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## Thinking Geographically

The GA's 2012 National Curriculum proposals place a lot of emphasis on developing young people's capacity to 'think geographically'. Thinking geographically is not everyday thinking. If we thought these were the same, there would be little point in having geography lessons, or specialist geography teachers who are grounded in the discipline. This paper provides a view on what it means to think geographically, based on the acquisition and development of geographical knowledge.

### Introduction

If we were to imagine learning to think geographically to be a bit like learning a language, then we need both geographical vocabulary and grammar in order to do this. In 2011 David Lambert argued<sup>1</sup> that the subject's 'core knowledge' can be thought of as geography's vocabulary – the extensive, factual basis of the 'world subject'. If core knowledge is geography's vocabulary, geography's conceptual framework forms its grammar. The GA's 2011 curriculum consultation<sup>1</sup> gained approval for this view.

Core knowledge under this guise is typically the information presented between the covers of a school atlas. It is in itself fascinating to some and the source of endless quiz questions. However simply 'knowing' the capital of Uzbekistan, the trajectory of the Gulf Stream or the location of the Murray Basin is not, in itself, geographical thinking. The best we could say is that it enables geographical thinking. We need facts in order to think, but we also need concepts to enable us to group bits of information, or facts, together. Simply absorbing lists of geography's vocabulary does not amount to much more than a dramatic feat of memory: impressive, but not in itself a sign of the intellectual development that we could regard as geographical thinking. For this, we are looking for a form of conceptual knowledge development which links facts together through geographic thought. Because geography, the world subject, tries to keep things whole, geographical thinking includes relating the local and the global, the near and far, the physical and

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<sup>1</sup> [www.geography.org.uk/getinvolved/geographycurriculumconsultation](http://www.geography.org.uk/getinvolved/geographycurriculumconsultation)

the human, people and environments, the economic and the social, time and distance ... and so on.

Another 'knowledge' distinction which may be useful for geographers in education is to distinguish contextual knowledge from conceptual knowledge. The vocabulary or 'core knowledge' may be regarded as the context of geographical enquiry. This concerns the specific place and locational setting of the conceptual content under investigation. In some ways it is the unique context of geographical enquiries that makes them geographical. So geography lessons about general principles (e.g. land use patterns in 'Anytown') or abstract models (e.g. the 'vicious circle of poverty') can feel 'placeless' – and lack geographical authenticity. But learning only the context, as an end in itself, makes relatively little contribution to thinking geographically. It can also be repetitive and intellectually dull - a 'gazetteer' or regional approach in which learning geography is more a 'burden on the memory rather than a light in the mind'<sup>2</sup>. We should instead be mindful that even seemingly clear cut geographical facts can be challenged. For example, how many continents are there and what are they called? It is part of the joy of geography that answering straightforward questions such as these is a matter of discussion and sometimes dispute.

### Thinking geographically and the role of organising concepts

A few large, organising concepts underlie a geographical way of investigating and understanding the world. These are high level ideas that can be applied across the subject to identify a question, guide an investigation, organise information, suggest an explanation or assist decision-making. They are the key ideas involved in framing the unique contribution of geography as a subject discipline.

The three main organising concepts of geography are frequently said to be place, space and environment. There are further possible candidates for this overarching framework, such as location, interaction, scale and change, but place, space and environment form an enduring structure which arguably encompasses these others. Of course, beneath this level of 'big ideas' there is a multitude of substantive concepts – e.g. from river basin to glacial ice; from city to rural fringe; from production to consumption – the conceptual contents of the subject (see Appendix 1).

By using these big ideas carefully and accurately we have a means of identifying what it means to think geographically. In what follows below we outline what is meant by the three main organising concepts and then link these to a definition of geographical thinking.

## 1. Place

A place is a specific part of the Earth's surface that has been named and given meaning by people, although these meanings may differ. Places range in size from the home and locality to a major world region. They are interconnected with other places, often in complex ways. Places are unique, but do not have to be studied as if they were singular, for in seeking understanding and explanation geographers study general processes and look for similarities as well as differences. In studying place in school we:

- describe and explain places in increasing depth. Their characteristics include population, climate, economy, landforms, built environment, soils and vegetation, communities, water resources, cultures, minerals, landscape, and recreational and scenic quality. Some are tangible, such as rivers and buildings, while others are less so, such as wilderness and socioeconomic status.
- explore people's aesthetic, emotional, cultural and spiritual connections with places; the role of places in their own feelings of identity, sense of place and belonging; and the ways they experience and use places.
- recognise that places may be altered and remade by people, and that changes promoted by one group may be contested by others. The values and beliefs people and groups hold are variables which contribute to our understanding of why change in places is often controversial.
- use the uniqueness of places to explain why the outcomes of universal environmental and human processes may vary, and why similar problems may require different strategies in different places.

