Freie Universität Berlin

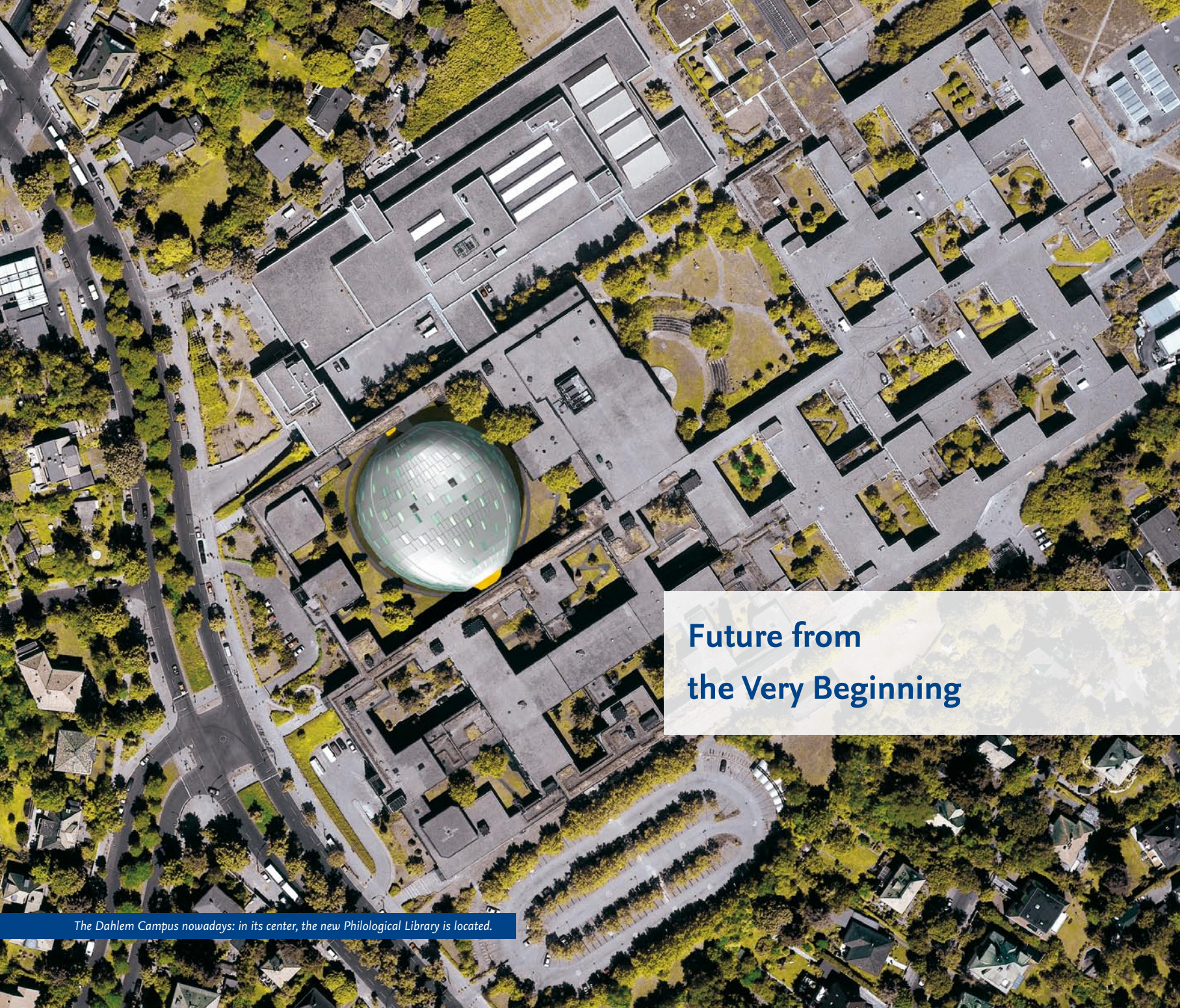
A Small Guide to the Freie Universität Berlin

