**INTRODUCTION**

Of course the first thing to do was to make a grand survey of the country she was going to travel through. ‘It's something very like learning geography,’ thought Alice, as she stood on tiptoe in hopes of being able to see a little further. (Lewis Carroll (1872), *Through the Looking-Glass and What Alice Found There*)

Alice started from ‘some-where’ in her family garden in Oxford when she decided to follow the White Rabbit. But was she going ‘no-where’? A number of different perspectives are juxtaposed in her experiences in Wonderland:

‘Will you tell me, please,’ she said, ‘which way I must go from here?’
‘Yes,’ said the Cat, ‘but mustn’t you tell me where you want to go?’
‘Well, any place – ’ Alice began.
‘Then you can go any way,’ the Cat said.
‘– if it is a place,’ Alice said.

After pointing out the Hatter’s house, the Cat explained that as every one in Wonderland was mad, Alice must be mad too. The Cat did not go away, but it just disappeared, its big grinning mouth the last to go. Space and time do not matter in Wonderland. At the Hatter’s house, the watch does not tell the time because it is always tea-time, and Alice is told there is no place for her although there are many empty chairs. And strange doors and paths appear at the most unlikely places. Luckily she has pieces from both sides of the mushroom to eat to get smaller or bigger when it pleases her. This comes in handy when she enters the rose garden to play croquet with the Queen of Hearts. This is the Queen’s territory, over which she seems to have total control, shouting ‘Off with his or her head’ every time someone displeases her. But heads were not cut off, as it was difficult to find the head of a playing card or the body of the Cheshire Cat. The trial before the Queen’s tribunal is fearsome as long as Alice is the size of a small girl; but as she swallows a ‘get bigger’ bit of mushroom the assembly is reduced to a pack of fifty-two small playing cards.

This strange children’s book gives us some clues to the concept of **relational space**. All through the book, competition over territory is demonstrated, as well as the fear and attraction of unknown spaces behind closed doors. Gradually, Alice gains control over relational space and her fears disappear as
she learns how to change her size. Her relational space, her relationship to the physical and social realms as well as the realm of meanings in Wonderland, is changed (see also Figure 1.8, p. 00).

Since Alice started on her journey into the unknown land more than 130 years ago, the discipline of geography has travelled a long way. A hundred years ago the geographer’s job was the ‘grand survey’ – mapping the landscape, the *absolute space*, as seen from a balloon or a hilltop – to guide subsequent travellers through it. On the basis of this surveillance, curiosity would lead on naturally to the basic geographical question: ‘*Why* is it like that here?’ Alice did not pose that question; she took in the ‘strangeness’ of life on the other side as a matter of fact. Geographers, on the other hand, have had problems with this question since ancient times, having had problems in finding appropriate methods to analyse the *why* of the things observed.

**Box 1.1  The popular notion of geography**

The scene was typical of that extraordinary ritual known as the *Cocktail Party*. – Groping for something else to fill the silence, she got in her word first. ‘And what do you do?’ she said. ‘Oh,’ I said, grateful for the usual filler, ‘I’m a geographer.’ And even as I said it, I felt the safe ground turning into the familiar quagmire. She did not have to ask the next question, but she did anyway.

• ‘Oh really, a geographer... and what do geographers do?’

It has happened many times, and it seldom gets better. That awful feeling of desperate foolishness when you, a professional geographer, find yourself incapable of explaining simply and shortly to others what you really do. One could say, ‘I look at the world from a spatial perspective, in a sense through spatial spectacles,’ or ‘Well, actually I’m a spatial analyst,’ both of which would be true up to a point. But such phrases convey no meaning to most people, and leave them suspecting that you need a new oculist, or perhaps an analyst of a different sort. – In a desperate attempt to build a bridge with familiar words, one ends up saying, ‘Well, actually, I teach geography.’ ‘Oh really?’ and laughing. ‘What’s the capital of North Dakota?’ (from Gould, 1985, pp. 4–5)

Most people have vague notions about the content of scientific geography. School geography may have left many with bad memories of learning the names of rivers and towns by rote. It is still common to meet people who think that geographers must have to learn a mass of facts, must know the population of towns all over the world and can name and locate all the states in Africa. This idea of geography as an encyclopaedic knowledge of places is illustrated when a newspaper rings up its local department of geography to find out how many towns there are in the world called Newcastle, or when readers write in to
settle bets as to which is the world’s longest river. Recently, the Norwegian State Television phoned me and I thought this would be on my international research in social housing geography, but they wanted me to delimit ‘Northern Europe’ in a programme on ‘Northern attractions’! A whole TV crew came to record me drawing up different possible borders on a map of Europe.

People have an idea that geography has something to do with maps. Less cynically than Swift:

So geographers, in Afric-maps
And o’er uninhabitable downs
With savage-pictures fill their gaps
Place elephants for want of towns.

Geographers are thought to be people who know how to draw maps and are somehow associated with the Ordnance Survey or the US Coast and Geodetic Survey.

Another opinion is that geographers write travel descriptions – a reasonable belief for anyone who reads reviews of the year’s books and sees that many of those listed under ‘geography’ are accounts of exciting expeditions to the Amazon, sailing trips around the world or something similar.

Each of these popular opinions as to what geography is has some truth in it. Place names, locations of towns, land use, topography and other spatial features you may observe on maps, air and satellite photos are facts for geographers of the same order as dates are facts for historians. They are the basic building blocks of the subject, but they are not the subject itself. Maps representing collection of such data are very important specific tools for geographers.

Different types of **thematic maps** are also important means of expression in geographical research, along with tables, diagrams and written accounts. Today, geographers are increasingly using **Geographical Information Systems (GIS)** and computer mapping, rather than the traditional maps (see pp. 00–00). Geospatial technologies have definitely changed the face of geography; by combining, for instance, data from satellite images with other spatial data, computer mapping has become a powerful tool for description, analyses and often a basis for decision-making. As stated by Bonnett (2008, p. 94), ‘the satellite and aerial data collected for Google Earth promise to allow anyone, anywhere, a God-like ability to see everything’. With access to the Internet you can start to explore the world. But to be able to analyse and make sense of what you see, you need to learn more geography.

The art of visual expression and analyses is much more closely associated with geography than with other social and natural sciences. Observations recorded during travel and **fieldwork** still provide essential data for geographers. A cultivation of the power of observation is therefore an important objective in the education of a geographer. Geographical training aims to develop the ability to ‘see geographically’, to observe and interpret a natural or cultural landscape in the field and/or through the study of maps, aerial photographs, satellite
images and other visual representations. But in general we travel through landscapes that have been discovered and mapped by others before us.

