be based on just three fundamental spatial concepts 'directional orientation, distance and connectedness (or relative position)'.⁷

Spatial science continues to inform school Geography. In the United States the National Geography Standards (1994) assert that, 'Geography is not just a collection of arcane information.

ABOVE: "Inside Australia" an installation by Antony Gormley (2002), Lake Ballard WA. Photo by Amanda Slater. Source: Flickr.com

Rather, it is the study of spatial aspects of human existence' (18). In the UK (QCA, 2007) space is referred to as:

Understanding the interactions between places and the networks created by flows of information, people and goods

Knowing where places and landscapes are located, why they are there, the patterns and distributions they create, how and why these are changing and the implications for people.

– a twofold explanation that opens up further possibilities to examine space beyond the bounds of spatial science and the spatial aspects of human existence. In Victoria it appears that the concepts inherent in spatial science traditions predominate. There appears to be little deviation from the concepts listed by McCaskill⁷ in 1967 (McCaskill, 1967).

Subordinate concepts: spatial distributions, spatial structure and organisation, spatial relationships, directional orientation, distance, relative position

The production of (social) space⁸

'In school geography, the concept of space is decidedly unproblematic: space is simply where things happen (Morgan, 2000, 277). It is a container in which objects and subjects are 'situated' or 'located'.

Pile & Thrift (1995) characterise this view of space which: 'based as it is in positivism, valorises the neutrality of seeing; the world is turned into a set of geometrical arrangements based on an abstract, fixed, universal, isotropic and material understanding of space'.

In academic circles criticisms of spatial science focused on its attempt to construct human geography as an autonomous

⁶ (Harvey, 1973, 13) 'If we regard space as absolute it becomes a 'thing in itself' with an existence independent of matter. It then possesses a structure which we can use to pigeon-hole or individuate phenomena. The view of relative space proposes that it be understood as a relationship between objects which exists only because objects exist and relate to each other. There is another sense in which space – space regarded in the manner of Leibnitz, has been contained in objects in the sense that an object can only be said to exist only insofar as it contains and represents within itself relationships to other objects.'

⁷ Location, distribution, association, interaction, scale, region, friction of distance, movement, energy, change.

The organising concepts in McCaskill's paper are derived from the idea of occupied space. 'Geography's special justification arises from man's own awareness of earth-space and his curiosity about the arrangement and interactions of the objects and forces that occupy earth-space' (1967, 85).

⁸ Lefebvre maintained that '(Social) space is a (social) product' (1991, 26) and that, 'To speak of 'producing space' sounds bizarre, so great is the sway still held by the idea that empty space is prior to what ends up filling it' (15). Nevertheless, *The Production of Space* attempts to reconcile the notions of mental space (the space of philosophers) and real space (the physical and social spheres in which we all live). In particular, he demonstrates how industrial capitalism produces distinctive spaces that are transformed by technology and planners who, at the behest of state political power, see only 'an empty space, a space that is primordial, a container to receive fragmentary contents, a neutral medium into which disjointed things, people and habitats might be introduced' (308).

science of the spatial. Geographers began to emphasise the importance of incorporating social relations and processes into spatial analysis. Indeed, space began to be thought of as something that is produced by human activity. By the 1980s space was 'seen not merely as an arena in which social life unfolds, but rather as a medium through which social relationships are produced and reproduced (Gregory & Urry, 1985, 3)'.⁹

Geographers were indebted to the French urban theorist and philosopher, Henri Lefebvre who argued that space⁹ and society are mutually constitutive: space is both the product of social relationships and is involved in the production of those relationships (Morgan, 2000, 276). Lefebvre (1991, O'Neill, 2005) showed how the view of space as a neutral container for social relationships is an historical construction, and was related to the rise of capitalist social relationships. He pointed out that different societies have radically different conceptions of space. Lefebvre explained the concepts space in countries with advanced capitalist economies as having three interdependent social dimensions, each contributing differently to the production of space according to local conditions (Dear, 1997, 51):