A Small Guide to the Freie Universität Berlin

Published by the Office of the President of the Freie Universität Berlin

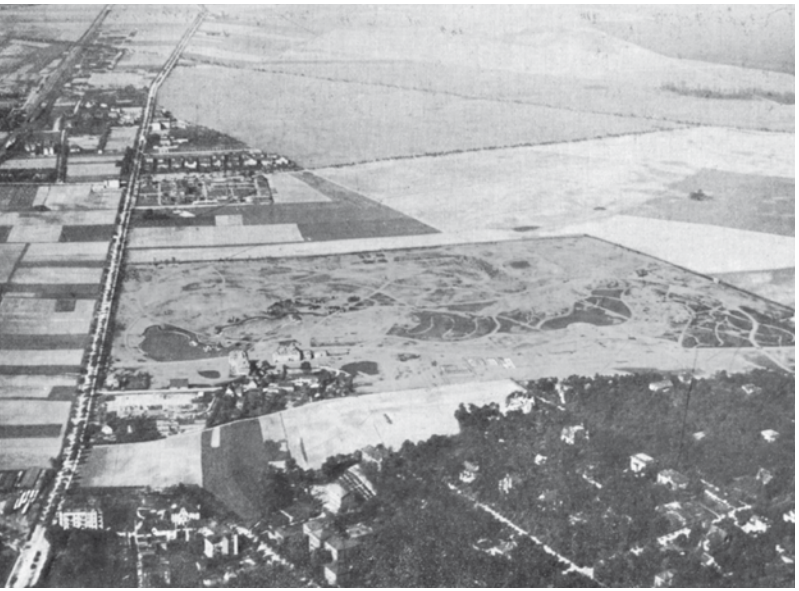
Translation: Richard Toovey (1–27)
Designed by Unicom Werbeagentur GmbH
Printed by H. Heenemann GmbH & Co
Photographs: Freie Universität Berlin: Dahl 7, 11 above, 25; Foster and Partners 8–9; Wannenmacher 13, 14, 15 above, 30, 33; CeDiS 23 below, 24, 36; Haas (BGBM) 16, 17; Rückeis 18–19; Ausserhofer 20–21, 39; von Recklinghausen 22, 47 above and below; Thoka 28–29; Nagler 30–31; Glossner 39, 44; Department of Physics 40, 41, 42. Archives for the History of the Max Planck Society 6, 15 below. Landesbildstelle Berlin 8. Landesarchiv Berlin 9. Photocase, Martinelli 32.
Cover photograph: The Philological Library, seen from the entrance. Designed by Foster and Partners, the building was opened in 2005.

Contents



Future from the Very Beginning

The Dahlem Campus nowadays: in its center, the new Philological Library is located.



Aerial view of rural Dahlem (early 1930s). After 1900, in Dahlem an academic community arose.

Dahlem – An Academic Center Rich in Tradition

The Freie Universität Berlin is part of an academic center with a rich tradition. During the early twentieth century, the Dahlem district of Berlin developed into a leading research location. It owes its existence in part to the Permanent Secretary at the Prussian Ministry of Culture, Friedrich Althoff, who proposed "the foundation of a fine colony, characterized by outstanding academic sites, a German Oxford". After 1900, a unique academic community rapidly arose in the leafy grounds of the Royal Demesne of Dahlem. Government scientific departments were among the first to take up residence, along with two institutes of the University of Berlin that moved into new buildings near the Botanical Gardens. They were joined in 1911 by the newly-founded Kaiser Wilhelm Society (the precursor of the Max Planck Society), which over the years commissioned numerous imposing buildings there for its research institutes. These separate entities grew into a dynamic scientific community that produced breakthroughs in research, as well as Nobel Prize winners such as Albert Einstein, Otto Hahn and Fritz Haber. In 1948, the Freie Universität Berlin took on several of the buildings from the Max Planck Society – and with them the mantle of a great scientific tradition. Since then, the university has enriched the district with new buildings of its own. Some of the key buildings architecturally, lie within an area of barely one square kilometer.

The university's first main building had formerly housed the Kaiser Wilhelm Institute of Biology, which had been established in 1911 as one of the first institutes of the Kaiser Wilhelm Society. In 1948, the building was handed over to the Freie Universität Berlin; for a long time it was occupied by the university's Admissions Office, but now it houses parts of the Law Department.

Foundation Successful – A Place for Freedom of Thought

Truth, justice, and freedom have been core values of the Freie Universität Berlin from the very beginning and the words, in Latin, are written on its seal. The university was founded by students and academic staff, with assistance from the United States of America and Berlin politicians, in 1948. A number of them had left the "Universität Unter den Linden", later renamed "Humboldt-Universität", in protest at the expulsion of certain students by the communist authorities. They wanted to study and teach in freedom from political restrictions, which is why they called their new home the "Freie Universität", which means "Free University". It was up and running by the very next term, winter 1948–49. The determination to study shown by a generation that had been held back by war impressed leading academics such as Richard Löwenthal, Ernst Fraenkel, Ernst Heinitz and Emil Dovifat, and with the support of the Mayor of Berlin, Ernst Reuter, they returned from emigration to teach. The Freie Universität Berlin kept its close relationship with friends in the United States. Both the architecturally innovative Henry Ford Building and the Mensa (dining hall) as well as the University Clinic were American gifts. By the time that John F. Kennedy visited it in 1963, the university had become a symbol of friendship between Germany and America. Today it enjoys the support of an alumni organization in New York, "The Friends of the Freie Universität Berlin".

Foundation ceremony of the Freie Universität Berlin on December 4, 1948. From the start, the university seal has borne the motto: veritas, iustitia, libertas.

Visit by U. S. President John F. Kennedy on June 26, 1963. Talking about the university, Kennedy said: "The Free University must be interested in turning out citizens of the world and men who are willing to commit their energies to the advancement of society."

