What makes geography geographical?

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Defining the core of geography is harder than one might expect. Sociologists have society, biologists living things, economists the economy and physicists matter and energy. But what is at the core of geography? (Clifford, Holloway, Rice and Valentine 2009)

Ways of defining geography

1. Some simply define geography as what geographers do.

2. Others describe geography by its subject matter.

… the study of the surface of the Earth. It involves the phenomena and processes of the Earth's natural and human environments and landscapes at local to global scales. (Matthews and Herbert)

Geography attempts to describe and explain the world and its peoples. (Bonnett)

Human geography concerns the understanding of the dynamics of cultures, societies and economies, and physical geography concerns the understanding of the dynamics of landscapes and the environment. (RGS)

Vermeer, The Geographer

Attempts to define geography by its subject matter face two problems:

- They cannot encompass the great variety of topics that geographers study.
- They include topics that are also studied in other disciplines, but don't explain how the geographical study of these topics is different.

3. A third approach is to describe geography thematically, as the study of spatial patterns or human-environment relationships.

Both these themes identify important aspects of the subject, but they are limited in that they each focus on only one aspect of the discipline, either its spatial or human-environment perspective, and neglect other themes.

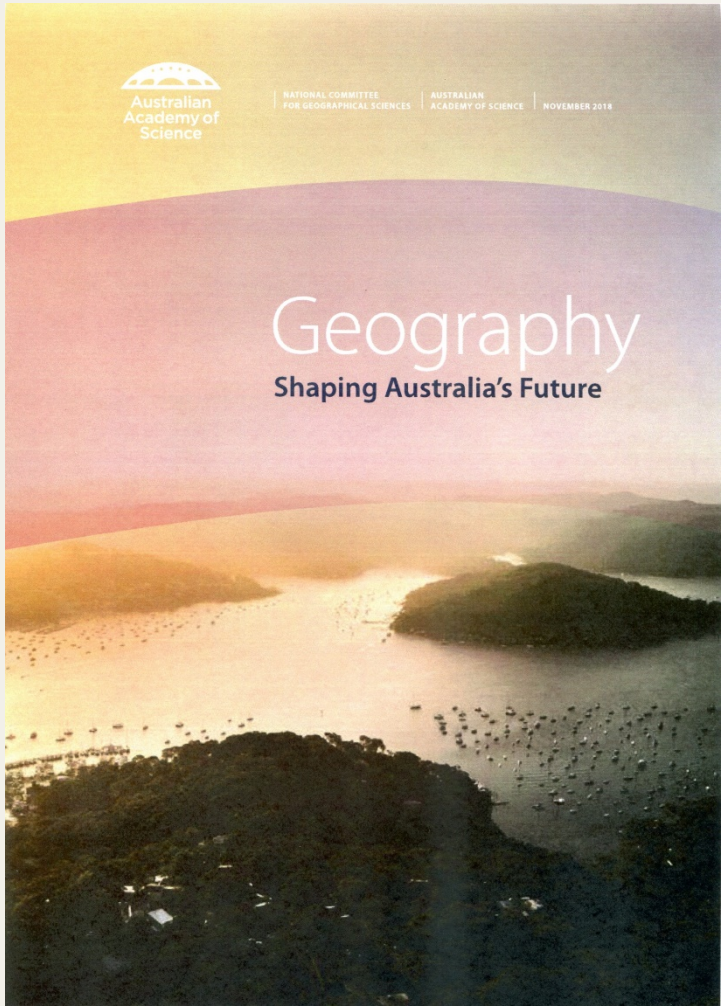
A child's story map: real geography?

Geography as a way of thinking

If geography cannot readily be defined by its subject matter or its themes, an alternative is to describe it as a way of thinking.

This approach was central to the British Geographical Association's influential 2009 manifesto for school geography, *A different view*.

The Australian Academy of Science report on *Geography: shaping Australia's future*, published in late 2018, also described geography as a way of thinking.



Ways of thinking are based on concepts, so which ones are the most important for geographical thinking? I have selected four:

- Place
- Space
- Environment
- Interconnection

Why these ones?

The first three are common to almost all discussions of geography's key concepts. More importantly, they have these characteristics:

- They are at the top of a hierarchy of concepts of increasing complexity and abstractness.
- They can be applied to a great variety of topics, and across different fields of the subject.
- They have a number of functions, such as identifying topics worth studying and questions to ask, organising information, suggesting methods of analysis, forming generalisations and identifying possible explanations. It is these functions that make them 'ways of thinking'.

But what about other concepts?

- Region is a subsidiary concept of place
- Location is a subsidiary concept of space
- Landscape is a subsidiary concept of environment
- Interdependence, system and process are subsidiary concepts of interconnection
- Sustainability is largely an evaluative concept
- Scale and time or change are largely analytical concepts

The four key concepts are high-level and very abstract ideas, and don’t make much sense on their own because they represent a number of related smaller ideas. To explain them, and to apply them in practice, they have to be unpacked into these more specific ideas. This is done in the next slides.