## 2. Space

Space in geography is the three-dimensional surface of the Earth. While historians study change over time, geographical study emphasises differences across space. This is of particular interest in understanding the rich diversity of environments, peoples, cultures and economies that exist together on the surface of the Earth. In geography we develop a deeper understanding of space (the 'spatial') by:

- investigating the spatial distribution of phenomena and explaining them, often by looking for a spatial association between several distributions.
- learning how to evaluate the environmental, economic, social and political consequences of particular spatial distributions.

- studying the influence of absolute and relative location on the characteristics of places and on people's lives.
- recognising that improvements in transport and communication systems have greatly reduced the time taken to send goods, capital and information between places, which has increased the speed at which economic and cultural impacts spread around the world.
- investigating the ways that space is structured, organised and managed by people for different purposes.
- recognising that people perceive and use space differently, and may feel accepted and safe in some and unwelcome or unsafe in others.
- understanding the role of values and beliefs in influencing decision-making about how space may be used in the future.
- exploring the ways space is represented, such as by maps, art, literature, films, songs, stories and dance, and the influences of these representations on people's perceptions.

### 3. Environment

The term environment means our living and non-living surroundings. The features of the environment can be classified as natural, managed, or constructed. However, we also recognise that these boundaries can be contested and are fuzzy: there is much interaction and cross-over. The concept of environment provides a powerful way of understanding, explaining and thinking about the world. In geography we do this by:

- recognising the environment as an ecosystem - with environmental benefits, such as genetic diversity, pollination or nutrient cycling.
- investigating the structure and functioning of environments as systems: of weather, climate, hydrology, geomorphology, biogeography and soils.
- examining the ways that people use, alter and manage environments (intentionally and unintentionally).
- exploring different worldviews about the relationship between humans and the environment, and applying ideas such as stewardship and sustainability in their studies of the environment.
- recognising that studies of the environmental change have an ethical dimension, succinctly captured by the question: who gets what, why and where (and why care)?
- investigating the effects of the environment on people and places through the opportunities and constraints it presents for economic development and human settlement.

- reflecting on the extent to which the environment contributes to human beings' sense of identity.

The analysis above provides an account of the conceptual underpinnings of geography. It is not to be 'read off' as a syllabus but to be used as a device to transform a teaching programme with broad disciplinary-based aims or goals. In the Geographical Association's 2009 'manifesto', where the notion of thinking geographically was introduced as an outcome of geographical learning in school, teachers are described as 'curriculum makers'<sup>ii</sup>. This is the means by which a curriculum becomes one of 'engagement' rather than one of 'compliance'<sup>3</sup>. When teachers operate with geography's big ideas they demonstrate the discipline that we value and are charged to introduce to young people.

### Thinking geographically and relational thinking

If we accept the claim that place, space and environment form the enduring structure of geography, there are nevertheless several ways in which to interpret the underpinnings of the subject. Peter Jackson writes that "thinking geographically offers a uniquely powerful way of seeing the world and making connections between scales, from the local to the global."<sup>4</sup> The concepts and theories that he regards as key are slightly different from the 'big three' described above and are expressed in pairs (see below). Jackson's main contribution is to emphasise in this way that it is relational thinking that characterises the geographical perspective. Jackson's paired list, slightly adapted for our purposes, is as follows:

#### Space and place

This pair draws directly from the broad framework. They remind us that although places are unique they are not cut off or isolated but connected to other places. The flows between places and through places are important.

#### Scale and connection

This is the 'zoom lens' attribute of geography that shows how decisions and events at a local level can have global consequences and global processes can have differential affects locally.

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<sup>ii</sup>GA (2009) *A Different View: a manifesto from the Geographical Association*, Sheffield: GA, also accessible at [www.geography.org.uk/adifferentview](http://www.geography.org.uk/adifferentview); see also [www.geography.org.uk/cpdevents/curriculummaking](http://www.geography.org.uk/cpdevents/curriculummaking)

### Proximity and distance

This does not just mean physical distance as expressed in kilometres, but includes perceptions and imagined distances. Geographers have had to adopt more flexible understandings of distance especially in the electronic age.

### People and environment

This concerns geographers enduring concern to understand similarities and differences. This includes, for example, examining distinctions such as 'us' and 'them' which in school geography is important in work on uneven development. It also includes the propensity geographers have to link the physical and human world, to keep the world 'whole' rather than separate.

Susan Hanson<sup>5</sup> suggests that geography views and approaches an issue or problem differently to other disciplines, as it considers one or more of the:

- relationships between people and the environment
- importance of spatial variability (the place-dependence of processes)
- processes operating at multiple and interlocking geographic scales
- integration of spatial and temporal analysis

She thereby identifies a 'geographic advantage' – the idea that geographers have something to offer that others do not. Hanson's formulation relates closely to what we have called thinking geographically, drawing on knowledge about place, space and environment and encouraging relational thinking.