International from Day One

Help from the United States of America was crucial in establishing the Freie Universität Berlin at top level and international stimuli have contributed to its excellent research record ever since. As early as the 1950s, the university had partnerships with renowned American universities such as Stanford, Princeton, Yale, and Columbia, as well as others in Western Europe. Between 1948 and 1967 alone, 272 visiting professors came here from America, and between 2001 and 2004 around 1,500 guests from abroad were invited. In the 1970s, the first contacts with universities in eastern Europe were made. These relationships, alongside those in North America and East Asia, were extended considerably during the 1990s. Nowadays, the Freie Universität Berlin maintains some 120 cooperative partnerships worldwide; if the departmental and institutional levels are taken into account, there are almost 370. The wealth of connections enjoyed by the Freie Universität Berlin puts it among the leaders in Germany. It is a top address for academics the world over and is the second most popular location among the foreign scholars and research fellows funded by the Alexander von Humboldt Foundation. In the individual rankings for General Language and Literature Studies, German, History, Foreign Languages, and Archaeology, it takes first place. Student exchange programs, too, have always had an important part to play at the Freie Universität Berlin. The first, with Stanford University, took place in 1949 and there are currently exchange agreements in place with 56 universities. International dialogue is further promoted by participation in the European Union's Erasmus, Socrates and Tempus programs, as well as numerous bursaries. In 2004, there were 6,200 foreign students enrolled at the Freie Universität Berlin. In addition, the university awards honorary doctorates to figures of both national or international renown, such as Paul Hindemith, Professor of Composition at Yale University and the first visiting lecturer at the Freie Universität Berlin (1950), and Kofi Annan, the Secretary General of the United Nations (2001).

The Freie Universität Berlin maintains numerous international contacts, which puts the university among the leaders in Germany.

Students from abroad in front of the Henry Ford Building.

The UN Secretary General, Kofi Annan, was awarded an honorary doctorate of the Freie Universität Berlin on July 13, 2001. The university honors outstanding figures of national or international renown alike – among recent recipients were Marcel Reich-Ranicki and physicist Theodor W. Hänsch.

Designed by Franz Heinrich Sobotka and Gustav Müller, it was opened in 1954 to provide the campus with a physical and organizational center. It stands in the tradition of the university buildings designed by Walter Gropius for Harvard University and Mies van der Rohe for the Illinois Institute of Technology. The photo shows it as it looked in the late 1950s.

The University Campus – Architectural Variety

The Freie Universität Berlin began as a haven for freedom of thought, and it has not held back from innovation in the architectural sphere. It possesses a great variety of buildings, many of them architecturally noteworthy. The university was laid out on the British and American campus model, which was a novelty in post-war Germany. In 1963, Edwin Redslob, the university's second Rector, wrote: "Specialization on the one hand and grouping on the other are the consequences for the architectural ensemble, which combines a wealth of separate buildings and itself forms an overall unity." At first the Dahlem campus consisted of nineteenth-century villas together with research buildings once used by the Kaiser Wilhelm Society. It acquired an architectural center in the 1950s, in the form of the Henry Ford Building and the University Library. They were joined by the Mensa (dining hall) and the faculties of Economics and Social Sciences (nowadays Economics and Law). At the time, these buildings with their functional, elegant style were state-of-the-art. The years that followed saw the construction of more buildings and the area occupied by the university grew.

The Admissions Office of the Freie Universität Berlin is characterized by innovative architecture.

The Seat of the President's Office

Once, the city of Berlin was directed from here: In 1945, the Allied Kommandatura, the first functioning Four-Power authority, moved into the former headquarters of the Association of Public Fire Insurers. After the Soviet Commandant walked out in 1948, the western representatives declared that the Inter-Allied Governing Authority would continue to function and symbolically left a seat at the conference table empty. It did not officially cease work until 1990 when the "Two-plus-Four" negotiations were mandated. In 1994, the President's Office of the Freie Universität Berlin and some of its administrative departments moved into the building, which had been built in 1926–27 to a design by Heinrich Straumer, a proponent of restrained modernism and the architect of Berlin's radio tower.

The President's Office of the Freie Universität at 16–18 Kaiserswerther Straße: the building was designed by the architect of Berlin's radio tower.

Scientific history was made in the Otto Hahn Building, which now houses the university's Institute of Chemistry and Biochemistry.

Otto Hahn Building

The Kaiser Wilhelm Institute of Chemistry was where Lise Meitner, Otto Hahn and Fritz Straßmann did the work that made them famous. In 1938, Hahn and Straßmann (Lise Meitner had already fled into exile) succeeded in splitting the uranium atom. The building itself, designed by Ernst von Ihne and Max Guth, was built in 1912. Since 1950 it has belonged to the Freie Universität Berlin. It now bears the name of Otto Hahn; Lise Meitner received an honorary doctorate from the university in 1956. Nowadays, the Otto Hahn Building is occupied by the university's Institute of Chemistry and Biochemistry. Among the subjects of current research here are communication between nerve cells and the nature of pain.

Meitner and Hahn in their laboratory.

The Large Tropical House

The extensive grounds of the Botanical Garden contain a world-class horticultural paradise with a three-hundred-year-old tradition. In 1679, the Elector of Brandenburg commanded that a model agricultural garden be laid out on the site of today's Kleist Park. In the course of time, this developed into a botanical garden in the proper sense. After two hundred years more space was needed, so at the turn of the century (1897–1910) it was relocated to Dahlem. At a time when teams of oxen were bringing in the rye harvest in Dahlem, a masterpiece of innovative industrial engineering was constructed in the Botanical Garden. The Large Tropical House, which measures 60 by 30 meters with a maximum height of 23 meters is, even today, one of the largest single-span glasshouses in the world. An ensemble of other buildings is grouped around it. Of great historical importance, the Large Tropical House is currently undergoing repairs, which are due to be finished in 2008. The Botanical Garden, a central institute of the Freie Universität Berlin, has an area of approximately 43 hectares and around 22,000 species of plant, making it one of the world's top botanical gardens. The layout takes visitors on a botanical journey around the world.