- Conceived space¹⁰, abstract conceptions of space using a system of verbal and graphic signs (Peet, 1998, 103), is the space that planners, architects, and policy makers envision in their blueprints and plans (O'Neill, 243). It is what Lefebvre calls the structure imposed on space (Lefebvre, 1991, 369). It is a form of space that is always relative, always changing. It is the closest Lefebvre gets to the concept of absolute space¹¹ (as described above)
- Perceived space¹² is the sense that people have of a space, usually as they view it. Lefebvre calls this the form of space or spatial practice (369). A particular society at a particular time develops activities that "mark the earth," leaving traces that signify to members of that society distinct uses for that space, such as "the 'corner' of the street, a 'marketplace,' a shopping or cultural centre" (16–17). Spatial practice enables a sense of continuity for social groups as their accumulated knowledge of space is inscribed on to an urban landscape. 'Lefebvre argues that designers build environments intended to visually signal a limited set of uses. Capitalism, urbanization, and other processes of modernity have all modified spatial practices. Social order, he argues, is both organized and represented in space' (O'Neill, 244).

⁹In *The Production of Space*, he identifies the following kinds of space: absolute, abstract, appropriated, capitalist, concrete, contradictory, cultural, differentiated, dominated, dramatized, epistemological, familial, instrumental, leisure, lived, masculine, mental, natural, neutral, organic, physical, plural, political, pure, real, repressive, sensory, social, socialist, socialized, state, transparent, true and women's space' (Dear, 1997, 490).

¹⁰ Also referred to as 'representations of space'

¹¹ Although Lefebvre sees 'absolute space' slightly differently, being made up of 'fragments of nature located at sites which were chosen for their intrinsic qualities (cave, mountaintop, spring, river)' (1991, 48)

¹² Shields (2004, 2010) explains, 'that the 'perceived space' of everyday social life and commonsensical perception blends popular action and outlook but it is often ignored in the professional and theoretical 'conceived space' of cartographers, urban planners or property developers'.

- Lived space¹³ indicates how inhabitants and users experience and use a space. Space is directly 'lived' by its 'inhabitants' and 'users' through associated images and symbols (Lefebvre, 1991, 39) in addition to certain writers, philosophers and artists who describe it (Lefebvre, 1991, 39). These images centre on feelings about space, space that is alien, space enshrined in myth, space that is sacred, space that is profane, space as seen by minority groups, a spaces where people like to congregate and spaces replete with emotional meaning. Lived space is linked to the underground of social life and to imagination (O'Neill, 244); it is also centred on everyday life 'ego, bed, bedroom, dwelling, house; or: square, church, graveyard' (Lefebvre, 1991, 42); in short, it is alive: it speaks (42).



Nandaemun, Seoul, September 2005 by Kewp. Source: Wikimedia Commons

Lefebvre's ideas about space can be applied to the urban geography of Seoul (Hutchinson, 2002). Conceived space can be viewed through the blueprints for the city developed in the Chosun Dynasty where the gates were arranged using Feng-shui and Confucian ideology. Such a conception of space represents space in a particular fashion, working ideologically to legitimate this view of planned space.

Perceived space is illustrated by the material spatial practices, or 'concrete' processes, flows and movements as over 4 million commuters thread their ways through the subway system, the eighth largest in the world, leaving behind the traces of meeting places in businesses, fast food restaurants, massage parlours and transport interchanges¹⁴. These spatial practices make and remake the city as a functioning urban system (Hubbard et al 2002, 14).

The lived space of the 'Just Blues bar' in It'aewon, a suburb frequented by the US military instantly transports one to southside Chicago, Nandaemun is seen by tourists as a

¹³ Also known as 'representational space', Cresswell (2008, 57) maintains that 'This is inhabited space, and as such, is very close to Tuan's definition of place' - see footnote³

¹⁴ Consider here, by way of analogy, the spectacular footage shot in the BBC TV series *Britain from Above* where a bird's eye view of the nation, its workings, cities, landscapes and peoples are revealed and re-discovered in new and extraordinary ways' <http://www.bbc.co.uk/britainfromabove/about/index.shtml>



Nandaemun, Seoul, after the fire, February 2008. Source: Wikimedia Commons

market centre that 'never sleeps' but it is also a 'lived space'. Nandaemun, to locals, is a 600 year-old gate. Destroyed by an arsonist in 2008, it has been described as the symbol that 'holds South Koreans together' These 'lived spaces' are kept alive and accessible by an art form: blues and jazz, and a popular imagination.

