5. Geography in Germany
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Geography in Germany is faced with the contested legacy of traditional geography, conceived, on the one hand, as merely descriptive and on the other, as a synthesis of natural and human sciences. Nowadays, human geography is part of the social sciences, while physical geography belongs to the earth sciences and defines itself as a natural science. Collaboration between physical and human geography is generally quite rare. Most often it is restricted to the context of the training of future secondary school teachers.

5.1. A history of geography in Germany

5.1.1. The early days of prestige

Geography was established as a fully-fledged subject of primary and secondary education in the second half of the 19th century. Before then, the Gesellschaft für Erdkunde zu Berlin (Berlin Geographical Society, founded in 1828) had paved the way for the rise of the discipline, supporting expeditions and popularising 'geographical' knowledge. With the travel narratives and naturalistic observations of Alexander von Humboldt (1769-1859) geography attained its status as a science capable of providing information on territories outside Europe. Carl Ritter (1779-1859) held the first chair in geography at the University of Berlin from 1820. He was the second founder of German scientific geography after A. v. Humboldt. C. Ritter focused on the spatial relationships between places, on spatial forms and on the meaning of landscapes and their geographical positions. He demonstrated that geographical positions evolved with technical progress, making distances shrink.

With the proclamation of the German Empire in 1871, the political context became favourable for geography. Germany had become a
state with political and economic interests, as well as colonial ambitions in Europe and abroad, which provided strong impetus for the development of geography. At school, the subject was introduced to consolidate the idea of Germany as a natural entity and thus strengthen national identity. As for universities, they were mostly geared toward the training of future schoolteachers.

It was in the context of the development of the positivist natural sciences and in relation to Charles R. Darwin’s (1809-1882) theory of evolution that geography emancipated itself at the end of the 19th century from the historical and purely descriptive approaches that had presided over its birth. Thus, it modelled itself after the hard sciences. Two dominant approaches emerged, both based on the visible terrestrial surface: geomorphology, which studies the morphology of terrains, and urban/rural geography, which focuses on the morphology of the urban and rural environment.

Researchers like Ferdinand von Richthofen (1833-1905) took up the Humboldtian tradition of research based on fieldwork. Indeed, they anchored physical geography in natural science approaches. As regards human geography, Friedrich Ratzel (1844-1904) attempted to provide the discipline with a scientific basis. His thought was inspired by the positivism of hard sciences and Darwinism. Heavily influenced by the rise of nationalism in the Bismarck period, his political geography sought to highlight, from a social Darwinist perspective, the relationship between the state, conceived as an organic entity, and territory, conceived as a natural foundation. Any state, like any living being, experiences growth and degeneration, spatial expansion and contraction. F. Ratzel attempted through his publications to provide scientific legitimacy to the German Empire’s expansionist and colonial policies. The Lebensraum (living space) concept, which he coined, was later taken up by Karl Haushofer (1869-1946) and the Nazis, who used it to legitimise that regime’s expansionist policies.

F. Ratzel’s political geography, which established a necessary link between soil, State and people, had a considerable influence on the development of scientific geography in other European states. Although F. Ratzel’s geography, which he called Anthropo-Geographie, was still influenced by deterministic ideas, he was the first to perceive the importance of distance in geography.

In the early 20th century, a conception of geography as the ‘science of space’ was developed by Alfred Hettner (1859-1941), who held the first chair in geography at the University of Heidelberg, from 1906. A. Hettner aimed at overcoming the dichotomy between natural and human sciences by defining geography as the science of distribution within terrestrial space. According to A. Hettner, geography’s main object was to describe the characteristics of a region following the länderkundliches Schema (regional schema): relief, hydrography, climate, vegetation, fauna, and people. This approach reflects the extent to which physical geography and deterministic thinking dominated German geography at that time and all the way through to the 1960s.

World War I reinforced the position of nationale Erziehung (national education) and so-called ‘geopolitical’ knowledge. The trauma of the Versailles Treaty in 1919 led to a proliferation of studies of Deutschtum (the German spirit) outside German borders. The emphasis then shifted away from the physical towards the human, from a state geography to a Volkstum-geography (geography of the folk).

These narratives belong to a mode of thought that extended well beyond geography and lent support to revanchist forces while paving the way for fascistic ideas. A few geographers, such as K. Haushofer, the founder of the periodical Geopolitik, actively promoted a geopolitical discourse that aimed at legitimising an expansionist policy through the use of “geographical facts”. Others, such as Walter Christaller (1893-1969), the precursor of spatial analysts and founder of the central places model, took part in the settling of occupied territories in the East, which were to be “Germanised”.