↓ *The Large Tropical House, one of the largest single-span glasshouses in the world, is an imposing structure.*

↑ *The elegant Mediterranean House stands apart from the main complex. The Dragon Tree and spice plants create an exotic atmosphere.*

Light artist Andreas Boehlke illuminated the Philological Library and the Building for the Humanities for the Long Night of Science in 2006. At this annual event, the Freie Universität Berlin presents its research activities to the public.

Modern and Forward-Looking Spirit

This molecular model could also illustrate the cluster structure of the research performance at the university.

Efficient Research Performance in Clusters

During the 1990s, the Freie Universität Berlin implemented a program of mergers and relocations in order to increase efficiency. It introduced new management structures at the administrative level and restructured the departments and libraries. Since 1995, these operate on business lines. Even at a time of huge budget cuts, the university has succeeded in improving its performance. Between 2001 and 2005, for example, the number of graduates per professor (excluding junior professors) increased by 46 per cent, while the corresponding number of doctoral graduates increased by 25 per cent. During the same period, the university's professors authored 24 per cent more research publications. The university has also acquired a significant proportion of external funding, currently amounting to 55 million euros. The Freie Universität Berlin has begun to bundle its research activities in clusters: innovative groupings that concentrate their research into key areas by taking an interdisciplinary approach that is networked with industry, politics and the media, and oriented to today's global issues.

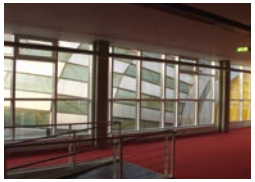
The Freie Universität Berlin has a strong tradition of equality for women and men. It is on the top of a ranking published recently by the Competence Center Women in Science and Research. The university has received the Total E-Quality Award twice (2002 und 2005). These successes are to be integrated systematically in the forward-looking International Network University project.

The combined collections of eleven separate libraries now reside in the Philological Library: 700,000 books and 800 current periodicals.

The Philological Library

Even before it was opened in 2005, the Philological Library had a nickname: "The Berlin Brain". Designed by an internationally renowned architect, Lord Foster, it brings together eleven collections that were previously housed in their respective institutes. The library contains 1,900 meters of shelf space, 700,000 books, 640 well-equipped spaces for study and 100 for internet research. The books are stored centrally on each of the five floors; the seating is arranged along their edges, which undulate in plan to give greater privacy for reading. Almost every form curves dynamically; there are hardly any corners or straight edges. The building's structure makes optimal use of the space available and creates a light, roomy interior.

Neither a new building nor a free-standing structure were initially envisaged for the Philological Library. The complex task facing the practices that were invited to enter the architectural competition in 1997 was to renovate and restructure the Building for the Humanities and Social Sciences. The winning entry was by Foster and Partners, who had previously designed the new dome of the Reichstag. The Philological Library embodies the spirit of the Freie Universität Berlin: modern and forward-looking. The merger of the separate libraries also demonstrates how the university is continuing to implement the program, begun in the 1990s, of bundling research activities both conceptually and physically.



The library inspired a piece by C. J. Hopkins, a well-known American playwright, which was given its world premiere there.

The roof of the "Berlin Brain": ten per cent of the surface area is transparent. The interior is light and roomy.

The Building for the Humanities and Social Sciences is being completely renovated and restructured – in parts it has already been given a new sheen.

Building for the Humanities and Social Sciences

The trend towards greater democracy between 1968 and 1980 also influenced the architecture of the Freie Universität Berlin. The low-level pavilion complex for the Humanities and Social Sciences that extends from Habelschwerdter Allee to Fabeckstraße dispenses with hierarchical and grandiose forms. It was designed by Georges Candilis, Alexis Josic and Shadrach Woods, who were students of Le Corbusier's. The building's orthogonal 'street' layout with terraces and courtyards symbolizes the idea of a "gridwork of science" that was introduced here in the early twentieth century. The planners of the Kaiser Wilhelm Society's science campus had intended to lay out a network of 'streets' in Dahlem. Three of these, known as J, K and L 'streets', cross the area occupied today by the Humanities and Social Sciences Building of the Freie Universität Berlin. Its new core is the Philological Library, opened in 2005 (see p. 22–23). The original building is currently being renovated and repaired; in many places it has already been restored and given a new sheen. The rehabilitation program is part of a thorough modernization of the campus as a whole.

The advantage of the university's leafy campus is that in between seminars and lab work, students can sit down to read under the trees – or simply relax and return to their studies with renewed concentration.

Modernization and Concentration

Several major buildings of the Freie Universität Berlin are currently being renovated, including the Building for the Humanities and Social Sciences (see p. 24–25), the Henry Ford Building (see photo on p. 12), and the Large Tropical House in the Botanical Garden (see p. 16–17). The Freie Universität Berlin has taken this opportunity to concentrate and modernize its facilities so that they form a coherent campus. At its center lies – appropriately enough for a university – the 'Berlin Brain', the Philological Library.