## Conclusion

This discussion began by arguing that geographical thinking is not everyday thinking. Neither are schools everyday places: they introduce children to the world as an 'object of thought' rather than as a 'place of experience'<sup>6</sup>. Subjects help organise this thinking by relating concepts systematically. For example, when pupils learn about 'the city' as an object of thought they are taken beyond the realm of their experience by learning about form and function, or about economic and social processes. They are therefore introduced to 'theoretical' concepts which are systematically related to each other and which require different thought processes from those of everyday learning: for example, they enable us to make links, comparisons and generalisations.

The conceptual framework of organising concepts presented here offers one enduring version of the conceptual 'heart' of the subject. It provides the disciplinary resource for teachers to help students make geographical abstractions, links and generalisations. In other words, this is the disciplinary toolkit required to induct pupils into making sense of the world through geographical thinking.

Whilst there remains little research evidence to show how progression works in relation to place, space and environment, the GA encourages curriculum making and a mentality that frees teachers to refine, extend and interpret these ideas through their own intellectual engagement with the discipline. To introduce the world to children as an object of geographical thought requires pedagogic ingenuity, for disciplinary knowledge may otherwise remain unconnected and 'inert.' This gets to the heart of both the value of subject specialist teaching and the challenge that faces teachers.

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Appendix 1 GEOGRAPHY 5-16 overview: What is geography? What will be studied?

PLACE (places, territories and regions)	SPACE (patterns and links)	ENVIRONMENT (physical and human interaction)
<p>Knowledge of the local place in its community and regional context</p> <p>Knowledge of Britain/UK, in its European context</p> <p>Broad knowledge of the world including continents, oceans, countries, significant Earth features such as wind patterns, tectonic structures</p> <p>Knowledge and understanding of specific places or regions different from their own, focussing on people-environment interactions</p> <p>Knowledge and understanding of places of great significance in and for the world today (including at least China, USA, Europe)</p> <p>Knowledge and understanding of places that are scenes of conflict at different scales (eg a local place, Afghanistan)</p> <p>Knowledge and understanding of places where physical extremes or hazards dominate</p> <p>Understanding that people have different perspectives and perceptions of places</p>	<p>Knowledge and understanding of economic patterns of production, distribution and change such as in industry, leisure, agriculture</p> <p>Knowledge and understanding of resource distributions and food, water and energy security on regional, national and international scale</p> <p>Understanding the reasons for and processes behind the location and changing distributions of population</p> <p>Understanding of flows and movements of people, goods and ideas, with examples on a regional, national and global scale</p> <p>Understanding of spatial systems, such as climate, through the distribution of energy through ocean currents and wind patterns</p> <p>Knowledge and understanding of issues that arise from uneven distributions of people and wealth</p> <p>Understanding the role of imagination and speculation in envisioning alternative uses of space in the future</p>	<p>Knowledge and understanding of fragile landscapes such as deserts, polar regions, mountains and reefs</p> <p>Understanding different approaches to managing and living with changing physical and human environments</p> <p>Knowledge and understanding processes involved in distribution and patterns of major physical features, including natural regions and ecosystems</p> <p>Knowledge and understanding the Earth's oceans and their significance</p> <p>Understanding landscapes as distinctive collections of landforms, soils and Earth surface processes</p> <p>Understanding the links between social, economic and environmental quality</p> <p>Understanding renewable and non renewable resources from the Earth and its atmosphere</p> <p>Understanding systems thinking in the context of human and physical environments</p>
<p><b>GEOGRAPHICAL ENQUIRY</b> (Procedures and skills)</p> <p>How to use maps – what they show us, how to use them (including OS maps, atlases and globes) and how to construct them</p> <p>How to use and apply geographic information systems (GIS)</p> <p>How to use data from texts, images, maps and databases to describe, analyse, make meaning and draw reasonable conclusions</p> <p>How to investigate first hand through fieldwork using observation, photography, GPS, sketching, interviewing, meeting people etc</p> <p>How to write descriptively and analytically about places, spaces and environments; constructing and challenging arguments</p> <p>How to use decision making techniques and occasionally informed speculation to imagine alternative futures</p>		



## Endnote references

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- 1 Lambert D (2011) Reviewing the case for geography and the 'knowledge turn' in the English national curriculum, *The Curriculum Journal*, 22, 3, pp 243-264.
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- 3 Young M (2008) *Bringing Knowledge Back In: from social constructivism to social realism in the sociology of education*, London: Routledge, p.22
- 4 Jackson P (2006) Thinking Geographically, *Geography*, 91, 3, pp 199-204.
- 5 Hanson S (2004) Who are 'we'? An important question for geography's future. *Annals of the Association of American Geographers* 94 (4): 715-722.
- 6 Young M (2010) The future of education in a knowledge society: the radical case for a subject-based curriculum, *Journal for the Pacific Circle Consortium for Education*, 22, 1, pp 21-32.