EXPLORATION AND THE COSMOGRAPHIC TRADITION

Until the end of the nineteenth century, however, voyages of discovery and the mapping of formerly unknown lands were closely associated with geography. Wayne K. Davies (1972, p. 11), for instance, maintained that geography enjoyed its strongest relative position among the sciences during the so-called ‘golden age’ of exploration from the fifteenth to the nineteenth centuries. This was not due to the academic status of the subject during this period but to the work of a number of people who were actively involved with the mapping and description of the new lands being discovered. To the extent that they were working scientifically, they would, however, be better described as cosmographers rather than geographers. Cosmography, as termed by Schmithüsen (1976, p. 10), included not only geography and cartography but also natural sciences like biology, geology and geophysics, and social sciences like anthropology, which only achieved their independent academic standing towards the end of the nineteenth century. Exploration, and all these other fields of cosmographic activity, were also regarded as being part of geography by the general public because they were carried out, to a large extent, under the auspices of the geographical societies (see Box 2.3, p. 00).

Geography developed as an academic discipline partly on the basis of a cosmographic philosophy that was developed to give coherence to the different activities of the geographical societies. Gradually, theoretical studies made an increasing contribution to the advancement of a specific geographical methodology. The chief emphasis remained, however, on geography as a science of synthesis, a science linking humanity and environment and creating a bridge between the social and natural sciences. Later parts of this book will show that geographical synthesis is not an easy task. Some even argue that it is impossible. We will, however, leave these critics for the time being, and present some of the synthesizing features that characterize geography.

A SCIENCE OF SYNTHESIS

As a student you will notice that geography has no obvious place in the traditional classification of the sciences by faculty. In Eastern Europe, geography is in general located in the faculty of natural sciences, in other countries you find geography in the faculty of social sciences or even arts. Only at some universities, like in Utrecht, the Netherlands, the problem is solved with a separate faculty for the ‘geosciences’. Some parts of geography have their strongest affiliations with mathematics and natural sciences, others with history, philosophy and social sciences. Other sciences study distinctive types of phenomena: geologists
study rocks, botanists plants, sociologists social groups, and so on. The work of geographers involves several types of phenomenon, each already studied by another science. Are geographers, therefore, ‘jacks of all trades and masters of none’? Representatives from some other disciplines, such as the historian Peter Bowler (1992), maintains that geography is a classic example of a subject that can disappear as a separate discipline and be split up in its different specialities.

Geographers would argue that although the subject-matter is shared with other disciplines, it is treated in a different way for geographical purposes. Many maintain that the subject-matter of geography is exclusive; geographers alone study places.

To clarify this point we may look at the position of geography as seen by Hartshorne (1939) (Figure 1.1). The diagram shows that the specialized, systematic branches of geography, such as vegetation geography, climatology, geomorphology, economic geography, social geography, analyse phenomena that belong equally to some systematic science. Hartshorne (ibid.) stated, however, that ‘geography does not border on the systematic sciences, overlapping them in common parts on a common plane, but is on a transverse plane cutting through them’. For every systematic science there is a corresponding systematic branch in geography, but the perspectives and the questions asked are different. Geomorphology uses knowledge from geology, but the aim is to understand how the physical landscape we observe in a particular location has been shaped. The geographer studying climate is interested in how the average weather (climate) characterizes an area, not in the weather in the coming days, which is the task of the meteorologist. The vegetation geography focuses on the plant societies that form forests and grasslands, not the single plant species. Political geography is concerned with how forms of governments and power relations differ from country to country, from place to place, not on how decision-making functions. The economic geographer focuses on the mapping of and changes in the localization of economic activities, not on macroeconomic models for consumption growth, purchasing power, interest rates, inflation and wage levels. Social geographers are more interested in where the different social groups are living, in segregated neighbourhoods or mixed, than in social relationships. There are also clear relationships between the different branches of systematic geography. It is easy to see, for example, that the relationship between climate and soil type must have an important bearing on conditions for agricultural production and that the development of industry in an area may not be due only to economic factors but also to the natural resources of the area, its population potential and its historical and political development. Hartshorne (ibid.) concluded that the interaction of all these factors can primarily be studied within definite areas or regions, and argued that geography should cultivate its core, regional geography, ‘as a safeguard against absorption by other sciences’. Regional geography is defined as the study of areas in their total composition or complexity. In most cases, regional geography would, however, focus on the relationship between humanity and
its habitat, or another theme that makes an illuminating presentation of the region possible. Hartshorne made it quite clear that each region should not necessarily be studied in the same way. For any particular region at a particular time a special pattern is woven linking a selection of systematic threads. A regional presentation then needs to find the special features that characterize the area and seek the relevant systematic data that explain them. In the philosophical discussion in Box 1.2, Figure 1.2 on categories of basic reasoning in **regional geography** is related to **total–special reasoning** (the ‘D’ corner). Hartshorne’s regional geography cannot, however, be placed at the top ‘D’ corner of the tetrahedron. The model, as are all models, is too simple. Regional geography is inside the tetrahedron, somewhat close to the top of ‘D’. As it is impossible to cover everything in a region, the ‘total-special’ ideal cannot be reached.
Box 1.2 Categories of basic reasoning, or arguments for a chorologic, regional approach

<table>
<thead>
<tr>
<th>Total–special</th>
<th>Partial–special</th>
<th>Partial–general</th>
<th>Total–general</th>
</tr>
</thead>
<tbody>
<tr>
<td>The special character of complex unities (wholes)</td>
<td>The special features of individual partial phenomena</td>
<td>Law statements (generalizations) about partial phenomena</td>
<td>The general nature of existing phenomena</td>
</tr>
</tbody>
</table>

Figure 1.2 The four categories of basic reasoning (after Schmithüsen, 1976). The use of the tetrahedron stresses that it is not necessary to choose only one of the four categories of basic reasoning. Most scientific reasoning involves more than one category.

Joseph Schmithüsen, in his *Allgemeine Geosynergetik* (1976), attempts to establish a philosophical base for geography as a science, arguing that all scientific research is based upon four different categories of basic reasoning, which are characterized by the following pairs of concepts: total–general, partial–general, partial–special and total–special (Figure 1.2). **Total–general reasoning** implies a holistic understanding of objects with the intention of making general statements about them. The questions asked are about the nature or essence of the objectives of science. This is the type of reasoning undertaken by the philosophers of science.

**Partial–general reasoning** implies a study of the parts as such, with the ultimate aim of presenting general statements, such as laws in physics. Scientific reasoning in physics thus corresponds to B in Figure 1.2. **Partial–special reasoning** is concerned with the understanding of individual phenomena, such as ‘why was Hadrian’s Wall built across Britain?’ This form of reasoning is also termed idiographic.

**Total–special reasoning**, on the other hand, tries to understand the complex features of particular unities, for example, landscapes or regions in geography. According to Schmithüsen (1976, p. 22), the methodological

(Continued)
peculiarity of geography is that it seeks to understand the complexities that exist together in a part of the earth in its spatial integration. This is, in his opinion, the basis of geography as an independent science. No other discipline concerns itself with the earth’s surface and its spatial parts in their totality: with the association of phenomena in particular spaces or regions.