In 1999, the university began the process of rationalizing the campus. It vacated many of the smaller properties and regrouped academically related units together in larger buildings. The success of the Philological Library in this respect has encouraged it to continue the process with a new building to house the "small subjects". This will be centered on a second interdisciplinary library. The architects were selected by competition and approval of grant funding for the construction is pending (see p. 48). In order to further enhance international academic exchange, it is planned to build a privately-operated congress center and hotel on the campus.

Bringing related subjects together in one building helps to create a closer academic network. It is a further step forwards for the Freie Universität Berlin in the ongoing process of bundling research activities both conceptually and physically.

The planned new center for the "small subjects" between the Building for the Humanities and Takustraße.

A Tour in Three Parts

This building houses the John F. Kennedy Institute for North American Studies; it was converted with funds from the Ford Foundation.

Tour 1: John F. Kennedy Institute

The John F. Kennedy Institute will be the home of the planned Graduate School of North American Studies (Prof. Dr. Ulla Haselstein), one of the doctoral programs that were applied for as part of the excellence initiative.

John F. Kennedy Institute for North American Studies

The John F. Kennedy Institute for North American Studies is an interdisciplinary research and teaching institute of the Freie Universität Berlin. It was established in 1963 by Ernst Fraenkel, a political scientist, to make it possible to specialize academically in the U.S.A. and Canada. The Institute offers students a first-class academic environment, combining in-depth study with a wide range of possible subjects; it has seven academic disciplines, numerous bursaries and exchange programs, and a study library with a collection of North American literature that is unique in Europe. The seven hundred students currently enrolled there can choose from a range of courses and programs in seven areas: culture, literature, language, history, politics, sociology, and economics. The seminars are held either in German, or in English. True to the Institute's interdisciplinary profile, the course-specific seminars are complemented by units in which regional issues and tasks of an academic nature are addressed jointly. The Institute moved into its current building, which was converted with financial assistance from the Ford Foundation, in 1967.

Freie Universität Berlin
John F. Kennedy Institute for North American Studies
Lansstraße 7–19
14195 Berlin
www.jfki.fu-berlin.de
Professors: 6 / Academic staff: 15 / Students: 700

Graduate School of North American Studies

The Graduate School of North American Studies builds on the interdisciplinary tradition of the John F. Kennedy Institute. It will focus on the theme "The Challenges of Freedom: Democrat-

The American flag on Staten Island near New York City.

ic Values in the American Century and Beyond" with research areas as follows: The Reconstitution of American Exceptionalism; Nation, Ethnicity, Diaspora, Borderlands; The Conservative Revolution and New Social Movements; The Role of Religion; Art, Aesthetics, and American Culture; Neo-Liberalism as a Cultural and Economic Paradigm; Globalization and the "American Centuries"; The Struggle Over the Public Sphere: Media and Cultural Narratives. The research areas of the Graduate School focus on developments that are of crucial importance not only for the development of American society, but also for modern societies generally. Partnership institutions include prestigious American universities such as Harvard, Yale, and Stanford, along with non-academic institutions in the Berlin region that have a special focus on the United States and Canada, such as the American Academy in Berlin and the Canadian-German Young Leaders Forum. The doctoral program will institute a three-year curriculum with a strong interdisciplinary emphasis, consisting of seminars, team-taught courses, and research colloquia.

"The proven interdisciplinary cooperation within the Institute, the participation of renowned academic specialists from the Freie Universität Berlin in the curriculum of the Graduate School, and the invitation of academics with an international reputation will ensure that the quality of education is competitive internationally and need not fear comparison with top-level research at American universities."

Ulla Haselstein, Professor of North American Literature and spokesperson of the "Graduate School of North American Studies" Application Group

Parts of the Otto Suhr Institute reside in this building.

Otto Suhr Institute

The lead partner in the application for the "Governance in a Globalized World" Cluster is the Otto Suhr Institute of Political Science. The Institute, which is the largest teaching and research institution for political science in Germany, enjoys an excellent reputation throughout Europe. The Otto Suhr Institute has numerous cooperative agreements at national and international level, an excellent record in research rankings, it lies in the leading group of departments in terms of

"Governance in a Globalized World encompasses all of the ingredients of the Freie Universität Berlin's vision of an international network university. Its interdisciplinary and thematic focus on governance – in Europe and in modern societies, in the developing world and in the global realm – exemplifies the difference between traditional research institutes and the Cluster concept. Its structured and fully funded PhD program will be an integral part of the Dahlem Research School. Its research cooperation with partners around the world reflects the university's internationalization strategy. Moreover, this Cluster of Excellence is located in the German capital and is, therefore, uniquely positioned for enhanced knowledge exchange between the world of politics and academia. In short, our Cluster demonstrates what the Freie Universität Berlin is accomplishing: a university on the move!"

Prof. Dr. Thomas Risse, Coordinator of the Governance-Cluster

third party funding and publications and it also trains more young academics than comparable institutes in Germany. The Institute specializes in, amongst other subjects, Political Theory, comparative governance, international relations, and political economy. The Otto Suhr Institute draws on a rich tradition. This goes back to the German College of Politics, which was founded in 1920 and reconstituted as a research institute after the Second World War. Among the first lecturers there were Ernst Fraenkel, Ossip K. Flechtheim and Richard Löwenthal, who had returned from exile. In 1959, it was integrated into the Freie Universität Berlin as the Otto Suhr Institute.