Subordinate concepts: socially-produced space, conceived space, spaces of representation, perceived space, spatial practice, lived space, representational space

Thirdspace

Geographer and sociologist Edward Soja in a series of influential articles and books (1985, 1989, 1996, 1999, 2000) proposed the term 'spatiality' to refer to the fact that space is socially produced and interpreted, and argued for the reassertion of space over time in social theory (Morgan, 2000, 276). He spoke of the 'making of geographies' as important ways understanding our lives and life worlds: an alternative point of view to the predominant ideas of historians and social scientists.

Soja's profound and poetic geographies assembled a new way of understanding space and society (Minca, 2008: 138). At the same time, it is easy to see Soja's debt to Lefebvre. Soja developed a conceptual tool that can be used to investigate the lived experiences of people and how they are affected by their environment. Thirdspace looks at three interacting urban spaces, for example (Bustin, 2011):

- Firstspace is the built environment, including architecture, the road network, urban growth, form and function; the traditional urban geography. Spatial science is based on the quantitative and mathematical descriptions of the patterns found in Firstspace; the patterns now observed through Geographical Information Systems and remote sensing.
- Secondspace is representational space: how the area is marketed and perceived in the minds of people. These are the spaces of artists rather than engineers or scientists, the spaces of utopian urban planners seeking

social and spatial justice through enlightened idealism and these are the spaces of cognitive maps, the images that we carry with us about the spaces we occupy in our daily lives. Secondspace is conceptual and therefore can be investigated in school geography by looking at the geographical imaginations held by students.

- Thirdspace is lived space: the experience of living in the Firstspace mediated through the expectations of the Secondspace. It looks at how the Firstspace and Secondspace combine to create a lived experience. It opens up many different possibilities of exploring space and spatiality (Soja, 1996). One approach is to view space from the perspectives of those deemed out of place in an environment or place (Bustin, 2011).

Soja gave voice to the powerless within this conception of spatiality. 'Out of place' people, those whose viewpoints, ideas and voices are often ignored or forgotten about but who are very much part of any urban space, such as the impoverished, the homeless or the elderly were uncovered and have subsequently been the object of much study in academic geography¹⁵. Soja maintains that the 'exploration of Thirdspace can be described and inscribed in journeys to "real-and- imagined" places' (2000,11).

Asian cities, real and imagined could be glimpsed through the dystopian lens of Davis *Planet of Slums* (2006), the more hopeful visions of Brand in *City Planet* or the relentless pace of change in Saunders (2010) *Arrival City*. Davis points out that China added more city dwellers in the 1980s than did the whole of Europe, including Russia, in the 19thc (2006, 2). However, Brand's vision refers to squatter cities as vibrant, 'What you see up close is not a despondent populace crushed by poverty but a lot of people busy getting out of poverty as fast as they can' (2006, 6).



Nanjing Road, Shanghai by Andrew Horne. Source: Wikimedia Commons



Yurts on the outskirts of Ulan Bator. Source: Wikimedia Commons

Saunders begins by describing a Chinese peasant searching for nearby herbal remedies in the local forest near the terraces his ancestor have tended over ten generations. The peasant may well still imagine the ancient stone pathway to the forest but the village is now a suburb of Chongqing "at the side of a four-lane boulevard a kilometre into the city; amidst a forest of apartment towers, there unfolds a glimmering mirage of grey and brown cubes cascading across the hillsides as far as the eye can see" (2010). For other inhabitants of Asian cities, particularly those 'out of place' their inscriptions on the city are more tenuous, their imaginings yet to be developed. Rigg (2003b) points out that 70% of the street traders in Manila are migrants to the city, 50% of the saam lors (tricycle taxis) in Bangkok are driven by seasonal migrants and most of the manual construction workers in Bandung come from rural areas in Central and East Java.