While there is some truth in the assessment that many geographers have lost their geographical identity to other subjects when working on specialized systematic themes, any fear of absorption by other disciplines seems rather strange today. We may instead stress the point made by Ackerman (1958, p. 3) that geography is ‘a mother discipline’ from which other specialized disciplines, like geodesy, meteorology, soil science, plant ecology and regional science, have emerged. Geography has become an outward-looking discipline that has frequently created new specializations. This multidisciplinary perspective may be regarded both as our raison d’être and our life-raft in the sea of knowledge (Capelle, 1979, p. 65). If the periphery seems interesting, why not explore it; this will only widen the ‘circle of geography’.

The systematic branches of geography are breaking much new ground. Admittedly, useful knowledge from other disciplines can be fitted to the procedures used in geography, but no other specific procedures are designed or followed in order to reveal the intricacies of spatial relations. Economic geographers are, for instance, concerned with structural changes in the localization of industries and the spatial factors that may explain these changes, while economists are generally less interested in spatial factors and distributions, preferring to concentrate on the factors which determine economic development on the national scale. Recently, some of world’s leading economists have, however, acknowledged the value of contributions from economic geographers. Journal of Economic Geography, which was founded in 2001, has become an exciting meeting-place for new research contributions from both geographers and economists. The research in the borderland between the two disciplines has had great impact on the understanding of global processes in trade and industry, and has also to a large extent influenced planning and urban policies. These must be regarded as fruits of geographical thinking, although many inputs come via economy and regional science. A good reference is Peter Dicken’s Global Shift (1986, 5th edn, 2007), now regarded as one of the classics in human geography. As economy has become increasingly globalized, the value of a geographical perspective is becoming more crucial.

In principle, there is a difference between social geography and sociology, but particularly within the field of urban studies, with a focus on social exclusion, urban deprivation and housing, cross-disciplinary cooperation has become more and more important. New international projects involving geographers, sociologists and planners have been given priority, for instance in the NEHOM (Neighbourhood Housing Models) project which I coordinated for the European
Union in 2000–04 (Holt-Jensen et al., 2004). Geographers have also been invited as coauthors in leading textbooks in urban sociology (Savage et al., 2003). Among sociologists, it has been noted that the leading British sociologist Anthony Giddens (1984) has acknowledged the inspiration he has received from geographical theory on space and place.

We may note that there are even differences between botanists specializing in plant distribution and geographers interested in vegetation. In most cases, geographers will concentrate on vegetation types and their distribution, carrying their relevance to human geography somewhere at the back of their mind. Botanists, on the other hand, are more interested in the distribution of single plant species or grouping of species; vegetation as part of the landscape picture and its importance to humanity recede into the background; rare and inconspicuous flowers are often of greater interest to them than common and landscape-forming trees. But research within the protection and maintenance of cultural landscapes has created very fruitful cross-disciplinary projects and cooperation. Botanists have come to realize the value of the broad geographical focus on human behaviour and its impact on the living landscape. So maybe Hartshorne’s model of the transverse planes needs some revision; two planes may indicate that we are living in separate academic worlds. In any case, the crucial message is that the geographical perspective is increasingly becoming more important and recognized by the systematic disciplines. As noted by Bonnett (2008, p. 4), this is due to two interconnected themes which are in the main media focus: environmental (for instance global warming) and international (as economic and cultural globalization) change. These are themes clearly associated with geographical knowledge.

We now proceed to look at a couple of the basic approaches to geographic study that have been at the forefront of discussion in the last fifty years.

**A model-oriented approach**

Geography exists to study variations in phenomena from place to place, and its value as an academic discipline depends on the extent to which it can clarify the spatial relations and processes that might explain the features of an area or a place. Geographical curiosity starts with the question, ‘Why is it like this here?’ Peter Haggett (1972, 2001) illustrates an approach to geographical inquiry by discussing the starting points of different scientists who might all be studying the same beach full of people bathing and sunning themselves (see Box 1.3). The geologist would be interested in the sand particles and the zoologist in the marine life along the shore. The sociologist might study the behaviour of the groups using the beach and the economist might well be concerned with the marginal costs of the different ice-cream sellers. For a geographer, one interesting field of inquiry would be to study the variations in population density on the different parts of the beach by mapping the location of each person. The geographer would find it difficult to work on the ground and might want a general oversight, perhaps using a helicopter to cover the situation by taking aerial photographs.
Box 1.3  

On the beach – a spatial science approach

Photo 1.1  Air photo of Ingierstrand Bad by Oslo, Norway

Figure 1.3a  Regionalization of the beach

Air photographs make good starting points for geographers. A sequence of air photographs can show population densities at different times of the day. The study area can be reduced to a scale that is easy to work with later. While many scientists like to enlarge objects in order to study them,
geographers often prefer to reduce the scale of complex phenomena through maps and photographs. Figure 1.3 shows a bathing beach in Norway on a fine summer’s day. Haggett (1972) used a beach on Cape Cod, USA, as an example in his book, but added in later editions (2001) also photos from a Norwegian Beach (Sjøsanden, Mandal), a Chinese beach and historical maps of the changing beach at Orford Ness, UK. Our photo and maps are from Ingierstrand Bad close to the Norwegian capital Oslo. The natural landscape here consists of a small sandy beach with rocky promontories: grass fields and woodlands around. We can also see it as a cultural landscape with many physical objects created by humans: roads, restaurants, a springboard and a pier, and we see people in the sea and sunbathing, queuing up at the ice-cream stalls and walking around.

The first reaction of geographers would presumably be to map accurately the exact location of each activity and map the changing population density during the day. At the second stage, geographers would try to systematize what they observed on the photographs or maps into some sort of geographical pattern, for instance, by dividing the beach into zones of different population density. The third task would be to explain how the geographical pattern of density distributions came about. That explanation would consider a range of distinctive factors, including natural factors like exposure to

(Continued)
sunshine and shelter provided by the topography, as well as cultural factors, such as the distance from restaurants, car parks and toilets. A crucial factor would be the process of change; each picture of the ‘settlement pattern’ on the beach would depend on what time of the day the photo was taken.

The beach is, of course, a microcosm; geographers usually work with larger areas, analysing population densities by counties or the distribution of agricultural land across the world. However, studies of large areas are basically similar to those used to study the beach. The analysis of geographical patterns requires:

1. an understanding of maps, projections and scales and of how maps are made;
2. knowledge of the statistical methods available to sort out those factors which might explain the patterns observed; and
3. an appreciation of the techniques which might elucidate the dynamics of changing geographical patterns.

Source: Based on Haggett, 1972, 2001

This example illustrates a working sequence in geographical research generally related to the spatial science school and the concept of relative space (see pp. 00–00): localization → geographical pattern → explanation. We start to locate spatial phenomena and use different mapping methods to discover specific geographical patterns, which we set out to explain. Because geographical patterns in general change through time, an understanding of the processes of change is crucial to the explanation of a specific geographical pattern. This working sequence is still rewarding as an educational device, but other models for research work have become more prominent.