5.1.2. Challenges

Long after the end of World War II, the role of geography in the Nazi system remained a taboo subject. Many geographers who had collaborated with the Nazis turned to ‘harmless’ subject matters and tried to reinstate the non-political traditions of German geography – notably geomorphology and urban and rural morphology approaches. This is indeed how German geography avoided political questions both at university and secondary levels. The dominant paradigm of the day was Landschaftsgeographie (landscape geography, which encompasses the physical as well as the aesthetic aspect of landscape) and Länderkunde (descriptive regional geography, which comprises methods of human and physical geography, as well as of other disciplines, such as history, anthropology, etc.).

It was only in 1969, at the German geography congress in Kiel, that this paradigm was fundamentally challenged. The centre of gravity
shifted towards more specialised and more nomothetic approaches (looking for universal laws) of general geography. Geographers like Dietrich Bartels (1931-1983) developed a spatial approach, which opened German geography to the methodologies of Anglo-American geography and to the quantitative approaches developed in economics and sociology. A conception of space as the “heart or essence” of geography and as the junction between human and physical geography replaced the *Landschaft* concept. This is the context in which many geographical institutes began teaching professional geography and established a diploma in geography. Geography thus became more concerned with questions of applied geography, such as planning, tourism and development aid.

In East Germany, geography’s post-war renewal also took place within the *Landschaftskunde* (landscape geography) and *Länderkunde* (regional geography) paradigms. It was only from the 1960s onward that East German geography was integrated into a ‘socialist’ scientific system and focused strictly on ‘Marxist-Leninist’ questions and approaches. In reaction, the development of Marxist geography in West Germany was long hampered.

After German reunification in 1990, geographical institutes in the former East Germany were integrated into the Western system and teaching and research posts were awarded in the 1990s mostly to Westerners.

5.2. The current state of geography in Germany

5.2.1. Contemporary trends

From the 1980s, German geography increasingly became a discipline of multiple paradigms. Even if spatial approaches continued to hold sway and were significantly boosted by the proliferation of geographical information systems (GIS), they also came under greater criticism from authors who took their cue from Anglo-American humanist approaches and developed more ‘qualitative’ and interpretative approaches within the framework of a geography of perception. In the 1990s, Benno Werlen (1952- ) was the main importer of the action theory and structuration theory developed by Anthony Giddens (1938-) into human geography. He profoundly challenged the identity of the discipline as a science of space and pleaded in favour of an approach that analysed how daily activities produce geographies. Such a social geography is based on the thesis that men not only make their history every day, but also their geography, and that scientific geography must, therefore, study these actions.

In the field of human geography, the 1990s were characterised by a growing interest in social and political theories as well as a considerable openness to debates in Anglo-American geography. In this context, ‘space’ was less and less considered as the starting point of geographical research. Scientific interest turned rather towards the question of the role of space in society according to the various theoretical perspectives.

Three theoretical approaches were particularly influential in this context: neo- or post-Marxism, post-structuralism, and the systems theory developed by Niklas Luhmann (1927-1998).

1. The (neo-) Marxist approaches in human geography challenged the paradigm of geography as “objective” spatial analysis. They denounced the “spatial fetishism” of works of spatial analysis, which they accused of being blind to social structures and processes at work behind the so-called spatial structures. The (neo-) Marxist works claim to turn the perspective around and analyse the role of space in social structures and processes.

2. As for poststructuralist approaches, they conceive of all social reality as constructed and contingent. They thus provide a critique both of spatial analysis approaches, which they accuse of naively confusing their desires with facts, and of (neo-)Marxist approaches, which they consider to be deterministic, since they bring all social phenomena back to a given structure: the socio-economic structure. Poststructuralist approaches fed the cultural turn in human geography. In such a perspective, our entire geography is no longer conceived of as given but as constructed, and research aims at analysing the histories, processes as well as the functions of such constructions.

3. Finally, sociologist N. Luhmann developed a social theory that does not take social actors, but rather communication itself, as its basic element. N. Luhmann took little interest in space since, in his view, spatial structures do not play an important part in contemporary society. Yet the debate on this matter has gathered momentum over the past few years, among both sociologists and geographers.

In the context of the “cultural turn”, and more specifically the “linguistic turn”, which formed the basis for a new cultural geography, the poststructuralist approaches that are being debated no longer accept geographical “reality” as given and natural. Instead, they are interested
in the constitutive processes, the signs (and particularly texts, maps and images) at work in the making of this reality. Political geography was simultaneously revived by the growing interest in so called ‘critical’ approaches inspired by radical geography (Marxist geography) and by critical geopolitics, which studies the relationship between geography and power. Thanks to the tradition of empirical case studies in German geography, the new cultural geography in Germany quite often manages to successfully articulate theoretical and empirical analyses.