Place

Fes, Morocco

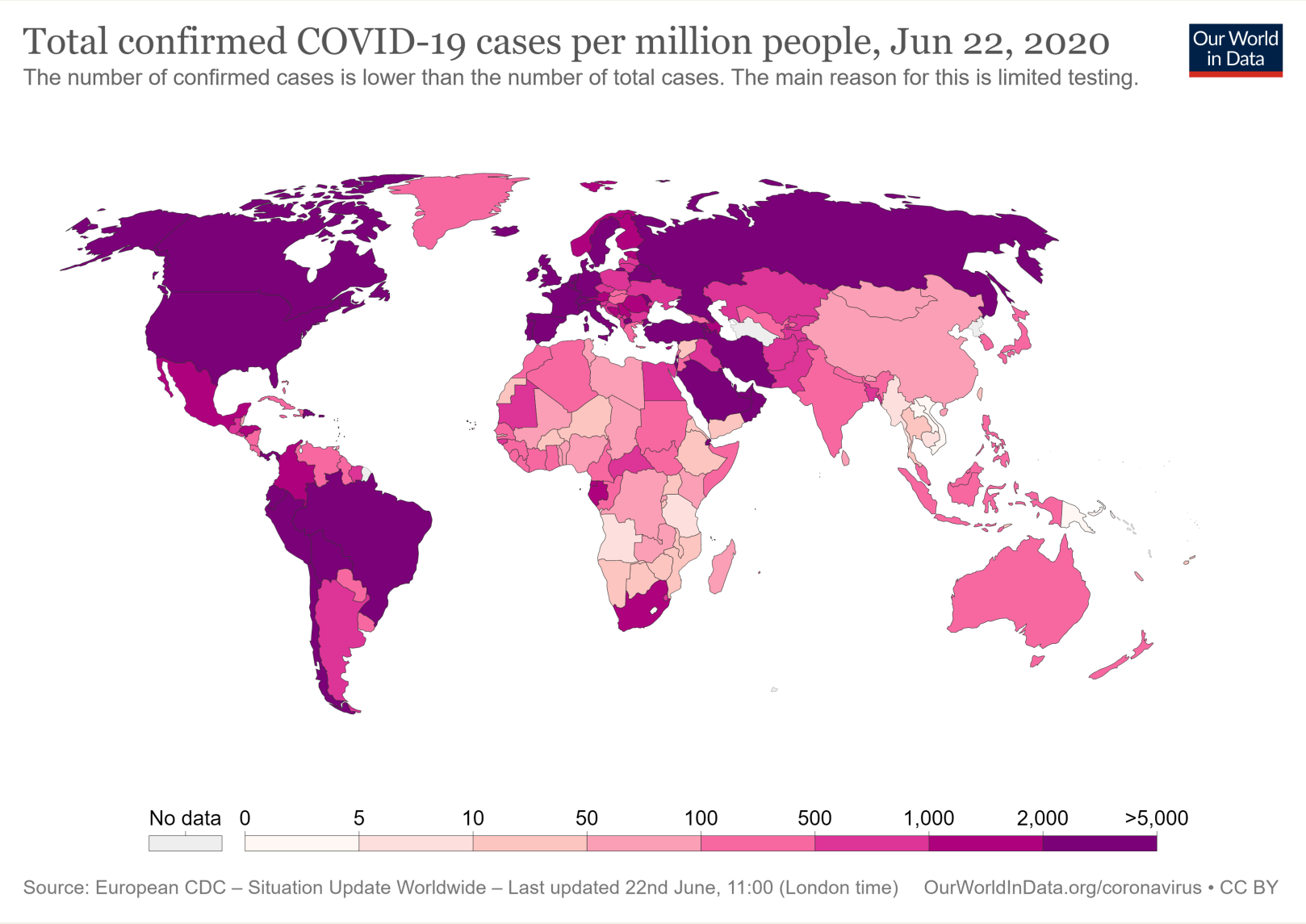
- Places affect us because they are the context in which we live.
- The places in which people grow up and live have an influence on their health, educational attainment and economic opportunities.
- For many people, attachment to a place or places is important for their identity and sense of belonging.

Coorong, South Australia

- Similar environmental and human processes may have different outcomes in different places because of the unique characteristics of each place.
- People in different places may respond differently to the same issues and events.
- Similar problems may require different strategies in different places.

Place is the key organising concept in the Year 7 unit on Place and liveability.