Local responses to global processes: deviations from the models in focus

Today a geographical research project often starts with the presentation of a social or natural process which seems to be related to geographical factors or have spatial relevance. Examples would be changing patterns of manufacturing or changing extensions of glaciers. Analysing and perhaps focusing on general trends of change, we may find that there are geographical differences in the patterns of change. While the ice caps of Antarctica and the North Pole are diminishing, the glaciers in Norway may at the same time be increasing. While textile mills have been closed down all over Britain, there are still some pockets where the industry thrives in this country. How can we explain such geographical differences? To what extent do local factors matter in global processes of change? As exemplified in Box 1.4, we are here making use of the following work sequence: process → variations of geographical change → explanation.
Box 1.4  Pit and place: reflections on the geographical patterns of the miners’ strike of 1984–85

<table>
<thead>
<tr>
<th>Area</th>
<th>NUM workforce on books</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Wales</td>
<td>53,000</td>
</tr>
<tr>
<td>Staffordshire</td>
<td>25,000</td>
</tr>
<tr>
<td>North Midlands</td>
<td>10,000</td>
</tr>
<tr>
<td>South Midlands</td>
<td>1,000</td>
</tr>
<tr>
<td>South Wales</td>
<td>200</td>
</tr>
<tr>
<td>Cumbria</td>
<td></td>
</tr>
<tr>
<td>Kent</td>
<td></td>
</tr>
<tr>
<td>North East</td>
<td></td>
</tr>
<tr>
<td>North Nottingham</td>
<td></td>
</tr>
<tr>
<td>South Nottingham</td>
<td></td>
</tr>
</tbody>
</table>

Source: Duncan and Goodwin, 1988, p. 50; Johnston, 1991

Figure 1.4  The distribution of support for the NUM strike in September 1984

Source: Duncan and Goodwin, 1988, p. 50; Johnston, 1991

(Continued)
In March 1984 the National Union of Mineworkers (NUM) called its workers to strike as a protest against the government plan for extensive pit closures. The strike lasted till March 1985, at which time the strikers went back to work, although no settlement was reached. The strike was a very important symbolic fight between the union and the Conservative government, a fact that should support full solidarity between the miners. In addition, coal mines are generally located outside the main industrial conurbations with strong bonds between workplace, home and social life: a society very much based on solidarity. Emphasis on the crucial importance of the pit for the local community, its economic and social life, was the main argument in the strike leaders’ campaign. What interests us here is that, in spite of this, there was an uneven geographical support for the strike. In some mining regions, NUM got 100% support throughout the year-long dispute; in others, the backing was small and coal continued to be mined. Figure 1.4 gives a picture of the geographical variability of the participation in the strike at one date – approximately halfway through its duration. Willingness to strike could to some extent be related to regional variations in the prospects of pit closures: South Yorkshire, north Nottinghamshire and north Derbyshire recorded surpluses and had good prospects for future working. But the ‘self-interest’ explanation fails as the strike had strong support in Yorkshire though not in Nottinghamshire. So the pattern must rather reflect long-established cultural differences between the mining districts. Johnston (1991, pp. 121–3) points out that the special system of subcontracting established in Nottinghamshire, at an early date, created a workforce divided into many small, relatively independent units each with its own wage rate – creating no miner solidarity of the type developed in Yorkshire. An ‘aftermath of the strike was the formation in Nottinghamshire of the Union of Democratic Miners (UDM), which was not federated with the NUM and was denied membership of both Trades Union Congress and the Labour Party. Turning to the politics of the community, the Dukeries [in north Nottinghamshire] again stands out as atypical among British coalfields’ (ibid., p. 129).

This example illustrates that local, geographically contingent determinants matter or, in the words of Peet (1998, p. 139), ‘that the historical dynamics of socio-economic systems can be comprehended only in the geographical context because spatially specific circumstances limit the possibilities of human actions’. At the same time, the example elucidates a presently more common approach in geographic research: from processes in space to geographical explanation.

AN ORGANIZATIONAL PLAN OF GEOGRAPHY

The number of branches of systematic geography could be argued indefinitely. Earlier accounts even included ‘mathematical geography’, which has long been regarded as part of astronomy. Uhlig (1971, p. 15) limits the field of
geographical inquiry to five aspects of the physical environment and five aspects of human life (Figure 1.5). Uhlig uses the term social geography in the German sense of integrative human geography rather than in the Anglo-American usage as a specialized branch of human geography. Of more significance is Uhlig’s location of landscape geography at a higher level of integration than the systematic branches. In the German geographical tradition, landscape geography (Landschaftskunde) forms a transition or bridge between systematic geography and regional geography (Länderkunde), which is the most complex form of geographical integration. The landscape is seen as the product of the interaction of geofactors and only such features as are repetitive and appear in accordance with certain rules or laws are taken into account. The landscape concept represents an integration of human and physical geography that considers elements
and properties (or characteristics) which form landscape types (Weichhart, 1975, p. 9). The aim of landscape geography is therefore to present and explain a typology of landscapes which most often focus on three aspects in the landscape: geomorphological landform features, vegetation cover and settlement patterns (marked with 'asterisks' on Figure 1.5). Regional geography, on the other hand, seeks to give a total, integrated presentation of a specific area. Whereas landscape geography is concerned with the nomothetic (law-based) aspects of a certain area, the real research interest of regional geography lies in those aspects that make a region specific. Such singular aspects that have arisen in the course of history are the results of individual decisions through time and mould each region in a way peculiar to itself (ibid., p. 16).

Regional geography has traditionally been regarded as the core of the subject. Systematic geography is then the area in which scientific laws are formulated and regional geography becomes the field in which such laws are tested, and which also provides a synthesis of the physical and human phenomena within an area or region (Hettner, 1927). It has, however, been difficult for regional geography to fulfil these roles in the field of research.

A NEW SYNTHESIS?

Haggett (1972/1983, 2001) has tried to develop a new form of synthesis which diverges from the traditional division of the subject (Figure 1.6). He emphasizes that the historical divisions are important if only because universities still often use them as a basis for their courses. But it is more valuable, he thinks, to divide the subject up in relation to the way in which it analyses its problems. His three main groups are defined as follows:

1) Spatial analysis concerns itself with the variations in the localization and distribution of a significant phenomenon or group of phenomena; for instance, the analysis of variations in population density or poverty in rural areas. Which factors control the distribution pattern? Which processes led to this pattern? How can these patterns be modified so that the distribution becomes more effective or just?

2) Ecological analysis concerns itself with the study of connections between human and environmental variables. In this type of analysis we are studying the relations within particular bounded geographical spaces, rather than the spatial variations between regions.

3) Regional complex analysis combines the results of spatial and ecological analysis. Appropriate regional units are identified by areal differentiations. Connecting lines and flows between the individual regions may then be observed.
The advantage, maintains Haggett (2001, p. 765), ‘of looking at geographic problems in terms of these three approaches rather than the orthodox divisions is that they stress the unity of physical and non-physical elements rather than their separation’.