The increasing appeal, for human geography, of constructivist approaches focused on the social construction of geography makes it more difficult for physical geography and human geography to collaborate. Yet recent attempts to establish paradigms for integrating the two halves of the discipline should be mentioned. Political ecology for example, acknowledges the fact that ecological issues are always also political and social issues. Poststructuralist approaches, for their part, which aim to transcend the nature/culture dichotomy, explore the ways in which this dichotomy itself is always produced and reproduced. In such a perspective, geography may, for instance, analyse how the discursive construction of the ‘natural landscape’ has shaped and is still shaping natural conservation policies.

5.3. Studying geography in Germany

5.3.1. Programmes and career opportunities

In its origins, geography was primarily a school subject (Erdkunde) and future teachers still make up a large part of university geography students. In the 1970s, in the context of a geographical revival, the Diplom* (diploma) in geography was created. As opposed to the Magister*, which is more geared toward research, the Diplom emphasises applied geography (planning, urban development, tourism, environmental studies and development aid, for instance). The early Diplomgeographen found employment in the public sector – notably rural and urban planning. From the 1980s onwards, the private sector has offered an increasing number of career paths, notably in research and consulting. The Organisation for Applied Geography (Deutscher Verband für Angewandte Geographie) distinguishes between three sectors of activity for geographers: spatial planning, environment and natural protection, as well as information and communication. During their studies, all students complete at least one internship at a professional establishment (consulting firms, municipal administrations or NGOs), or else at a secondary school, for those who are considering a teaching career.

Within the Bologna process, the Diplom and the Magister in geography are gradually replaced by Bachelor (3 years) and Master (2 years) degrees. Most institutions are creating Bachelor programmes in geography (which include human geography, physical geography, geoinformatics and a few additional subjects), a Bachelor of Education for future teachers, and more specialised Master programmes. These may emphasise either human or physical geography specifically, or else train for very specific careers, such as “geomarketing”. The choice of secondary subjects is very broad and includes, in the case of human geography, other social sciences (sociology, economics, anthropology or political science), and, in the case of physical geography, natural sciences (geology, meteorology, chemistry, physics or biology). At a few universities, geography is also part of interdisciplinary area studies – for example: “African Studies” at Bayreuth, “Middle Eastern Studies” at Erlangen or “European Studies” at Passau. As a rule, geography is organised in independent institutes, which are affiliated to natural sciences faculties, but at the universities in Frankfurt/M. and Munster, for example, there are two independent institutes, one for human geography and another for physical geography.

5.3.2. Differences between universities

Geography can be studied at nearly sixty universities throughout Germany – at large institutes often numbering 1000 up to over 2000 students and between six and more than a dozen professorships (such as Munster, Bonn, Erlangen, Mainz), or at small ones with a few hundred students and only two or three chairs in geography (as at Karlsruhe, for instance). Some have longstanding traditions, such as Heidelberg, Tübingen and Marburg, others were founded in the 1970s (e.g. Bayreuth) or (re-)founded in the 1990s, such as Leipzig.

Until recently, the curricula did not vary much from one institute to another, and it was only from the doctoral level onward that thematic and regional specialisations really mattered. With the introduction of the Bachelor/Master system, however, new and more specialised Master programmes have been established, which reflect the ma-
jor fields of research at the respective institutes (for instance, urban studies at Berlin, economic geography at Hanover, cultural geography at Erlangen, markets and metropolises research at Frankfurt/M. or in natural resources geography at Göttingen).

5.3.3. Teaching and coursework

There are different types of teaching in geography programmes: the *Vorlesung* and the *Seminar* are traditional forms of university teaching. Three others are more or less specific to geography.

At the Bachelor level, *Vorlesung* (lectures) generally deal with rather broad topics, such as urban geography, economic geography, or geomorphology. At the Master level, they are more specialised (on urban governance, for instance). A *Vorlesung* often ends with a *Klausur*, a written in-class test that involves answering questions such as: "What is the process designated by the concept of 'gentrification'?"; "How did the spatial organisation of industrial production evolve between the Fordist and the post-Fordist period?"; "What part does the theory of central places play in land development and planning?".

In *seminars* (course), students work on a specific topic, either on their own or in groups. For example, possible seminar topics in social geography include "the geography of the traditional landscape", "the linguistic turn in social geography", "migration as a social geography issue". Students research the relevant literature (in German and English), write a five to thirty page paper (*Hausarbeit*) and present the results of their research to the class in an oral presentation (*Referat*). In geography, graphic representation plays a very important part, and the use of video-projectors is thus widespread.

Cartography, geocomputing, statistics and empirical methods are taught in *Methodenkurse* (methodology seminars), which are often compulsory. Students will be asked to demonstrate practical skills (creating a map or a statistical treatment, for instance). Computer skills play an important role in this kind of class (statistical analysis and mapping software, GIS).