Governance in a Globalized World

Research in the cluster addresses a number of questions: How can effective and legitimate governance be sustained in interdependent local, national, regional, and global spaces? What legal, political, economic, social, and cultural problems and conflicts emerge, and how are they to be dealt with? How can governance at the various levels cope with economic globalization, social fragmentation, and the increasing interaction of heterogeneous cultures and traditions? How can we develop a systematic understanding of the emergence of – and governance solutions to – long-term policy problems? This Berlin-based cluster consists of four research areas covering international and transnational spaces, Europe and beyond, modern developed statehood, and areas of evolving or eroding statehood. The cluster's core disciplines are Political Science, Economics, Law, and History. In particular, the cluster combines international relations expertise from a variety of academic fields with detailed area expertise, specifically including non-Western cultures. The Freie Universität Berlin is cooperating with the University of Potsdam, the Humboldt-Universität zu Berlin, and the privately funded Hertie School of Governance on the one hand, and with various research institutes and think tanks, including the Social Science Research Center Berlin (WZB), the Institute for Advanced Study Berlin, and the SWP German Institute for International and Security Affairs on the other. This further enhances multiple synergies.

Even in a globalized world there is space for a political instrument like a referendum.

Freie Universität Berlin
Otto Suhr Institute of Political Science
Ihnestraße 21, 14195 Berlin
www.polwiss.fu-berlin.de
Professors: 39 / Staff (incl. library): 270 / Students: 3,000 (incl. all)

Science Campus Dahlem: Department of Mathematics / Computer Science and the Zuse Institute Berlin.

Tour 2: Departments of Mathematics / Computer Science and of Physics

The Science Campus Dahlem is situated around the U-shaped core of buildings housing the Freie Universität's Institutes of Physics, Chemistry, Mathematics, and Computer Science as well as the Zuse Institute Berlin (ZIB). Around the corner are the institutes of Biology, Physiology, and Biochemistry as well as, within walking distance, the Max Planck Institute for Molecular Genetics (MPIMG) and the Fritz Haber Institute (Physical Chemistry).

Department of Mathematics and Computer Science

Structurally, Mathematics and Computer Science live harmonically under one department roof. Among the many funded projects, two may be worth mentioning here. First, the DFG Research Center MATHEON, which connects the three universities Freie Universität, Humboldt-Universität, and Technische Universität, is closely linked with Freie Universität Mathematics, especially with Numerical Analysis and Scientific Computing; from the application point of view, MATHEON's projects on the Campus Dahlem are mostly projects in mathematical life sciences with creditable interdisciplinary connections to Medicine, Biology, Physics, and Chemistry. Second, Complex Analysis and Dynamical Systems are strong partners in the collaborative research center "Space, Time, Matter" (together with the Humboldt-Universität).

Freie Universität Berlin
Department of Mathematics and Computer Science
Arnimallee 2–6, 14195 Berlin
www.math.fu-berlin.de / www.inf.fu-berlin.de

Professors: 33 (Mathematics 20, Computer Science 13),
Scientific staff: 120 (Mathematics 61, Computer Science 59),
from third party funding: 69 (Mathematics 36, Computer Science 33)
Students: 1,690 (Mathematics 560, Bioinformatics 240, Computer Science 890)

Zuse Institute Berlin (ZIB)

The ZIB was founded in 1986 by its present head who simultaneously is a full professor at Freie Universität, holding a chair in Scientific Computing at the Department of Mathematics and Computer Science. By law, ZIB is a non-university research institute of the federal state of Berlin, supported by the city's three universities. In addition to its

research in application-oriented algorithmic mathematics and practical computer science, the ZIB also provides high-performance computer services to university partners in northern Germany. ZIB is closely linked with mathematics at Freie Universität: students from there get early on involved in advanced research projects at ZIB. Moreover, ZIB scientists lecture regularly at Freie Universität Berlin and supervise bachelors, masters, and diploma theses as well as dissertations.

DFG Research Center MATHEON "Mathematics for Key Technologies"

This Center, founded in 2002 and recently renewed after strong international peer review for another four-year period, is one of the up to now six DFG research centers in Germany. MATHEON is based on a cooperation agreement between the Freie Universität, the Humboldt-Universität, and the Technische Universität (host university) and the mathematical research institutes WIAS and ZIB. Structured as a network, MATHEON has evolved to be a role model for excellence clusters to be established in Germany's excellence initiative. The Center's mission is to give a strong impulse to the role of mathematics in the fast interactive process of technological renewal cycles. Thus MATHEON's research program is clearly application-driven. Undoubtedly, the Campus Dahlem contribution (by Freie Universität and ZIB) to MATHEON is very strong both in terms of science and in terms of public visibility and awareness.

"You are the visionaries of applied mathematics."
Ian Sloan, President of the International Council for Industrial and Applied Mathematics, Sydney, talking about MATHEON's approach to research

At the Institute for Computer Science plants enhance the working environment.

Berlin Mathematical School (BMS)

This graduate school is a joint project by Berlin's three universities. It comprises both, pure and applied mathematics, and combines the strengths of the American graduate school system with those of the German Ph.D. training system. The BMS was originally started as a MATHEON initiative and it is presently one of the three mathematics projects to be evaluated in the first competitive round of Germany's excellence initiative.