Weichhart (1980) has also attempted to provide a better organizational plan for the discipline in order to promote geographical synthesis. He refutes the notion that ‘geography as human ecology’ or ecological analysis can form a leading concept for the whole of geography. Questions relating to humanity and its environment can only be a part of the research field – but need to become a more important part. Returning to Uhlig’s (1971) organizational plan (Figure 1.5), Weichhart (1975) classifies the geofactors that are the important elements of the geosphere into three groups: abiotic, biotic and human-induced. Abiotic factors are geology, soil, climatic features, ocean currents, etc.; biotic factors include vegetation, animal life and humans as biological creatures; and human-induced factors are settlement, transportation, industry, social structures, etc. Weichhart (1975, p. 99) envisaged three groups of complex system relations for geographical analyses:

- It is possible to study the system relations between all or a number of the abiotic or biotic geofactors – geography as a physical geographical synthesis. The leading threads might include a nomothetic-orientated typology of natural landscapes or a process-orientated description of the evolution of the landscapes in a certain region.
- On the human side, we may study the system relations between all or a number of the human-induced factors.
• The catalogue of relevant problems would, however, be incomplete without consideration of the interrelations between abiotic, biotic and human-induced factors which constitute the human-environment system. Weichhart (1975, p. 98) makes the point that this does not imply that the totality of geofactors is brought into consideration. Geographical research has shown that the abiotic and biotic parameters needed to describe and explain the patterns of physical nature or human geography are not identical to those needed to explain and describe the complex of relations between humanity and nature. Relief structures recede into the background; soil, vegetation and hydrological features become more important. Among human-induced factors, there are also some that may have less significance for the relations between humanity and nature. The study of humanity–environment relations is therefore not the same as a total synthesis of all the geofactors.

This understanding of geographical research is exemplified in Box 1.5, in which focus is on specific geographical investigations within each of the three groups of study.

Figure 1.7  Simplified examples of analysis models of geographical synthesis within physical geography, ecogeography and human geography

**Source**: Leser, 1980, pp. 68–9
Figure 1.7 illustrates some of the factors that have to be taken into account in the geographical study of the three concrete research themes:

(a) The study of the topography of the Grampian Mountains, Scotland, in **physical geography** has to build on a syntheses of different natural factors and processes, but human influence can also be of great importance. The topography of the Scottish Highlands are not so easily changed by human action, whereas the topography of the sandy shores on the Danish west coast (see pp. 00–00) is to a large extent dependent on human actions. And where there are heavy precipitations in the form of rain and snow the landforming processes are different from where there are deserts. Shifts in temperatures between freezing and melting have great influence on the denudation/erosion in the Grampians, whereas in deserts high evaporation may result in rivers drying up and losing their dredging and transport capacity. The local geology, the occurrence of hard and soft rocks, influences the results of erosion, while new landforms are created by volcanic activities and faulting of the continental blocks (**tectonics**, see p. 00). The landforms in an area as we see them today represent the results of a sum of factors and processes which may be different from place to place. A study of landforms is based on a synthesis focusing *mainly* on the natural factors.

(b) The study of desert structure and **desertification** processes, for instance in the Sahara region (SAHEL) in Africa, in **ecogeography** will have to focus on a mix of natural and human influences (see Figure 3.6, p. 00). Global warming created by human activities as well as natural climatic processes have to be taken into account. Land ownership structures, population development and agricultural practices are other factors that have to be considered. Some natural factors, such as geology, may have less impact, while social practices are of much greater importance than in the study of landforms. Here focus has to be on a man–land synthesis.

(c) A study of transport patterns and processes in **human geography** calls for a focus mainly on human-induced factors. But we also have to consider natural conditions. In Norway we definitely know that topography and climate are crucial factors for the road and rail connections, particularly in winter, crossing the mountains. How dense a network is needed depends on the population density, the industrial activity and the ability to cover the costs of transport. Political decisions are also very important, for instance when it comes to the development of main roads. So here we see a synthesis of politics, power, settlement and industrial structures as well as considerations of natural conditions.

*(Continued)*
In all three fields of research both human and physical geographic factors have to be considered, but to different degrees. In ecogeography the integrative task is crucial, but we should note that this does not mean we will need to integrate all the human and physical factors that are included in either purer physical and human geographical research.

Weichhart’s organizational plan provides a useful framework for the applied research projects that are of growing importance in geography. Many German departments use the threefold division to provide a framework for degree courses in geography.

More fundamental than the suggestions for new organisational structures for the discipline is, however, a basic, philosophical underpinning of geography as a science that has been presented by Robert David Sack in his book *Homo Geographicus* (1997).

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**Figure 1.8** The relational geographical framework

*Source: Sack, 1992, improved by Sack, 1999*
HOMO GEOGRAPHICUS

What does it mean to be ‘a geographical human being’? Is it something that is reserved for the specially educated geographers? No, Sack’s message is that everyone of us are *homo geographicus*, that our geographical relations are intrinsic parts of our life projects. This can be linked to *existentialism* and Heidegger’s philosophy (see Box 1.7). To enter these philosophical discussions we need briefly to consider the basic geographical terms *place, space, territoriality* and *globalization*.

All human actions involve space and place. The world is full of *places*, from mountain tops and forests to towns, streets and houses. When we travel fast in a car or by train and only briefly observe the places passing by, we conceptually recognize it as travel through *space*. Distances recognized as kilometres, travel time or as psychologically felt distance become more important than the places we pass by. We may also recognize during our travel in space that in the modern world many differences from place to place are disappearing. Globalization leads to ‘McDonalization’ (Ritzer, 2007), with the same architectural style all over the world. Globalization makes places look more alike. Some call this ‘placelessness’ (Relph, 1976). On the other hand, we experience in the contemporary world a counter-current of *postmodernism* which aims at preserving or creating places of special meaning. This includes, on the one hand, architects like Christian Norberg-Schultz (1984), who argues that physical planners needs to take care of ‘*genius loci*,’ the spirit of place, which is conveyed to us in the old towns of Praha and Jerusalem, but is absent in new suburban housing estates. On the other hand, it includes social scientists like Pierre Bourdieu, who in a number of books attacked neo-liberal modernism and through the concept ‘*habitus*’ defined conditions for a social sense of place (see Hillier and Rooksby, 2005). As increasingly more and more millions of people today see international travel and awareness as normal parts of ordinary living the place-specific becomes much more interesting than the placeless features of modernity.

And in these geographical expeditions of ours, place becomes much more than the visible – the buildings and landscapes we see. Places are to a great extent the social constructions we form in our heads and that are created through our social relations in places. A pub is a physical place which can have pleasant interior furnishings in an old building, but it is of interest only if it is the place where we meet our friends. A place can also have *meaning* for you if you experienced something special there, for instance if it was where you met your boyfriend or girlfriend for the first time. So if we link ‘genius loci’ and ‘habitus’ we see that we have to understand place as something combining physical nature (which also includes houses and streets), social relations and meaning. These are three basic concepts in Sack’s figure (Figure 1.8). Before returning to the concepts ‘nowhere’ and ‘somewhere’, we have also to consider the concept *territoriality*.