For many Asian cities the real is more bizarre than the imagined. Hanoi is now ranked ahead of Shanghai, Beijing, Tokyo and Seoul as the place to shop in Asia but the inner city accommodation is so congested that new inhabitants to the city rent dwellings from dispossessed farmers (Montheard, 2010). A vast shanty town north of Ulan Bator now holds one quarter of Mongolia's population where roads are unpaved mud paths; streets have no signs, streetlights and names, and garbage piles up between the rows of tents and shacks (Gillet, 2011). Gated communities built on the fringes and in the central urban spaces of Jakarta 'boast a range of high class services and facilities such as self-contained golf courses, equestrian areas, shopping malls and hospitals that are only accessible to residents and their guests' (McGregor, 2008, 150).

Subordinate concepts: spatiality, Firstspace, Secondspace, Thirdspace, 'making of geographies', 'out of place' people

¹⁵ There are many opportunities to study the 'out of place' in Asian urban areas. (Narayan et al 1999, Rigg, 2003a, Sanie & Baum, 2003)

Relative space

Topological space¹⁶ has long been recognised by geographers. Relative space can be illustrated by an examination of the famous London Underground map where the relative distances between tube stations is reasonably accurate but direction and the bends and twists of the rail tracks are obscured. Although this conception of space had been studied by geographers in the spatial science tradition other geographers that adhered to structural philosophies, predominantly Marxist philosophies, began to explain other aspects of relative space.

Harvey (1989) provides a powerful way of understanding the transformation of space within late-modernity through his description of the process of 'time-space compression' by which the world is made smaller through successive rounds of capitalist investment, leading to technological, social, political and, ultimately, cultural change.

Subordinate concepts: topological space, relative space, 'time-space compression'



The MacDonnell Ranges, Central Australia by Thomas Schoch. Source: Wikimedia Commons

Space given meaning by human endeavour

Space is also constructed by people in other ways; we conceive of space differently, space is given meaning by human endeavour (Hubbard et al 2005). The ways in which Aboriginal and Torres Strait Islander people think of space is important in an Australian curriculum. The spaces of traditional country have been left behind by the Ancestors and linked together by Dreaming or learning tracks (Sveiby & Skuthorp 2006) renewed through song, dance and visual art. The artists were not concerned with relative distances between places or the actual size of a site they rather referred to particular places or single events of the Dreaming. Further, distance is not generally spoken of in terms of precise measurement but in terms of people's experience of space, for example how thirsty they were, how much they were carrying, or, the length of daylight hours. One could well imagine different conceptions of space given meaning through human interaction with their surrounds in various Asian locations.

New ways of thinking about space reinforce the conception of children's geographies. The personal geographies of students (i.e. their personal space as identified by the places they use or are connected to is also an important consideration. There is clearly room for an educational resource resembling *Living Geography: exciting futures for teachers and students* (Mitchell

Asian world cities¹⁷ are tied together in seemingly instantaneous communication and yet many of the spaces in between are ill-served by infrequent ship visits, inadequate internet bandwidth and jet aircraft flit across the sky on uninterrupted journeys from an Asian world city to other world cities in Australia, Europe and North America. Although the time and cost of moving commodities, people and information has been dramatically reduced through new technologies and 'time-space compression' there are clearly significant portions of Asian space where people are excluded from these developments. Successive waves of capitalist investment has led to the integration of Asia into global society, a skein of a tightly woven space of flows circulating similar consumer brands, images and lifestyles to the extent that local ways of life are all but annihilated by space. Geography is concerned with the ways in which some Asian places have been ignored by and others offered resistance to these powerful spatial forces (McGregor, 2008, 214–224).

2009, (ed.)) that embraces 'young people's geographies' – their experiences and encounters with the world, set in the context of Australia and Asia. Each experience, whether virtual or in real time, leads to a different perception of such spaces.

Students should have opportunities to study spaces of exclusion where, as well as the young, other 'out of place' people: the elderly, disabled and minorities perceive spaces differently - where they may experience hostility when they attempt to enter spaces that are made alien to them. Students should be afforded opportunities to engage with parts of the built environment that have also been given rich meaning through tradition, myth, language and ritual (Hubbard et al, 2005). They may ponder the extent to which settler cultures from the Asia-Pacific have become integral to these *Australian* spaces?