The geography of Covid-19



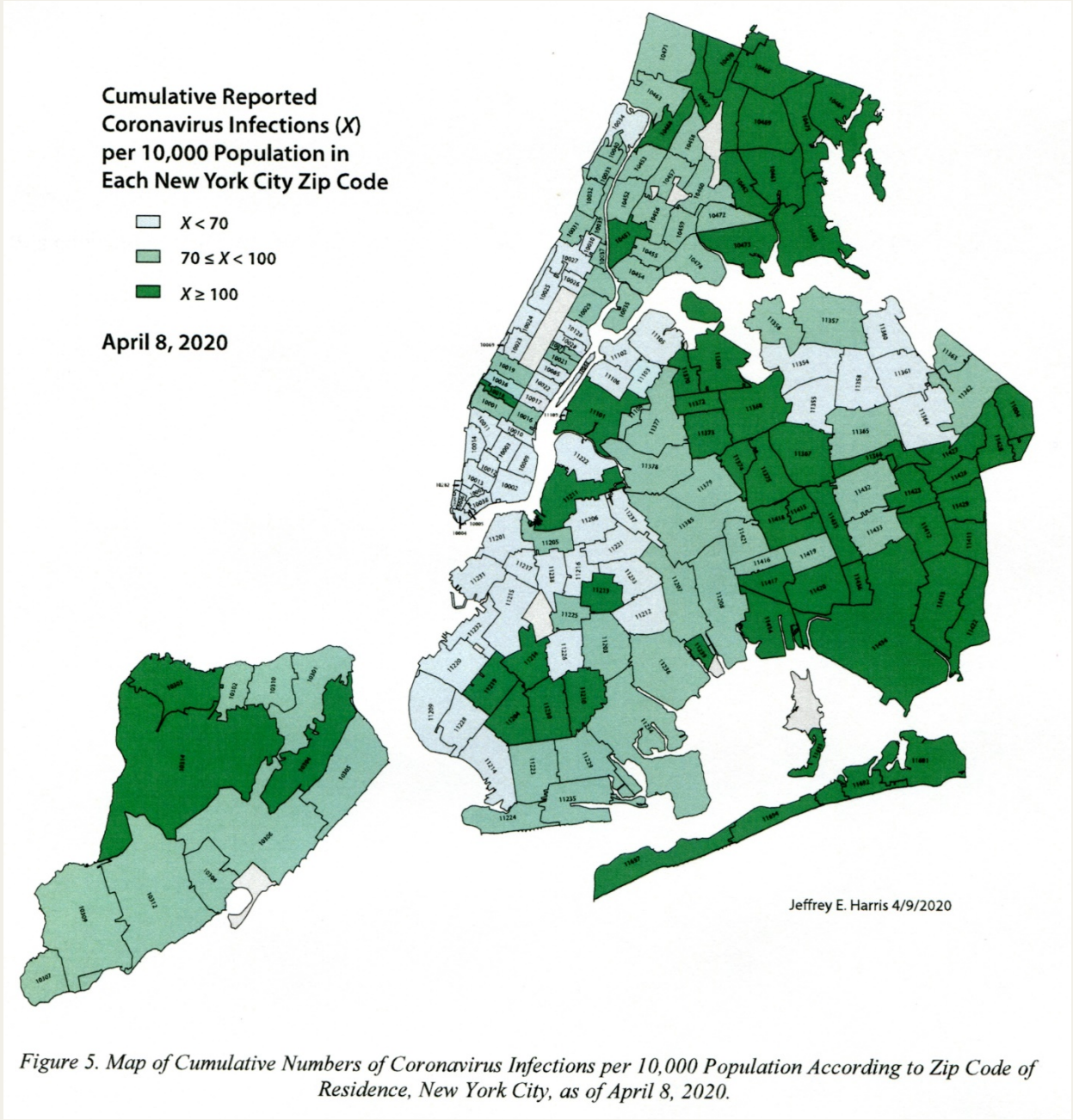


Figure 5. Map of Cumulative Numbers of Coronavirus Infections per 10,000 Population According to Zip Code of Residence, New York City, as of April 8, 2020.

These spatial patterns are really maps of differences between places.

Covid-19 and place

The most affected places have been:

- Dense urban areas

  More than other large cities, New York exemplifies the urban characteristics that the virus has turned into vulnerabilities — population density, sky-high cost of living, a reliance on retail, culture and tourism and a dependence on crowded public transport.

But

… there is a huge difference between rich dense places, where people can shelter in place, work remotely, and have all of their food and other needs delivered to them, and poor dense places, which push people out onto the streets, into stores and onto crowded transit with one another. (Florida)

Apartments, New York

- Global cities. Will there be long-term effects?
- Industrial centres like Wuhan, Detroit, and Northern Italy, which are connected through supply chains.
- Recreation places (Aspen in Colorado).
- Places with older populations.
- In the US, conservative farming areas, places with concentrations of immigrant labour, and meat processing places.
- Differences between cultures, such as greeting customs?

Space

Location is a fundamental spatial concept, with a number of subsidiary concepts:

- Absolute and relative location; Distance; Accessibility; Centrality; Proximity; Remoteness

The ‘death of geography’ thesis argues that the constraints of relative location and distance are being reduced by transport and communication technologies, so that geography (location) is no longer relevant. But proximity is still important for knowledge and information exchange.

Centrality and proximity, Sydney CBD

Remoteness, Mountainair, New Mexico

- Societies organise space in different ways to achieve different purposes, such as in the planning of cities and transportation networks, the drawing of electoral boundaries or the designation of administrative areas.
- Spatial distributions can have significant environmental, economic, social and/or political consequences.
- Change in a spatial distribution can be an important indicator of environmental, economic or social change.

Space is the key organising concept in the Year 8 unit on Changing nations, and the Year 10 unit on Geographies of human wellbeing.

Spatial pattern of changes in woody vegetation since European settlement

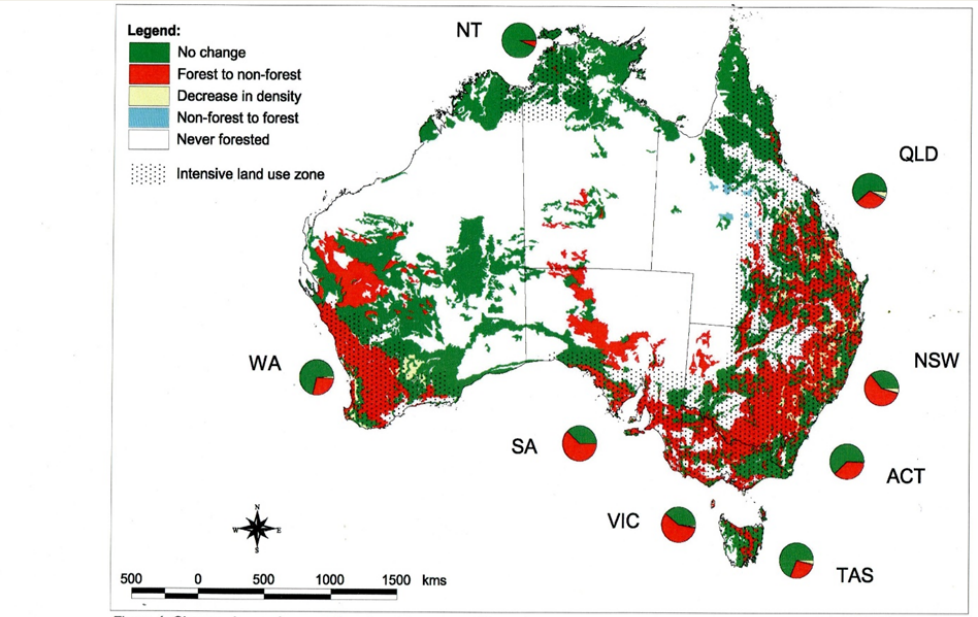


Figure 1: Changes in woody vegetation since European settlement

Covid-19 and space

- Were Australia and New Zealand protected by being islands isolated from world centres? But Taiwan and Vietnam are next to China, and have been very successful in controlling the virus.
- Ski resorts. Study of data for 401 counties in Germany found that the share of the population infected was, amongst other factors, a function of the road distance to the major Austrian ski resort of Ischgl.
- University student break in US. In the US thousands of college students flocked to spring break destinations in March of 2020. A study estimated the effects of their return to university on the spread of the virus. There was an increase in cases in the county of the university that peaked two weeks after the students returned, and an increase in mortality three to five weeks after, explained as a secondary spread to higher-risk individuals.

Environment

- The biophysical environment supports and enriches human life by producing raw materials and food, recycling and absorbing wastes, providing a range of ecosystem services, and being a source of enjoyment, inspiration and identity.
- The biophysical environment presents both opportunities for, and constraints on, human settlement and economic activity.
- People and societies perceive, use and adapt to the environment in different ways.