An agricultural field is a place, but it acquires meaning as an area that needs ploughing, weeding, sowing and harvesting to produce what the farmer has decided for it. When using the power of decision in this way, we create territories. This is
the equivalent of using geographical power. Territoriality creates places designated for specific functions, and thus places of distinct meaning as living-room, home, school. We all need territories we feel we can control. A child, growing up, will try to push the boundaries, but perceptions of ‘safe’ and ‘unsafe’ areas are always there to set limits. As adults we may have developed such self-confidence and so strong a personality that we dare to move almost anywhere. But this depends on what kind of person you are, your gender, physical strength, social status, age, ethnicity, education, and so on. Territorial safety also depends on whether you are an ‘outsider’ or an ‘insider’ in a place, and a command of international and local languages is a good asset (Box 1.6 gives a concrete example).

### Box 1.6 Territories of a Sri Lankan tourist resort

A tourist hotel sited between palm trees on a sandy beach in a Third World country seems a ‘Shangri-La’ of wealth and affluence in a world of general poverty. Such a place attracts beggars, fortune-tellers, taxi drivers and youngsters selling T-shirts – all in the hope of earning big money. The hotel wants to protect its guests from these ‘fortune-seekers’, partly because it does not want competition on the territory reserved for the hotel shops. So the hotel’s territory is guarded as a place only for the guests, hotel employees and entertainers who have been invited in by the manager. Even the native bus-drivers who transport the tourists from hotel to hotel have to sleep in poor accommodation in a part of the building that does not allow them access to the hotel’s facilities. Between the palms, guards are posted to keep the beggars out, while inside fat middle-aged Europeans are served drinks at their beach chairs.

The hotel is a pleasant oasis but, at the same time, a tourist ‘ghetto’ – the guests do not dare break out. When they do so, on foot through the main entrance, they are at once offered taxis and guided tours and have to break through a phalanx of other offers and appeals for help. If the tourist manages to refuse all these requests and walks a couple of hundred metres from the hotel, he or she will find him- or herself in another territory. Here there might be a small child or two asking for a ‘pen’ but, principally, the tourist will be left to look around, to sit undisturbed on the balustrade or to walk around the marketplace.

The ring of fortune-seekers around the hotel is also a territory, and this might be divided up into smaller territories. Each beggar (or family group) has carved out a definite small territory of his or her own. There might be competition over boundaries and zones of ambiguity, but the beggars, pimps and prostitutes have territories of action they try to control. Only those with a great deal of self-confidence and strong personalities can afford not to bother about these territories and to trespass anywhere.

Most of us need territories we feel we can control. A growing child will constantly try to enlarge his or her territory, but the territory the child feels is safe, and that which is unsafe, is always at the back of the child’s mind.
Our experience of territoriality, our ability to control the territory around us, is an important part of what we call our **relational space** – the understanding and feeling of spatial relations which we carry in our mind and on which our actions are based. The concepts place, space and territoriality are key concepts in geography, but also basic elements in any human’s life.

You can possibly agree that place consists of ‘nature’ or physical surroundings, the social contacts we have there and the meaning the particular place have for us. Figure 1.8 from Sack’s book *Homo Geographicus* (1997) shows this, but also that place and ‘self’ are closely related. The growth of our own ‘self’, our identity, builds on our relations to the realms of ‘nature’, ‘social relations’ and ‘meaning’ connected to places. All the time we must relate to the physical world, to existing things which we use and to distances between things. Our social relations take place and lead on to social influence and the establishment of territories, at least in our own room or home. The realm of meaning is connected with symbols, for instance ‘roots’ that connects us to places through our lives. A place means something because we relate special events to it. Place then constitutes and integrates forces from the **realms** of nature, meaning and social relations. Sack points out that, in addition to these three, it is possible to talk of a fourth realm, the realm of **agency**. This is based on the claim that the forces from the other realms are not determinate; we have power to choose for ourselves, we have ‘free will’. This realm, however, is not included in Figure 1.8 as it cannot be seen separately from the other three.

The structural similarities between place and ‘self’ are based on the fact that both are weaving together elements of nature, meaning and social relations (see Figure 1.9).

We have a physical body, we are dependent on social relations with others and we need to find meaning in our life. This mix of physical nature, social relations

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**Figure 1.9** The dialectical relations between ‘self’ and place through time. From birth our ‘self’ is influenced by the place in which we grow up. Gradually we also make some influence, particularly on the social relations, in the places we move to. And new experiences from places we later in life live in or visit influences our ‘self’. (Adapted from Sack, 1997, p. 132)

*Source: Adapted from Sack, 1997, p. 132*
and meaning is understood primarily because it involves activities in place and space. Place becomes an active agent in the forming of our ‘self’. There is a reciprocal (or dialectic) relation between ‘self’ and place. We start our life as children in a parent’s home and a hometown which influences the formation of our ‘self’ in the first instance. But then we may move to another place to study or we start travelling in the world. We have our ‘roots’, but the development of our ‘self’ is influenced through new experiences in new places. To some extent we also influence the places we come to, particularly the social life around us, friends and lovers, definitely the ‘meaning’ of others and sometimes even the physical structures. If we become farmers, housebuilders or politicians this is definitely the case.

If you accept this argument, you also have to accept that place as a focus in life and research is basic and necessary; we cannot understand human life and activity without a conscious relation to places, their physical properties, social activities and interpreted meaning (a deeper philosophical basis is presented in Box 1.7).

### Box 1.7 Existentialism, Heidegger and ‘being’ in the world

Basically, many scientists see existentialism as ‘anti-intellectual philosophy on the grounds that one of its central tenets holds that reality and existence can only be experienced through living and cannot therefore be made the object of thought’ (Walmsley and Lewis, 1993, p. 117). On the other hand, existentialism – particularly through the philosophy of Martin Heidegger (1889–1976) – is crucial for an understanding of relational space as presented by Sack (1997). The central concept in Heidegger’s philosophy is *Dasein* (i.e. ‘being here’), a German word meaning a human subject’s existential ‘being’ in the world. As human beings, we are, on the one hand, interwoven with the environment and processes that make up the world and, on the other, we ‘step out of this unity to observe, experience, reflect on and choose between possible ways of being in the world. This duality means that everyone is, to varying degrees, estranged, alienated from the world. A schizophrenic seems to live in a deep existential fear that alienates him or her from a meaningful being in the world. We are all located on a scale between ‘being’ and ‘not-being’ in the world. The human struggle against estrangement is essentially connected to our existence in space/place (being) and time (becoming). Every human tries to eliminate detachment through the creation of meaning in places of ‘being’ in the world and through a meaningful future life of ‘becoming’.

The world is a structure of meaningful relations in which the individual exists and which he or she partly creates. Heidegger distinguishes between three aspects of the world: the physical, the social and the subjective. We can link these three aspects to the realms of nature, social relations and meaning in Sack’s figure (Figure 1.8). As human beings, we are ‘thrown’ into the physical world or realm of nature with the conditions...
set by the place we live in and the material conditions that set frames for our future. An important part of ‘being’ in the world relates to how we manage to cope with these conditions.

Another crucial part of being is our relations to, and dependencies on, other human beings. Basically, however, we are all alone: no one else can live my life or die my death, so to be in the world we need a subjective meaning for our existence.