Subordinate concepts: 'time-space compression', space of flows, Dreaming spaces and learning tracks, personal space, virtual space, real space

¹⁶ As, for example, in the Geography of Transport Networks <http://people.hofstra.edu/geotrans/eng/ch1en/conc1en/ch1c3en.html>

¹⁷ Tokyo, Singapore, Beijing, Shanghai and Hong Kong are ranked among the globe's ten most important and influential world cities – the others being New York, London, Paris, Sydney and Milan (Beaverstock et al, 1999), Globalization and World Cities Research Network, 2008, Taylor et al, 2010)

Relational Space

Relational space is a complex idea. In academic geography it is made more complex because geographers examine the ways in which space is used to deconstruct language, the ways in which space undergirds many disparate philosophies and the contributions of spatial concepts to the social theories that intrigue many human geographers. This is made ever more difficult because the authors of these theories, and the readers of them, cannot maintain a neutral position outside what is depicted; there is no way, according to this point of view, of standing apart from this world to dispassionately reduce space or spatiality to simply held concepts.

Geographers have alluded to fine arts and space: the space of impressionist paintings and random streams of smoke, sunlight, steam and clouds (Gibson-Graham, 1997, 317) giving way to much more open and fluid theories of space. Lefebvre saw an artistic revolution, initiated by cubism, heralding new ideas about space (Smith, 2004, 21). Indeed, Lefebvre explained that around 1910 predominant ideas about space were shattered. Gone was the space, according to Smith, of common sense, political control, Euclidean geometry, Renaissance perspectivism, Newtonian physics and descriptive geographies (21). For the last forty years contemporary geographers have been engaged in theorising a new relational space.

Smith (2008, 92) explains that the common sense view of space that flows from Newtonian physics is an instinctive one in Western societies, space, 'as a field, as a container, or as simple emptiness'¹⁸. Other notions of space preceded this one including a pre-Capitalist view of space where land is not a parcel to be bought and sold. Here space is seen in terms of social relations. People belong to the land. The land is looked after by the group and this space is imbued with spirits, the histories of the group. It contains sacred places¹⁹.

But it was the 'Cartesian spatial order' with its associated grids, coordinates, binaries and hierarchies (Genocchio, 1995: 35) that underpinned Western philosophy before the development of critical contemporary geographies over the last thirty to forty years. Inside this spatial order, space was the mere backdrop against which life is played out (Mitchell, 2000: 215). To think about relational space one has to think more deeply about the production of space in an attempt to uncover how space is given meaning through human endeavour (Hubbard et al, 2005: 13). Gregory and Urry (1985: 21) explained that there is a long-established philosophical debate about the nature of space. In one corner is the absolute space position maintained by Descartes and Newton. In the other, is the view articulated by Leibnitz who argued that space is something merely relational. 'According to this relational view the universe simply consists of pieces of matter, composed of various substances, and these pieces

of matter exhibit spatial relationships between each other and between their own constitutive parts' (21).

Harvey (2006:124) elucidates, 'An event or a thing at a point in space cannot be understood by appeal to what exists only at that point. It depends on everything else going on around it (much as all those who enter a room to discuss bring with them a vast array of experiential data accumulated from the world). A wide variety of disparate influences swirling over space in the past, present and future concentrate and congeal at a certain point (e.g. within a conference room) to define the nature of that point.' Thus place, as a particular point in space, is mediated by these 'disparate influences swirling over space.'

Again, he helpfully explains, 'space is neither absolute, relative or relational in itself, but it can become one or all simultaneously depending on circumstances'²⁰. The problem of the proper conceptualisation of space is resolved through human practice with respect to it. In other words there are no philosophical answers to philosophical questions that arise over the nature of space – the answers lie in human practice. The question "what is space?" is therefore replaced by the question "how is it that different human practices create and make use of distinctive conceptualizations of space?" (125/6).

Subordinate concepts: fluid space, relational space, social space, Cartesian and Euclidian space, the nature of space, conceptualisations of space, space as a conjuncture

To accept the idea of relational space you therefore have to go through a number of thought processes. Firstly, you have to accept the philosophical idea that space is composed of relations between objects. These objects can only be said to exist insofar as they contain and represents within themselves relationships to other objects. Similarly, in modern physics in order for space to arise there needs to be at least two fundamental particles.