Department of Physics

The first physics institute at the Freie Universität Berlin was set up shortly after the founda-

Main entrance at the Department of Physics.

At the Department of Physics.

tion of the University in 1948, in the buildings of the former Kaiser Wilhelm Institute for Physics, whose previous directors had been Heisenberg, Debye, and Einstein. The present department was formed in the early 1970s, when the university was restructured and enlarged, it moved into the new physics building in 1982. Since then, the Department of Physics has offered a very favorable working environment. Research at the Department has traditionally been directed towards fundamental research; at present, it focuses on topics from solid-state, molecular and bio-physics to theoretical and computational physics. The spectrum of research topics ranges from surfaces and interfaces to biologically relevant molecules, from mathematical modeling to the theoretical description of material properties. In the field of characterization and manipulation of molecules on surfaces, the department is internationally renowned. An other focus is the use of ultrafast laser pulses to observe and control chemical reactions. Synchrotron radiation is also applied for the investigation of the above topics, in particular at dedicated beamlines at BESSY. The department is home to three collaborative research centers funded by the DFG and participates in various other individual and collaborative research projects funded by external grants.

Freie Universität Berlin
Department of Physics
Arnimallee 14, 14195 Berlin
www.physik.fu-berlin.de
Professors: 22, Scientific staff: 155 (100 from third party funding),
Students: 500

Colloborative Research Center 450: Analysis and Control of Ultrafast Photoinduced Reactions

Experimental set up for ultra-fast laser spectroscopy at the Department of Physics.

One of the major goals in chemical reaction dynamics is to understand and control the evolution from reactants to products and to select specific pathways for a chemical reaction. The aim of this research center is to characterize the nuclear dynamics induced by optical excitations and to control the resulting molecular dynamics by further interaction with an optical field. Ideally, this leads to a stable product state, which would allow to control the outcome and pathway of chemical reactions.
Research is based on experimental methods of ultrafast laser spectroscopy including shaping of light fields, characterization of photoinduced reaction dynamics of individual molecules or clusters to complex molecular systems as well as theoretical modeling.

Colloborative Research Center 498: Protein-Cofaktor Interactions in Biological Processes

Most biological processes are catalyzed and controlled by enzymes. Many of these enzymes incorporate special organic molecules or metal centers as cofactors, which directly participate in the catalytic processes, or influence them indirectly in a regulatory way. The cofactor function is largely controlled by specific interactions with the protein environment. Vice versa, the molecular and electronic structure of the cofactor and its excitation states can influence protein conformation and assembly. In this way, the protein can be acti-

vated for a specific reaction. All these functionally significant processes are based on protein-cofactor interactions, which constitute the central topic of our collaborative research center and continue to be a timely concept among international research efforts.

Colloborative Research Center 658: Elementary Processes in Molecular Switches at Surfaces

Surface science experiments at the Department of Physics.

The increasing degree of miniaturization and integration in electronic devices and sensors opens the perspective to use molecules as building blocks for functional molecular nanostructures. For applications like molecular electronics it will be essential to control the switching between different molecular states, which in nature is often realized by photoinduced conformational changes. The collaborative research center investigates reversible conformational changes of individual molecules and ensembles leading to measurable changes of functional (e. g. optical, electronic or magnetic) properties of the system. The focus on elementary processes includes investigating all of the individual steps, physical parameters and interactions which induce and influence the process of molecular switching. The research is based on various complementary methods such as synthesis of molecular systems, characterization of structural and electronic properties by quantitative surfaces sciences techniques, and theoretical modeling. The long-term goals are to develop novel functionalities, like cooperative switching processes, and criteria for applications in molecular functional devices.

Tour 3: Humanities Campus and the Philological Library

"The establishment of the Dahlem Humanities Center (DHC) will bundle the excellent humanities research being done at the Freie Universität on the one hand; on the other hand, it will give it a unified profile that is both nationally and internationally visible and, at the same time, structure it internally. It is this combination that, in my view, makes our project especially attractive."
Erika Fischer-Lichte, Professor of Theater Studies and spokesperson of the "Multiple Modernities – Multiple Concepts of Art" cluster application (2nd round)

The Dahlem Humanities Center (DHM) aims to investigate the forms, principles and effects of cultural dynamics in a globalizing world. Cultural practices and interpretative patterns are the central means by which individuals and social groups perceive themselves, construct different world views and assert modes of social meaning. The relevance of these interpretative patterns and practices will increase in parallel with the promotion by globalization of processes of political, economic and cultural homogenization. Its impact is ambiguous: while it serves as a source of positive expectation, it also creates fears of a loss of identity. Until now, though, no theory of cultural transformation has emerged that embraces both a global and a historical perspective.
The research objective is to examine the diverse profiles of the concept of cultural transformation and to shed light on the preconditions, causes, motivations and processes of cultural transformation in social, historical, anthropological, religious, political, economic, linguistic and discursive terms.

Attempts to restrict, discontinue, or even reverse processes of transformation will be conceived not so much as a counter-paradigm of the concept of cultural dynamics, but rather as one of many ways in which the processes of cultural dynamics are shaped. Ultimately, and with a view to the ever-growing complexity of the man-made (and in this sense, cultural) world, the DHC will address the question as to which descriptions are adequate for grasping the aforementioned phenomena.