As place and space are intrinsic parts of our being in the world, our individual relational space is the basis for our actions. If we are to understand how this relational space influences humanity’s being and becoming in the world, we need to encounter people and situations in an open, intersubjective manner.

In intellectual life – in the scientific division of labour – the realm of nature, the social realm and the realm of meaning are, however, separated, somehow creating an intellectual deadlock. Most scientists analyse primarily phenomena within one of the three realms while phenomena or influences from the other two are seen as ‘background facts’ or are simply overlooked. Most natural science research does not consider human behaviour. Natural science and medicine normally focus on physical processes. When the focus is on humans they are rather seen as part of nature and are exposed to its forces. A medical examination finds out whether you are sick or not through blood tests and other physical indicators, while sickness can be related to your personality and your social situation.

Research within sociology and political science are generally not concerned with nature and have less room for humanistic interpretation. Social scientists may maintain that our social relations guide our thoughts and our organisation in the physical world and that our physical environment is socially constructed. Often it is maintained that social relations also guide ‘meaning’ as our ideas, values and belief are formed by our social roles. ‘Tell me who you associate with, and I will tell you who you are and how you think!’ The assertion that social relations guide our opinions also concern the meaning we ascribe to nature, including the metaphors (conceptions) we use to define nature as something separate from humans and our scientific models and theories about the natural realm.

Researchers working with intellectual history or literary interpretation focus to a small degree on social relations and the physical world. Humanists may maintain that social relations and nature concern our interpretation of the interplay between signs and symbols and that meaning and ideas motivate our actions. The world and the self are therefore mentally, not socially constructed. Research within social science, natural science and humanities will generally assume that the chosen realm is the most important and superior to the other.

Natural scientific, social scientific and humanistic research provide three different perspectives and basic interpretations of the world, but none give the whole and full ‘truth’. Here, maintains Sack (1997, p. 15), the concepts of space and place are essential categories that incorporate all the realms. The geographic
approach and understanding of place and ‘self’ bind the different perspectives and geography together as a science of synthesis, and thus have a crucial role in academia as well as for man in general.

The cone in Figure 1.8 (starting in ‘somewhere’ and extending out to ‘nowhere’) is intended to indicate two things:

1) ‘Somewhere’ (indicating insidedness) and ‘nowhere’ (indicating outsiderness) are limiting cases and are never in themselves completely attainable. ‘Somewhere’ is the personal perspective of the ‘ego’, whereas various degrees of public, abstract or objective ‘outside’ perspectives are located further up the cone.

2) There are many paths from ‘somewhere’ to ‘nowhere’, even though they are interrelated. The lenses in the cone represent such different paths or perspectives. A religious, moral lens may, for instance, be located rather close to ‘somewhere’. A scientific, abstract lens closer to ‘nowhere’ could draw attention to place as a location in space, whereas a less abstract lens further down on the same axis could be analysing a personal sense of place (ibid., p. 18). Throughout the history of geography, most approaches have been close to ‘nowhere’.

The discussion on concepts as ‘nowhere’ and ‘somewhere’ are directly related to the methods we use in scientific investigations, quantitative versus qualitative methods and to the discussion between spatial science and humanistic geography which will be presented later in this book. Based on the discussion above we will, however, now conclude this chapter with some inputs in a discourse that is as old as the discipline: Should geography narrow its field of investigation to make us less ‘a jack of all trades’ or is the broad pluralism of geography the main asset of the scientific discipline? Note: our aim is not to give a ‘blueprint answer’ to this important question; rather, throughout the book the aim is to stimulate discussion by juxtaposing opinions!

**SPECIALIZATION AND PLURALISM**

The broad field of inquiry traditionally attributed to geography requires that research workers in the subject deploy a wide variety of skills. It also requires that research workers recruited to the discipline have experience in mathematics, statistics, biology and geology, as well as in history, sociology and economics. As no one individual can hope to cover more than a couple of these fields, it has been necessary to build up a staff of specialists in each of the branches of geography so that the whole discipline can be presented to students. The adage that ‘geographers specialize in not being specialists’ in no way applies to the staff of university geography departments. Research workers must specialize in order to create something
worthwhile. In the normal course of events, an individual will work in a field that interests him or her and in which he or she has a fair amount of background knowledge. As an individual’s specialization develops, he or she will resent the imposition of any kind of paradigm, understood as a framework for what the geographer should investigate and what methods should be used.

James Bird (1979, p. 118) observes that there ‘certainly are basic strains within geography, and if one paradigm is plastered across the subject, it will soon be broken by the disjunctions below’. It is, he believes, a hopeful sign at present that the idea of a ruling paradigm (which is similar in effect to an imposed orthodoxy) has been more or less discarded. Alternative schools of thought coexist, and this diversity is a good thing because it offers understanding with wider dimensions.

Gerhard Hard (1973, p. 237) suggests that, with our increasing awareness of the multitude of scientific traditions that are pursued within the framework of geography, we might begin to doubt the extent to which there has ever been a single former geographic discipline. The history of geography is the focus of this book; the following chapters will both try to present a cumulative story as well as discuss whether we can identify paradigms and substantial changes within the discipline. We also need to take into consideration that our perspective on a discipline’s history is always more or less influenced by the norms and outlook of the present generation. We see history in the terms of the present. Whether we emphasize the continuity and gradual growth of a science or dwell on its discontinuities and changes, we tacitly assume a single line of progression to our present situation. Perhaps we should stress geography’s heterogeneity – its many-faceted and rich traditions?

In an argument on the traditional German understanding of regional geography, Hard (1973) posed the following question: Are real geographers only those who integrate all the branches of the discipline into their research? If so, he maintained, there are very few ‘real geographers’. Hard uses Venn diagrams to develop his argument (Figure 1.10). His first example, though simple, is not totally unrealistic. The term ‘real geographer’ may here only be applied to those who are committed to (a) geomorphology or (b) cultural landscape morphology, or both (shaded in Figure 1.10 (I)). If, however, synthesis is the sole aim of geography, a ‘real geographer’ must study both the physical and the cultural morphology of the landscape to qualify (Figure 1.10 (II)). If we consider the research themes actually pursued by self-styled geographers, the figure expands (Figure 1.10 (III)) to include climatologists, geomorphologists, biogeographers, ecogeographers and landscape geographers of different sorts, as well as economic geographers, location theorists, behavioural geographers, and so on. It is too restrictive (Figure 1.10 (IV)) to include among the ‘real geographers’ only those ecogeographers who are attempting a synthesis of natural and human factors.
The cultural landscape – functional, intentional and structural modes of explanation

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<thead>
<tr>
<th>Box 1.8</th>
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Figure 1.10  Different definitions of a ‘geographer’ (shaded). The circles symbolize closely connected research themes: (a) geomorphologists; (b) landscape morphologists; I–IV are explained in the text

*Source:* Adapted from Hard, 1973, p. 235

Figure 1.11  The relationship between the factors that contribute to an explanation of the cultural landscape

*Source:* Jones, 1988
Geography is a field-study discipline that has a keen interest in the relations between humanity and nature as these may be studied in the everyday cultural landscapes that surround us. One focus of investigation (promoted by, among others, Carl Sauer – see Box 2.10) has been the study of changes in the cultural landscape, in land tenure, land use, building culture and settlement form (that is, very much a focus on physical changes and their explanation).