Picture the famous image of the world at night with glistening illuminated light sources reflecting human existence. Then imagine that these places are made up of relations between these twinkling objects and you are approach the idea of relational space. But you have to go further than this idea to accept that space is constructed out of human relations. It is the journeys, phone calls, transmission of ideas over the radio, exchanges of opinions through social networking software that cement these relationships. These social relations are never still, they change from hour to hour, from minute to minute, the pattern of lights should not be thought of as static, relational space is always changing. Further, if space is made up of social relations, then, according to this view, society is also shaped by space. In other words 'geography matters.'

These powerful ideas about relational space have opened up all sorts fields of study in Geography. Social relations are

¹⁸ 'Socially speaking space, like time, is a conjuncture, that is to say, the articulation of concrete historical practices.' (Castells, 1977)

¹⁹ There are many opportunities for studying pre capitalist views of space in an Asian context. See McGregor, 2008, 20-26, Rigg 2003, Part 1, Southeast Asian development: the conceptual language of dissent.

²⁰ Lefebvre also referred to the intertwining of the three elements that made up space; Soja referred to the trialectics of spatiality where physical, mental and social space 'remain open to the re-combinations and simultaneities of the 'real-and-imagined' (1996, 65).

inherently unequal. There are always the powerful and the powerless. A relational view of space enables geographers to further explore these imbalances or 'power geometries' – an echo of the earlier discussion about people who feel 'out of place.'

New spaces for study

Thus, geographers use space in a metaphorical sense, this time as a container for ideas rather than for chunks of Euclidian space, and, as such have developed these new ways of seeing our complex and differentiated world. For example, the authors of *Living Geography* look at futures, in terms of sustainable development, global dimensions: living in the wider world, applying geographical thinking to life, death and disease, as well as advocating the use of digital and spatial technologies to explore space.

Similarly, an ever more complex globalised world as envisaged by the authors of the Open University text, a *World in the Making* (Clarke et al, 2005) recognising that we often imagine and act ourselves as though the spaces are ready made (Lambert & Morgan, 2010, 78). But the world is not ready-made. It is constantly being made and remade by a variety of forces, both human and non-human, opening up possibilities of hybrid geographies of human and non-human forces. The view of space that is propounded here is relational space. Its four themes of the interconnections of the global economy through patterns of trade, work and finance; the proliferation of various political institutions and campaigns, the ways by which new technologies are increasingly networking the world; and, migration as a globalising process, are demonstrating that the world is always in the making as these relationships unfold.

Another text that points to a relational view of space is *Consuming the Caribbean* (Sheller, 2005) where spaces of the Caribbean has been fashioned out of flows of plants, people, ships, material resources, foodstuffs, technologies, know-how and capital occurring over centuries (Lambert & Morgan, 2010, 78). When Edward Said read Jane Austen's novels he noted the relationship between the landed gentry in the novels and how they were deeply linked to the Caribbean as absentee owners of (slave) plantations (Crang, 1998, 170).

Said's (1979) *Orientalism* can similarly be mined for examples of how relational space between the Occident and the Orient were constructed. One might also explore the relational space between Portugal and its Asian colonies in a similar way. When the Portuguese were establishing their vast trading empire in the fifteenth and sixteenth century in order to control the spice trade with India they not only needed to establish relations between sailors and merchants. There were artefacts that became important connecting objects in this network. Lisbon could only maintain its hold on this trading network by also including to the 'regimento', a means of navigating by the stars and by use of the 'carriera' a ship specifically designed to carry cargo and to avoid plunder (Whatmore, 1997, Law, J. 1986).

Further propositions about space

It is Massey who explores the concept of relational space best. In *Spatial Divisions of Labour* (1984) space was 'conceptualised as the product of the stretched out, intersecting and articulating social relations of the economy' (2). This theme has been expanded by Massey's subsequent work on relational space. *Space, Place and Gender* (1994) articulates these social relations stretching out across the globe and then back again to her home suburb of Kilburn, in North London, knitting together relational space. Massey connected the life-sized models of Indian women dressed in saris in a local shop to the global space that enmeshes Kilburn. She observes a notice that announces a forthcoming concert at Wembley Arena featuring six or seven women with sub-continent and she remarks on an advertisement that explains that 'all Hindus are cordially invited'. Massey adds, 'It is (or ought to be) impossible even to begin thinking about Kilburn High Road without bringing into play half the world and a considerable amount of British imperialist history' (154) She sees 'economic, political and cultural social relations, each full of power and with internal structures of domination and subordination, stretched out over the planet at every different level, from the household to the local area to the international' (154)