Forest, Malaysia, providing ecosystem services

Farming, Yacka, South Australia, providing food

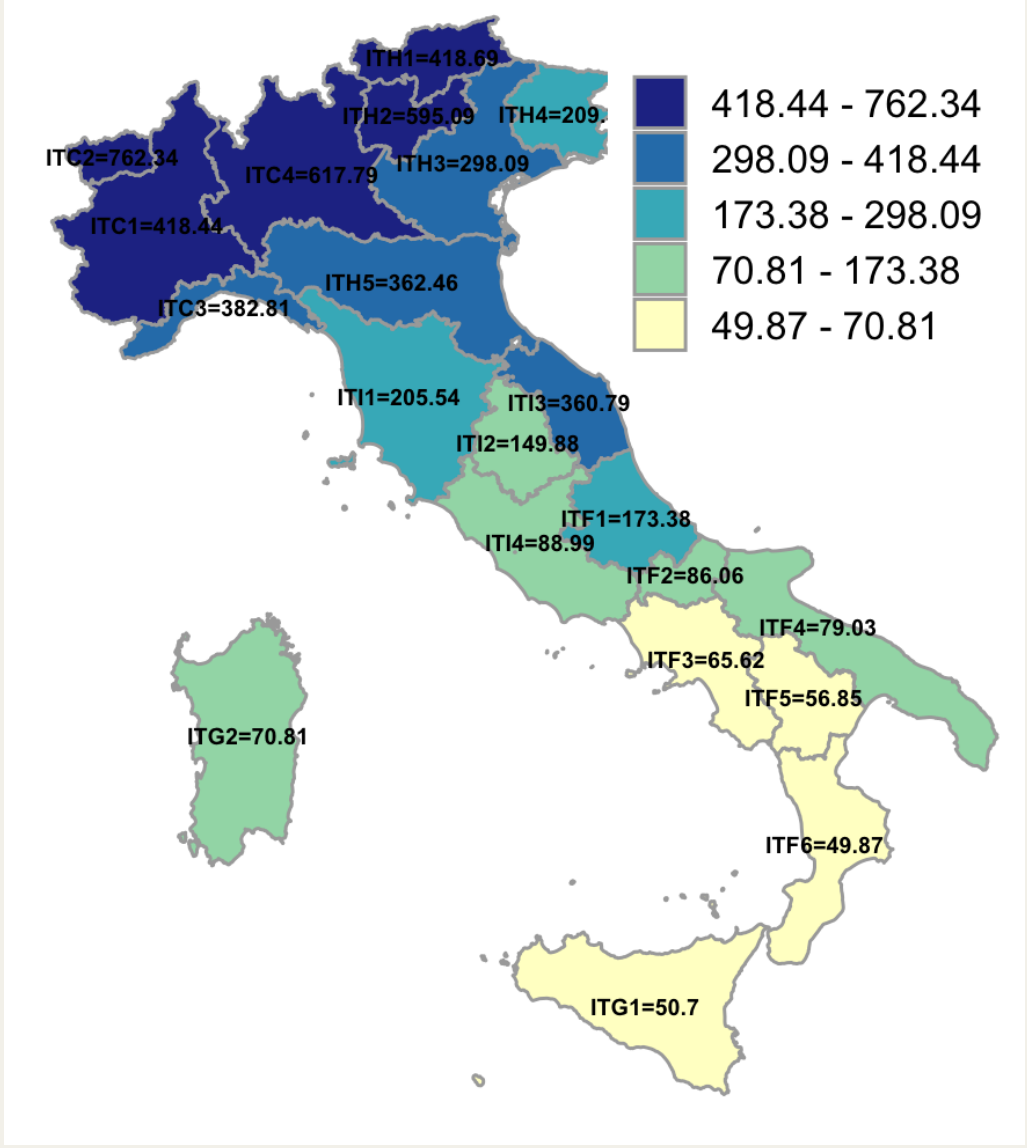
- Human actions are changing the biophysical environment, in both positive and negative ways.
- Different environments have different natural hazards.

Environment is the key organising concept in the Years 7-10 units on Water in the world, Landforms and landscapes, Biomes and food security, and Environmental change and management.

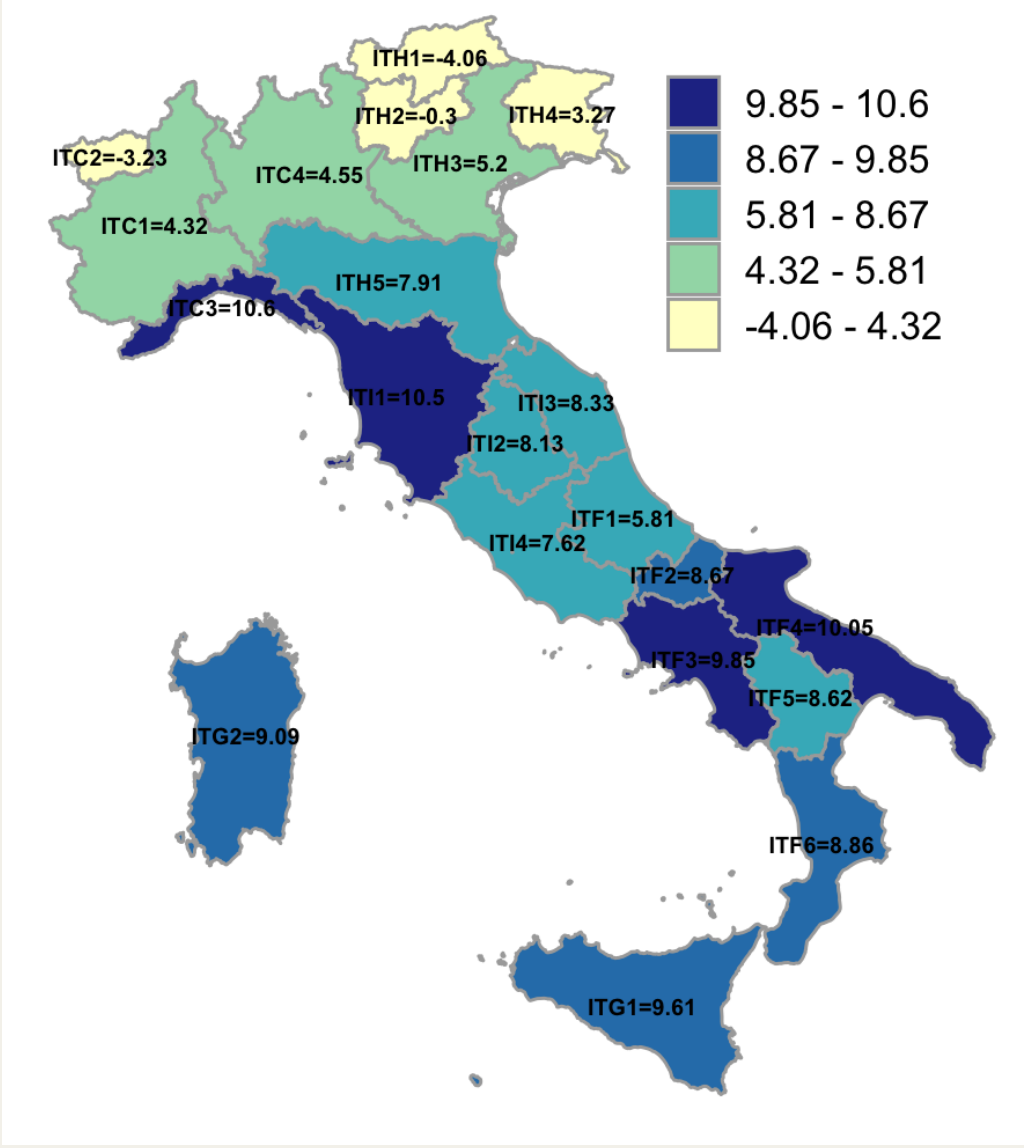
Mallee trees planted to control salinisation, Western Australia