However, Jones (1988, p. 203) points out that in such a study we need three modes of explanation: functional, structural and intentional (see Figure 1.11) to explain the form and patterns of the cultural landscape. This can be represented as a triangle in which the three sides represent the three modes of explanation and the associated geographical scales (micro, meso and macro). At the corners are phenomena which appear to provide a link between them: the individual actor as the link between intention and function; production as the link between function and structure; and ideology as the link between structure and intention.

As an example of this we might consider a study of a farming landscape, with all its infields and outfields, forests and farm buildings. The functional mode of explanation focuses on the landscape's functions in human terms. This is more or less a traditional geographical perspective in which modes of production are related to natural resources, buildings, property structures, market possibilities, etc. Such studies tend to draw their inspiration from the natural sciences and they work mostly at the mesoscale – the cultural landscape of a region.

In the intentional mode of explanation, a particular feature of a cultural landscape (such as land use) can be explained 'in a chronological-biographical sense in relation to the needs, motives, preferences, decisions and actions of individual persons' (ibid., p. 200). A building may be explained through its history and through the needs and aspirations of the farmer. Here we see the farmer's practice as 'agency', acting on the basis of personal intentions and his or her interpretations of the functional resources at hand as well as the structural forces at the macroscale (for example, the threats of globalization and of changing national policies).

Whereas the intentional mode of explanation focuses at the microlevel on the individual agent, structural explanations try to explain changing landscape features as adjustments to agricultural policies, technological innovations or market forces. Hence explanation is sought here at the macrolevel in relation to socioeconomic structures and related ideologies.

We need all three modes of explanation to understand such a basic and simple geographical object of study as the cultural landscape. But we must, of course, accept that the individual researcher may focus his or her research project on only one of these modes. Aasbo (1997) points out that there is currently an increasing interest within geographical research in the intentional mode. There is a tendency to push this perspective further towards the study of identity and meaning in the cultural landscape.

(Continued)
Insiders (e.g. farmers using the landscape) and outsiders (e.g. environmental planners and tourists) have conflicting perspectives on the identity and meaning contained within a cultural landscape which might lead to misunderstandings and antagonistic policies.

One reason for this new focus in the research seems to be the economic changes that have transformed our society in the last hundred years. Before 1900 when the influential French approach to regional geography was developed by Paul Vidal de la Blache and others (see pp. 00–00), it was possible to study cultural landscapes as dominated by local agricultural conditions, the features of the cultural landscape could be understood locally as results of the vertical connections between humanity and the natural conditions in that landscape. Hence a chorological perspective based on the notion of absolute space was not problematic.

The growth of manufacturing industry meant the breakdown of local dependencies, making a focus on relative space more fruitful. The cultural landscape could now be understood better in terms of transport cost – as a result of the physical distances between factors of production, of the location of raw materials and markets, and of the availability and location of labour. Geography became a ‘discipline in distance’.
The ‘third industrial revolution’ (which is, rather, the advent of a postindustrial society, in which only a fraction of the population really produces goods) has created new and less directly explicable landscape features. Figure 1.12 shows a traditional Norwegian farm surrounded by its infields and forests. Looking at the picture, you might overlook the people when trying to work out why the farm buildings are built as they are, and consider the farm’s production potential and its market possibilities. However, the picture attracts our attention for a quite different reason. There are a lot of people sitting on the sloping field watching a scene where young people are performing traditional folk dances. And in front of the barn there is a van containing a TV crew. Even though it is raining slightly (as witnessed by the umbrellas), people have paid money to be here. This is a media-dominated landscape. The farmer may receive income from this activity, but the farm and the farm buildings function only as a stage set! I took this photo during my MA fieldwork in upper Telemark (see p. x in Preface) in the summer of 1962 at a folk festival held there. Now almost fifty years later the economy and landscape in my field study area are to an even larger degree dominated by the tourist industry and new kinds of service activities. Amazing to visitors, this small ‘rural community’ (1,800 inhabitants) has successfully managed to integrate some 50 asylum seekers from Somalia into their workforce!

This brave new world of ours is continuously throwing up new tasks and problems for the geographer to solve. Humanity and nature are still dependent on each other but local connections are no longer so easy to see. The global dependencies between humanity and the fragile environment of the earth become, however, more and more clear. We have to think globally, as stated in the World Commission on Environment and Development (WCED) report Our Common Future (1987), but the necessary local actions are often obscured by the diffuse effects of these dependencies on the global, and even local, environment.

Hartshorne (1939, pp. 243–5) described geography as an ‘integrative’ discipline, but that is not the same as regarding it as an ‘integrated’ discipline. There is an integrative task to transmit impulses from branch to branch within the structure, but there is no need to withdraw from the periphery. We may still postulate a core or nerve centre, but to regard regional geography as this core is no longer helpful. The core in spatial science terms was defined by Ackerman (1963, p. 433) as ‘thinking geographically’:

To structure the mind in terms of spatial distributions and their correlations is a most important tool for anyone following our discipline. The more the better. If there is any really meaningful distinction among scientists, it is this mental structuring. The mental substrates for inspiration differ, however, from field to field within the discipline.
The observable spatial structures need to be in focus, but we need to proceed below the surface appearance of spatial distributions and analyse processes and actions that lead to events in space and place. Our concern will be to analyse processes and how they are linked to both structural necessities and local, place-bound factors. We will be interested in how our relational space is formed in our everyday life. Both Sack's presentation of *Homo geographicus* (1997) and Jones's (1988) approach to the study of the cultural landscape, as presented in Box 1.8, may help to illustrate this.

Through this introductory chapter we have tried to expose a variety of inputs from geography as an academic discipline. We have as well introduced a number of concepts and discourses that need a deeper explanation, so you have to proceed through the following chapters to get a better basis for further discussion. The hope is, however, that this introductory chapter has spurred your curiosity to learn more and to go on to explore the history of scientific geography. The next chapter tells the story of the discipline from antiquity to the Second World War.

### Questions for Discussion

1. Describe some of the popular notions of geography that you have heard. How would you describe in few words the scope and aims of geographic research to somebody that has not at all studied it?
2. Define the concepts absolute, relative and relational space.
3. Define systematic and regional geography and discuss the relations between them and systematic sciences.
4. Give an account of the different research processes in spatial sciences school and newer approaches.
5. Discuss the organizational plans for geography presented in Figures 1.5, 1.6 and 1.7. How are these reflected in the study structures at your university?
6. Define the concepts space, place and territoriality.
7. Discuss Sack's illustration in Figure 1.8. Do you agree with Sack in his presentation of the different realms that constitute place (somewhere) and that all humans are *homo geographicus*?
8. How can we understand the relations between place and "self"?
9. Explain and discuss Figure 1.11 and the factors that explain development of the cultural landscape.