The DHC is essentially backed by the two largest humanities departments of the Freie Universität Berlin: that of Philosophy and Humanities and that of History and Cultural Studies. Besides Philosophy, the former includes various European languages and literatures, General and Comparative Literature, Musicology, Film and Theater Studies, and Arts and Media Administration. The latter brings together a range of subjects that is unique in Germany's academic community; in addition to history and art history, it includes a majority of the so-called "small subjects", among them Archaeology, East Asian Studies, Ancient American Studies, Turkic studies, Arabic Studies, Iranian Studies and Islamic Studies.

The Philosophical Institute, completed in 1981, was the first new building for the Freie Universität Berlin to have a design based on the archetype of the urban villa, so typical of Dahlem.

Freie Universität Berlin
Department of Philosophy and Humanities
Habelschwerdter Allee 45, 14195 Berlin
www.geisteswissenschaften.fu-berlin.de/
Professors: 52 / Academic staff: 100 / Readers: 67 /
Students: 6,200 (main and core subject)

Freie Universität Berlin
Department of History and Cultural Studies
Koserstraße 20, 14195 Berlin
http://web.fu-berlin.de/geschkult/
Professors: 55 / Academic staff: 86 / Readers: 60 /
Students: 4,700 (main and core subject)

Collaborative Research Center 447: Culture and the Performative

This Research Center (Coordinator: Erika Fischer-Lichte) investigates the ways in which cultural processes of transformation are informed by the relationship between textuality and performativity. It comprises nineteen research projects (including three based at the Humboldt University). These projects concentrate on two historical eras, each marked by media revolutions: the threshold between the Middle Ages and the Early Modern period, on the one hand, and the present since the emergence of the New Media, on the other. Within the Center, which is currently in its third funding

period, the focus of interest has recently shifted to questions of the relationship between intentionality and emergence within processes of cultural transformation. It now gravitates towards the problem of the extent to which processes of cultural transformation elude intentional fashioning. The objects of research pertain to the political and the social, the artistic, the ritual and the scientific (in the sense of the epistemological).

Collaborative Research Center 626: Esthetic Experience and the Dissolution of Artistic Limits

Acting is a means of human expression.

This Research Center will comprise 17 subprojects during its second funding period, from 2007 to 2010. The Center's overall mission is to investigate a three-part question: (1) whether and to what extent (in view of the recent and earlier development of art) one can speak of a characteristic of esthetic experience; (2) whether there is a characteristic of artistic experience in esthetics; (3) whether there is a particular experience of individual arts in the field of art. The current relevance and urgency of these questions results from two trends that can be observed in the development of art during the last few decades: the increasing intermedial networking of the arts with one another and the trend towards a dissolution of the border between art and non-art in the course of an estheticising of the world in which we live (the latter diagnosed critically or even pessimistically in the context of culture). The Center thus reflects a set of problems with a long history and it does so from a standpoint of awareness of the far-reaching changes in esthetics and art brought about by recent and current developments.

Philological Library

The new Philological Library (see p. 22–23) designed by Foster and Partners is a research library that is unique in the humanities in Germany and satisfies the most demanding academic requirements. It includes all of the European languages and literatures represented at the Freie Universität Berlin and gives students and academic staff free access to almost the whole of these extensive collections (700,000 volumes and 800 current periodicals). It provides members of university with a total of 640 work spaces for study and research in data banks, electronic magazines and the Internet (via WLAN).

The seating is arranged along the perimeter, which undulates in plan to give greater privacy.

The collections of eleven institute and seminar libraries have been brought together under its roof to create a central location for research in the humanities. Not only does it attract attention from far beyond Berlin, it has also developed into one of the key focal points of academic activity on the campus. Thanks to numerous synergy effects, it has been possible to extend the high-quality services on offer (demand-oriented, comfortable opening times, special copy & print and scan services, flexible book caddies). Since duplicate copies are no longer necessary, funds are freed for other purchases; it is now also possible to acquire items that

In the Philological Library, almost every form curves dynamically.

fall between subject areas. The comprehensive library stock in the areas of languages, literature, art and cultural studies is thus complemented by important interdisciplinary material and extended to cover the subject of area studies. The process of cluster formation in a university and regional context is thus supported effectively at the institutional level. The wealth of material contained in the Philological Library not only benefits the members of the Freie Universität Berlin and its many international academic guests, it also adds to the resources available at a national level.
The main goal in designing the library building was to create ideal conditions for disciplinary and interdisciplinary academic work – and this has been achieved in an ideal manner.

The following libraries have been brought together in the Philological Library: Greek and Latin Philology, Byzantine and Modern Greek Studies, Mediaeval Latin Philology, Romance Philology, Latin American Studies, German and Dutch Language and Literature, English Language and Literature, Comparative and Indo-Germanic Linguistics, General and Comparative Literature, Slavic Studies.

The New Building for the "Small Subjects"

In view of its thoroughly positive experience with the Philological Library, the university is planning to rationalize the humanities campus yet further with a new building to house the "small subjects". At its heart there will be another central, interdisciplinary library. The architectural competition has been concluded and grant funding for the construction work has been applied for (see p. 26–27).