Covid-19 and environment

- Low humidity/precipitation and/or high temperatures reduce transmission rates in some studies.
- Maps on next slide (from Rios and Gianmoena) show a relationship between incidence and temperature in Italy.



Cumulative cases to 15 April 2020



Temperatures in February

Interconnection

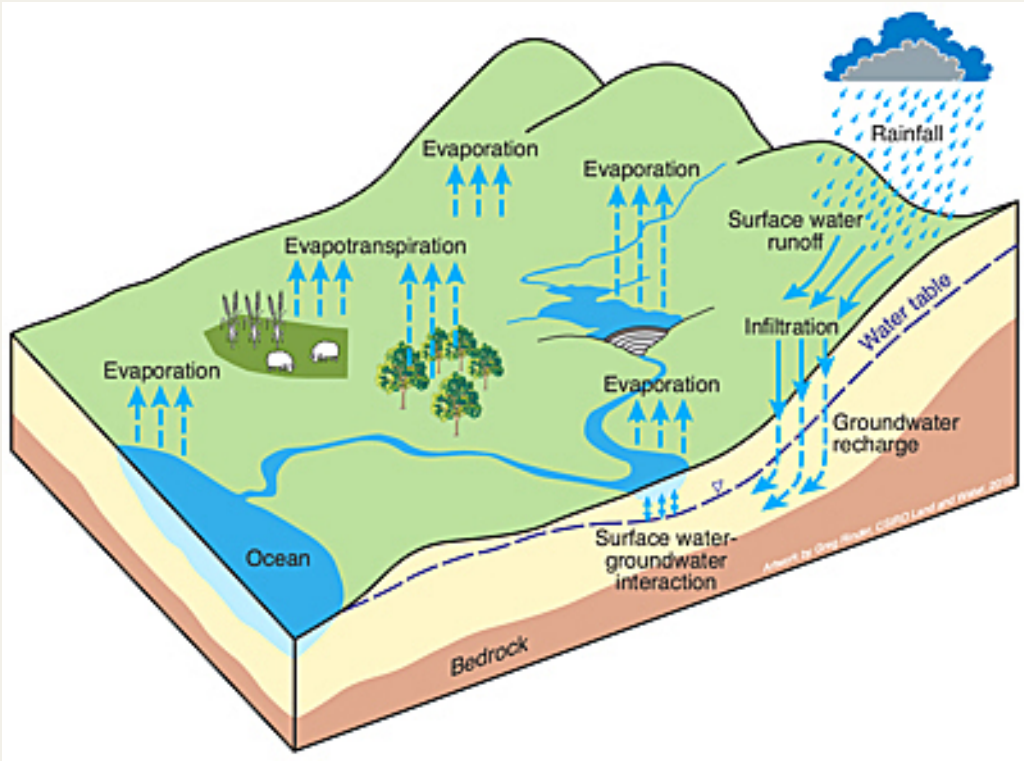
- Places, and their environments, people and organisations, are interconnected with other places, through environmental, economic, demographic, cultural, political and personal relationships.
- Environmental and human processes are sequences of cause-and-effect interconnections.

Tobacco sales, Kelantan, Malaysia, 1977

Rao Rao, West Sumatra, a village of out-migration, 1970

- Systems are networks of interconnected objects linked through flows of energy and matter (and information?) and, where humans are involved, people and information. Change in one component produces change in others.
- Holistic thinking (including the interrelationships between people and environments) is a recognition of interconnectedness.

Interconnection is the key organising concept in the Year 9 unit on Geographies of interconnections.



The hydrologic cycle

Covid-19 and interconnection

- Increased interconnections between places produced by economic globalisation, students and tourism spread the virus rapidly.
- Ability of governments to cope hampered by disruption of global supply chains of medical equipment.
- What might be the long-term effects on globalisation?