Field trips (*Exkursion*) are designed to apply concepts and theories learned in the classroom to observations in the field. In its 'classic' form, the professor is the expert and the students are expected to write a report. But more innovative forms also exist: Students prepare a part of the excursion (as regards content and pedagogical presenta-

tion) in cooperation with their professor and then guide their fellow students. As a general rule, Bachelor programmes involve two to three-week study trips, most often abroad, as well as a dozen one to three-day excursions in regions close to the university.

*Projektstudien* (field studies) are small-scale research projects that train students to organise research projects (for instance: "the demographic shift and its impact on the real estate market", "large housing projects in East and West Berlin: stigmatisation, integration policies and security policies", "geomorphological research in the Rhine valley"). Field studies consist of a seminar-like preparatory phase, an empirical phase and an assessment phase. Students are usually required to write a report of 10 to 20 pages to present the results of the field study.

For further Information


German Society of Geography (Deutsche Gesellschaft für Geographie, DGfG) (Ed. 2004): Geography in Germany, DVD.


Further information on studying geography in Germany can be found on the homepage of the German Society of Geography (Deutsche Gesellschaft für Geographie, DGfG): http://www.geographie.de/english/index.html
Glossary

Akademisches Auslandsamt, n.: orientation office for foreign students.

Allgemeiner Studentenausschuß (Asta), m.: autonomous representation body for students within the university administration.

Ausländerbehörde, f.: state administration in charge of foreigners, and notably of visa delivery.

Bachelor (BA), m.: degree obtained after the first cycle of university studies since the implementation of the Bologna reform process.

Deutscher Akademischer Austauschdienst (DAAD), m.: German academic exchange service which promotes and manages study abroad programmes, both for German students going abroad and for foreign students coming to Germany.

Diplom, n.: in the pre-Bologna process system, the degree obtained after four years of studies of a more pre-professional orientation than the Magister*.

Einwohnermeldeamt, n.: state administration where foreigners must register upon arrival and departure.

Exzellenzuniversität, f.: 'university of excellence', selected as one of Germany's elite universities, receiving additional funding as a result.

Fachbereich, m.: distinct 'faculty' within the university, usually bringing together several disciplines (such as, for instance, the social sciences).

Fachhochschule, f.: polytechnics founded in the 1970s to develop programmes that are more pre-professional than university curricula.
Fachschaft, f.:  
‘department’ for each of the disciplines, endowed with their own councils (Fachschaftsrat) and their own space (Fachschaftsraum) managed by students.

Grundstudium, n.:  
in the pre-Bologna system, the first cycle of university studies that culminated in the Zwischenprüfung*.

Handapparat, m.:  
‘seminar reserve shelf’ at the university library, where the required texts for a seminar have been gathered and put on hold for students.

Hauptstudium, n.:  
in the pre-Bologna system, the second cycle of higher education that leads to the Diplom* or the Magister*.

Hausarbeit, f.:  
short research dissertation undertaken as part of a seminar.

Klausur, f.:  
written exam of fixed duration.

Magister, m.:  
in the pre-Bologna system, the degree obtained after the second cycle of university studies, enabling entry into doctoral studies.

Master (MA), m.:  
the degree obtained after the 2nd cycle of university studies under the Bologna reform, progressively replacing the Diplom* and the Magister*.

Meldebestätigung, f.:  
certificate of residence issued by the Einwohnermeldeamt*.

Referat, n.:  
oral presentation given as part of a seminar.

Schein, m.:  
‘certificate’ obtained after completing a seminar or lecture course that culminates in an exam.

Semesterferien, pl.:  
two month period between semesters, in February-March and August-September, during which there are no classes and students are expected to work on individual projects.

Seminar, n.:  
seminar, a traditional form of teaching at German universities.

Sprechstunde, f.:  
mandatory regular office hours for every professor.

Staatsexamen, n.:  
qualifying exam for teachers and lawyers set by the Länder, taken at the end of the 2nd cycle of studies.

Studentenwerk, n.:  
an organisation providing support services for students, like CROUS in France.

Vorlesung, f.:  
lecture course given in an amphitheatre.

Vorlesungsverzeichnis, n.:  
course catalogue presenting all the seminars and courses offered by an institute (kommentiertes Vorlesungsverzeichnis) or an entire university.

Wohngemeinschaft or WG (pronounced “vaygay”), f.:  
an apartment shared between two or more student.

Zweigbibliothek, f.:  
a specialised library dedicated to a specific discipline, often housed in a separate building from the main university library, for example as part of an institute or department.

Zwischenprüfung, f.:  
intermediate exam between the Grundstudium* and the Hauptstudium*, under the pre-Bologna system.