Massey's recent book, *For Space*, (2005) makes three powerful and penetrating propositions about space:

1. That we recognise space as the product of interrelations; as constituted through interactions, from the immensity of the global to the intimately tiny.
2. That we understand space as the sphere of the possibility of the existence of multiplicity in the sense of contemporaneous plurality; as the sphere therefore of coexisting heterogeneity. Without space, no multiplicity; without multiplicity, no space.
3. That we recognise space is always under construction.

This last idea opens up all sorts of possibilities for space. Consider Canadian geographer, Geraldine Pratt (1999) writing about the 'homespace' of a Filipino maid. The young woman desperately attempts to establish a sense of belonging, a sense of personal space, in her tiny live-in room by adding photographs and religious icons. When she travels across Vancouver, she sees her journey space as relational. She recognises only the journey across town to collect family shopping, a tunnel vision of space, rather than the complexities of the city space itself.

Many of the more complex conceptions of space have been revealed through the scholarship of feminist geographers. Rose (1999, Longhurst, 2008) insists that space is not a pre-existent void or a 'terrain to be filled or spanned or constructed' but instead it is practised and performed. In short, Rose thinks of space as 'a doing'; or, a space to be performed. In *Phenomenology of Perception*, Merleau-Ponty (1962) describes the relationship between the lived body and its world. He argues that the body is the original subject that constitutes space – that there would be no space without the body. He

goes on to suggest that through movement and orientation we create a link between our bodies and the outlying space, so that we organise our surrounding space as a continual extension of our own being.

Subordinate concepts: spaces shaped by social relations, social relations shaped by space – ‘geography matters’, power geometries, ready-made space, space in the making, hierarchies of power in space, scaled space, heterogeneous space, space under construction, bodily space, performative space.

Conclusion

Relational space frees Geography teachers to examine people and environment in a number of different ways. This space is a product of interrelations, multiplicity and spaces of openness (Murdoch, 2006:20). According to Soja this new mode of understanding of relational space or, as he terms it, the spatiality of human life (Soja, 1999: 267) offers a different way of thinking about human geographies. Nevertheless, relational space is a slippery concept. As Crang and Thrift observe ‘The problem is not so much that space means very different things – what concepts do not – but that it is used with such abandon that its meanings run into each other before they have properly been interrogated’ (2000, 1) At the same time contemporary school geographies should be aware that ‘absolute space is the space that is broadly taken for granted in western societies – our naively assumed sense of space as emptiness – but it is only one way in which space can be conceptualised.’ (Smith & Katz, 1993, 75).

Just as we should heed Rawding’s advice with regard to an over simplistic conception of place ‘locations are seen as settings for the delivery of national curriculum themes ... this undoubtedly simplifies and sterilises the study of place, often resulting in an arid narrative and uninspiring factual accumulation ... with no coherent theoretical or philosophical underpinnings’ (2007,22), so too we should contemplate Maude’s counsel ‘it is important to note that space, however conceptualised, has no explanatory power on its own. There are no spatial explanations of phenomena. In physical geography the explanations are through physical relationships and environmental processes. In human geography space only has an effect through the influence of relative location and distance to other places on the economic, social and cultural processes that influence the characteristics of places’ (2011, personal communication).

I would content that Geography is much, much more than the branch of science concerned with identifying and describing the Earth, utilising spatial awareness to try and understand why things exist in specific locations²¹. Let us continue to

²¹ McNerney, 2011 defines space “Space is a concept relating to the study of an area of the earth at varying scales, from local to global. Within these spaces there are located places, people and geographical phenomena which the geographer may study. The studies may include plotting the location of natural and human places, description of the relationships, interactions, distributions and patterns between places and across the space, analyzing causation of locations and observed patterns and the identification of trends and projecting futures (modeling). Such literacy in relation to space is the language of spatial thinking.”

scratch our heads, theorise and change our minds about the concept of space and the spatial. Debates about space in contemporary human geography should have significant implications for Geography teachers and the Australian Curriculum, Geography.

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