Geographical concepts and Aboriginal culture

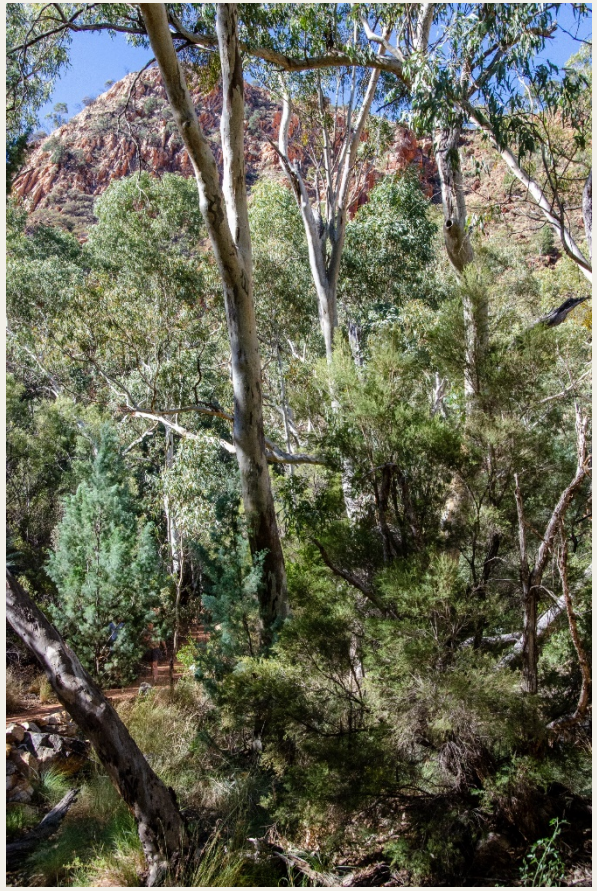
Now look at some examples of ways of using Aboriginal culture to illustrate and extend the four concepts.

The colours of ochre, Central Australia

Aboriginal culture and place

The Aboriginal concept of Country is probably the richest and most complex example of the concept of place, and of the significance of attachment to place for people.

> *Indigenous conceptions of place assert an essential belonging of human beings to the places they inhabit. In Aboriginal Australian culture, for instance, one's very identity, one's totemic and kinship relations, are inseparable from one's country and the landmarks—the rocks, trees, waterholes, and so on—that make it up.* (Malpas)

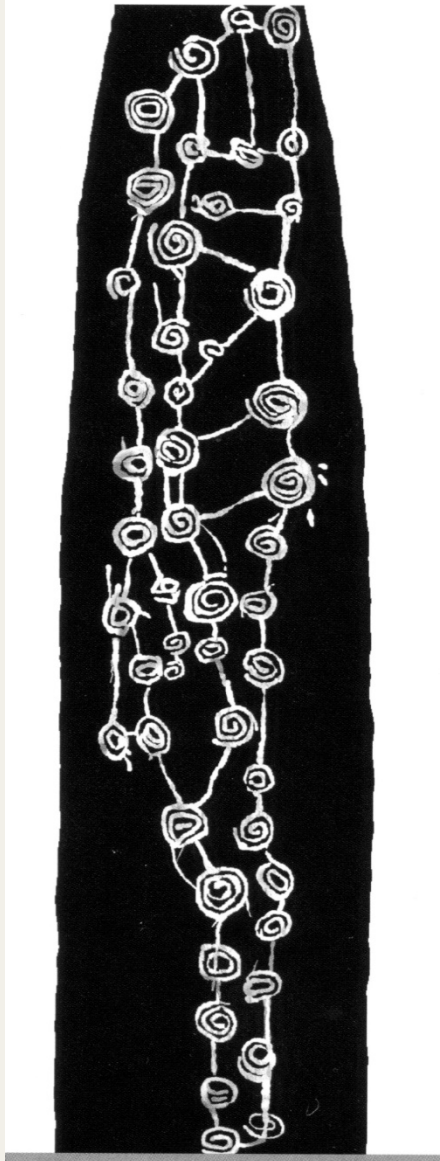


Angkerle Spring, a place of cultural and spiritual significance, and source of water, food and materials, West MacDonnell Ranges, Central Australia

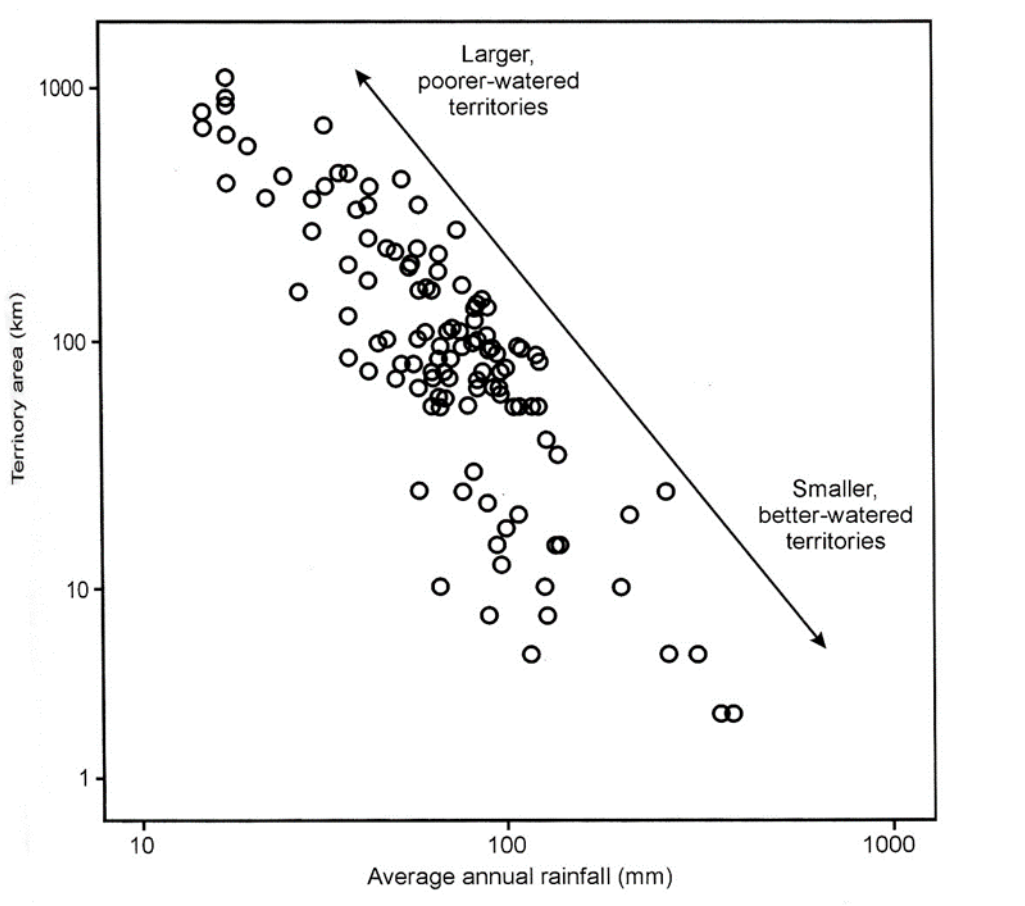
Aboriginal culture and space

Aboriginal spatial or territorial organisation was complex and flexible, and wonderfully adjusted to Australia's variable and often difficult climate. Bill Stanner writes:

> *Each territorial group was associated with both an estate and a range. The estate was the traditionally recognized locus (Country)… of some kind of patrilineal descent-group … The range was the tract or orbit over which the group … ordinarily hunted and foraged to maintain life.*
>
> *In good habitats people often went beyond estate or range from ennui, to obtain special foods and raw materials, to share in neighbours' windfalls, for the pleasures and duties connected with the 'external structure' of social life, and for other reasons. … There was a real interest in mixing with neighbours, and a strong moral requirement to share life-supports with them.*
>
> *At another extreme, there were environments of the utmost stringency [where] a range might extend by common understanding into the territories of neighbours prepared to share food and water with the distressed.* (Stanner)



A map of Country on a Western Desert spearthrower



This example illustrates the concepts of both space and environment.

Territorial area (in square kilometres) compared with average annual rainfall (in millimetres), for 123 historically recorded Aboriginal groups.

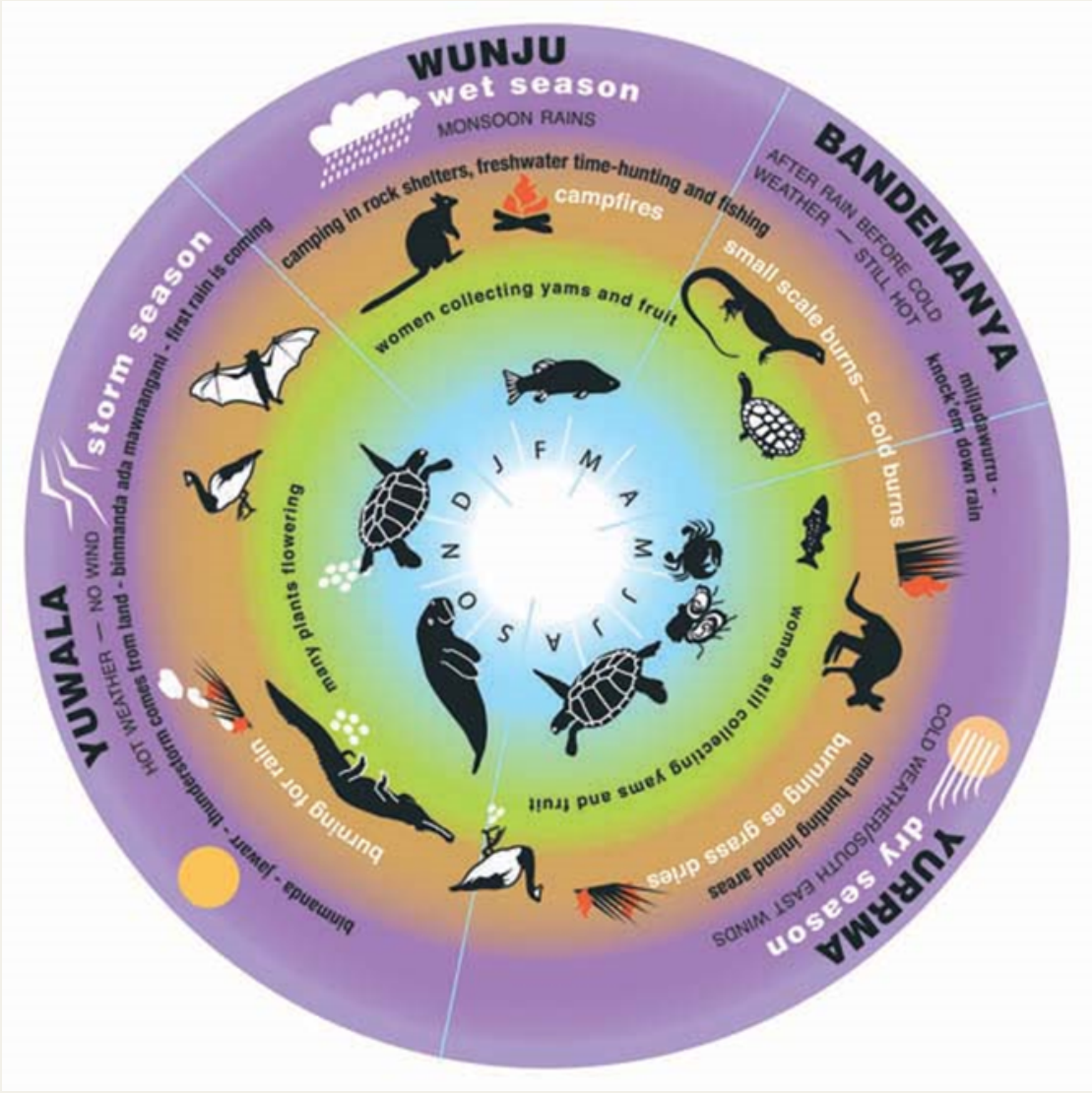
Aboriginal culture and environment

Aboriginal concepts of human-environment relationships challenge Western thinking, because they do not see any separation between humans and the environment. Jessica Weir writes:

> *Critically, in country humans and nature, and nature and culture, are not regarded as separate, but are entangled together in all types of relationships.*

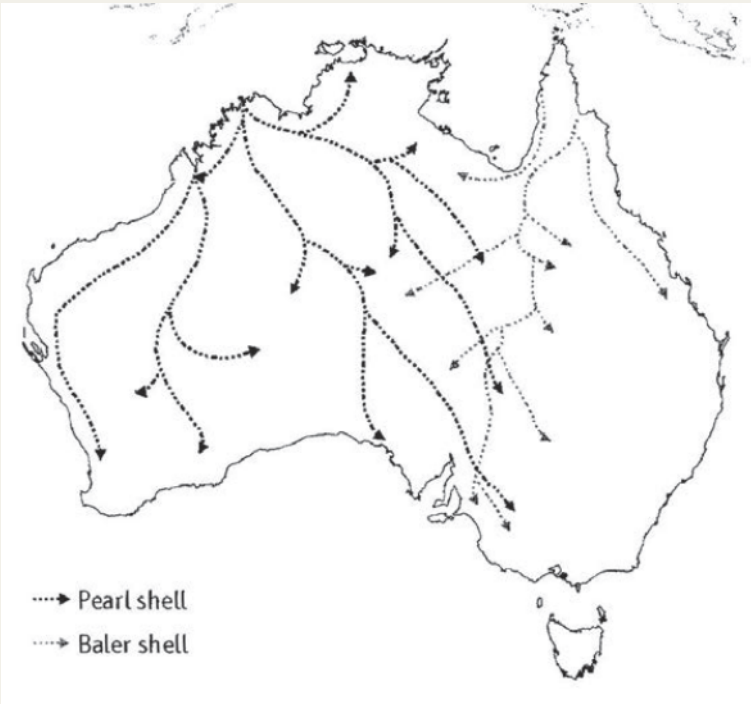
Aboriginal seasonal calendars can teach students that there is more than one way to classify and describe environmental phenomena.

The seasonal calendar of the Wunambal Gaambera People of the northern Kimberley region of Western Australia

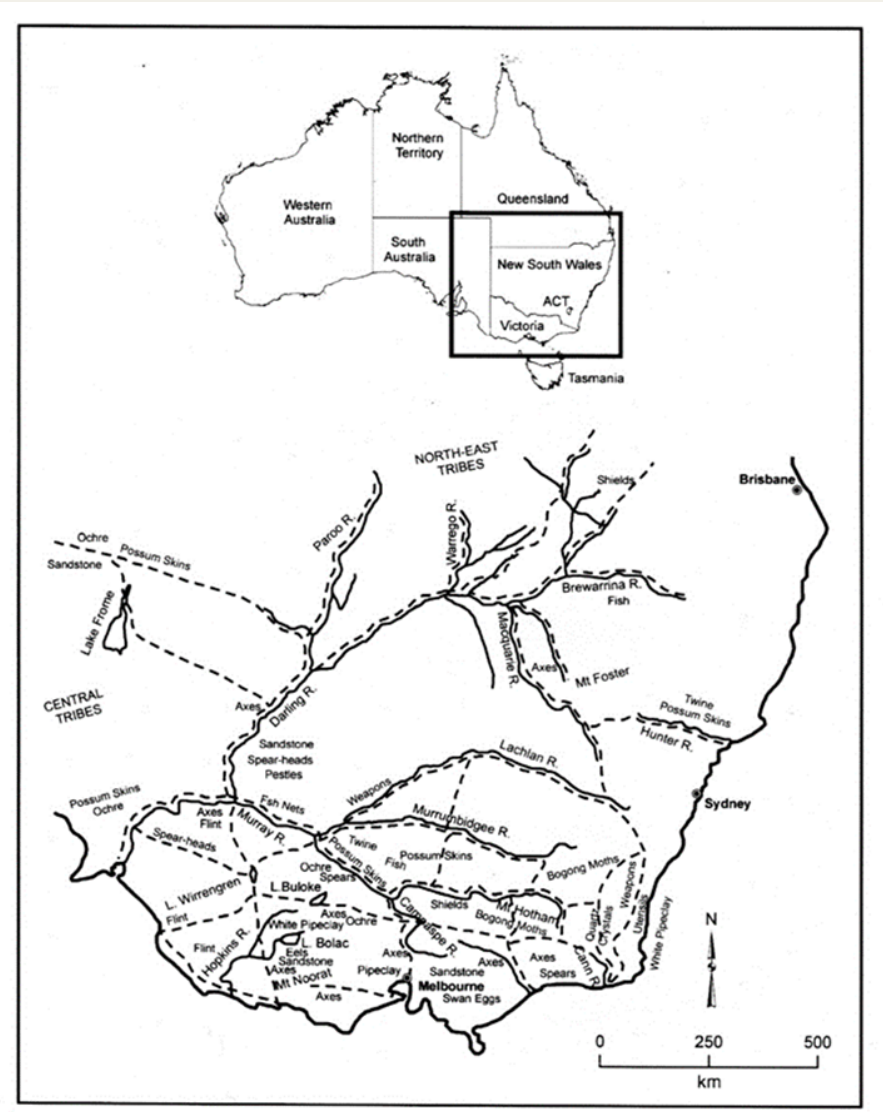


Aboriginal culture and interconnection

Trade routes and songlines interconnected seemingly separate cultural groups across the continent, showing that distance was not an impediment to flows of information and products.



The movement of pearl shells and baler shells across Australia



Aboriginal pathways and traded resources, south-eastern Australia

As a consequence, Aboriginal societies were well interconnected. Rose writes:

> *The ties which link countries one to another follow Dreaming tracks, trade routes, and marriage networks. The whole of the Australian mainland was part of one vast system of trade and knowledge, and information networks are apparently thousands of years old.*

Seven Sisters Songline by Josephine Mick, Pipalyatjara, 1994.
Source: Kungkarangkalpa: Seven Sisters Songline website and the Alive with the Dreaming! Songlines of the Western Desert project.

Applying the four concepts produces a deeper understanding of Aboriginal and Torres Strait Islander life and culture, and enriches the concepts themselves.

Conclusion

Place, space, environment and interconnection are not exclusive to geography. Like all concepts, they are shared with other disciplines. But I think that they are more central to geography, and more likely to be used in combination, than in other disciplines. They enable us to appreciate:

- The wonderful variety of the world's places, and their influence on things, processes, events and us.
- The understanding gained by looking at things spatially.
- The fundamental importance of the environment in supporting our lives and welfare, and therefore the necessity to better understand it.
- The interconnectedness of everything, and the value of trying to think holistically.

The topics that the concepts point to are generally the ones historically studied by geographers. But a view of geography as a way of thinking provides scope for many new areas of distinctively geographical research.

Thank you